



**The Missing:**  
**Action to resolve the problem of people unaccounted for as a result of  
armed conflict or internal violence and to assist their families**

**Human remains & forensic sciences  
Electronic Workshop  
02.2002 - 03.2002**

**Human remains: Law, politics & ethics  
23.05.2002 - 24.05.2002**

**Human remains: management of remains and of information on the dead  
10.07.2002 - 12.07.2002**

**Workshops  
Ecogia ICRC Training Center - Geneva - Switzerland**

**Final report and outcome**

**Mission statement**

**The aim** is to heighten awareness among governments, the military, international and national organizations – including the worldwide Red Cross and Red Crescent network – and the general public about the tragedy of people unaccounted for as a result of armed conflict or internal violence and about the anguish of their families

**by** creating and making available tools for action and communication

**in order to** ensure accountability on the part of the authorities responsible for resolving the problem of missing people, to better assist the families and to prevent further disappearances.



**ICRC**

## Human remains management

## Table of content

1.	Introduction.....	7
1.1	Introduction to the process "The Missing".....	7
1.2	Workshops .....	8
2.	Outcome: recommendations and best practices .....	10
2.1	Workshop on <i>Human remains: law, politics and ethics</i> .....	10
2.1.1	Exhumation and identification of remains: the tension between justice and identification .....	10
2.1.1.1	General recommendations .....	10
2.1.1.2	The family's right to know the fate of relatives: rules of international law and recommendations applicable in armed conflicts and/or other situations of violence..	11
2.1.1.3	Forensic specialists: does working in a context involving missing persons change their role and responsibilities? .....	12
2.1.1.4	Forensic teams, contracts, contracting agencies.....	13
2.1.1.5	The families of missing persons: towards a positive involvement.....	15
2.1.1.6	An international standard-setting body for forensic specialists.....	15
2.1.2	Criteria for identification and the role of DNA analysis.....	16
2.1.2.1	General recommendations .....	16
2.1.2.2	Introduction to using DNA for identification in the context of missing persons.....	18
2.1.3	The legal protection of personal data and human remains - Comments (see 4.1).....	19
2.2	Workshop on <i>Human remains: management of human remains and information on the dead</i> .....	20
2.2.1	General recommendations .....	20
2.2.2	Autopsy protocols and records of <i>post mortem</i> data .....	20
2.2.3	When it is not possible to conduct an autopsy .....	22
2.2.4	Towards a standardized system of <i>ante mortem</i> data collection.....	23
2.2.5	Standard criteria for identification.....	24
2.2.6	General recommendations on the use of DNA analysis in contexts involving missing persons (see 2.1.2.1.4 to 6 and 2.1.2.2) .....	26
2.2.7	Recommendations on the operational feasibility (i.e. in the field) of DNA analysis (in response to document 5.3.3).....	26
2.2.8	Exhumation of human remains .....	27
2.2.9	Management of human remains without forensic specialists (review of 4.2).....	27
2.2.10	Involvement of communities and families in the management, exhumation and identification of human remains (response to 5.3.6) .....	29
2.2.11	<i>Ante mortem</i> table - List of information items.....	31
2.2.11.1	The information that should be collected about the <i>missing person presumed dead</i> .	31
2.2.11.2	The information that should be noted for the persons interviewed.....	38
2.2.11.3	The information that should be collected from other people .....	38
3.	Experts' contributions.....	41
3.1	Experts' contributions to workshop <i>Human remains: Law, Politics &amp; Ethics</i> .....	41

## Human remains management

3.1.1	By Dr Djordje Alempijevic, M.D., M.Sc., Institute of Forensic Medecine, School of Medicine, University of Belgrade (Yugoslavia) .....	41
3.1.2	By Luis Fondebrider <sup>1/</sup> , Argentine Forensic Anthropology Team - EAAF (Argentina) .	44
3.1.3	By Dr Vivienne Nathanson, Head, Professional Resources and Research Group, British Medical Association (United Kingdom of Great Britain and Northern Ireland (the)).....	48
3.1.4	By Dr Alex Kirasi Olumbe, Head of Medico-legal Services & Chief Government Pathologist of Kenya (Kenya).....	51
3.1.5	By Dr David Ratnavale, Office Chairman, President Office, Human Disaster Management (Sri Lanka) .....	56
3.1.6	By Dr. med. Markus A. Rothschild, Zentrum der Rechtsmedizin, Johann Wolfgang Goethe-Universität, Frankfurt am Main (Germany).....	60
3.1.7	By Prof Dr D. Strinovic, J. Skavic, D. Zecevic, M. Kubat, V. Petroveckii, H. Brkic, M. Slaus, S. Gusic, J. Cadez, Institute for Forensic Medicine and Criminology, University of Zagreb (Croatia) .....	63
3.1.8	By Mr Ivan Szekely, Councillor, Open Society of Archives .....	67
3.2	Experts' contributions to workshop <i>Human remains: Management of human remains &amp; information on the dead</i> .....	71
3.2.1	By Argentine Forensic Anthropology Team (EAAF) - Burial Sites.....	71
3.2.2	By Argentine Forensic Anthropology Team (EAAF) - Pre-Mortem form .....	73
3.2.3	By IOM Guatemala.....	76
3.2.4	By Ms Gill Kitley, Human Rights Officer, UNMEE, Office of the Under-Secretary-General for Peacekeeping, United Nations General Secretariat.....	79
3.2.5	By Ms Shari Eppel, Director, Matabeleland, AMANI TRUST (Zimbabwe) .....	83
3.2.6	By Prof Jehuda Hiss MD, Director, The National Center of Forensic Medicine Ministry of Health (Israel).....	87
3.2.7	By Dr Fernando Iregui Camelo, Technical Secretary, Comisión de Búsqueda de Personas Desaparecidas, Defensoria del Pueblo (Colombia) .....	90
3.2.8	By Mr Phil ya Nangoloh Sr, Executive Director, National Society for Human Rights (Namibia) .....	93
3.2.9	By Mr Cristian Orrego, Senior Adviser, Human Rights Center, University of California, State of California Department of Justice DNA Laboratory (United States of America (the)).....	95
3.2.10	By Prof. Dr. Markus A. Rothschild, German Society of Legal Medicine, Medico-Legal Centre, Goethe-University, Frankfurt/Main (Germany) .....	99
4.	Relevant outcome from other workshops .....	101
4.1	The legal protection of personal data & human remains - Electronic Workshop - 02.04.2002 - 06.05.2002 .....	101
4.1.1	The legal protection of personal data & human remains - Protection of personal data: commonly accepted principles .....	101
4.1.2	The legal protection of personal data & human remains - Identification of human remains: commonly accepted principles.....	101
4.1.3	The legal protection of personal data & human remains - Protection of genetic information: commonly accepted principles.....	102

4.2	<b>Member of armed forces and armed groups: identification, family news, killed in action, prevention - Workshop - 06-07.05.2002 - Management of human remains: Some military considerations .....</b>	<b>102</b>
4.2.1	<b>General recommendations .....</b>	<b>102</b>
4.2.2	<b>People killed as a result of violence and the management of graves: rules of international law and recommendations applicable in armed conflicts and/or other situations of violence (see references under 4.2.5).....</b>	<b>103</b>
4.2.3	<b>Deaths on the battlefield: checklists for the management of human remains .....</b>	<b>103</b>
4.2.4	<b>Recovering buried or hidden remains when forensic expertise is not available: checklists .....</b>	<b>106</b>
4.2.5	<b>References: .....</b>	<b>108</b>
5.	<b>ICRC Preparatory documents .....</b>	<b>109</b>
5.1	<b>ICRC Preparatory documents - General.....</b>	<b>109</b>
5.1.1	<b>The family's right to know the fate of relatives: rules of international law and recommendations applicable in armed conflicts and/or other situations of violence</b>	<b>109</b>
5.1.2	<b>People killed as a result of violence and the management of graves: rules of international law and recommendations applicable in armed conflicts and/or other situations of violence .....</b>	<b>110</b>
5.2	<b>ICRC Preparatory documents to workshop <i>Human remains: Law, Politics &amp; Ethics</i>. </b>	<b>112</b>
5.2.1	<b>The forensic specialist: does working in a context involving missing persons challenge existing practice? .....</b>	<b>112</b>
5.2.2	<b>Identification of remains: what are the forensic specialist's specific responsibilities in contexts involving missing persons? .....</b>	<b>113</b>
5.2.3	<b>Human rights instruments relating to forensic science - Summary .....</b>	<b>114</b>
5.2.4	<b>The families of missing persons : towards a positive involvement.....</b>	<b>115</b>
5.2.5	<b>Collecting, managing and transmitting information about human remains .....</b>	<b>115</b>
5.2.6	<b>Autopsies: the aims, responsibilities and obligations of forensic pathologists in the context of missing persons.....</b>	<b>116</b>
5.2.7	<b>A team of international forensic specialists: who is in charge? .....</b>	<b>118</b>
5.2.8	<b>The legality of undertaking forensic work in a given context.....</b>	<b>118</b>
5.2.9	<b>Guidelines for forensic specialists working with a variety of international actors .....</b>	<b>119</b>
5.2.10	<b>Employing forensic specialists: contract considerations.....</b>	<b>119</b>
5.2.11	<b>Forensic specialists and violations of international humanitarian law and human rights.....</b>	<b>120</b>
5.2.12	<b>An international standard-setting body for forensic specialists (with regard to missing persons and the International Criminal Court): a possible outcome of this workshop?120</b>	
5.2.13	<b>Identification: a proposed strategy (for contexts involving missing persons).....</b>	<b>121</b>
5.2.14	<b>Introduction to using DNA for identification in the contexts involving missing persons122</b>	
5.2.15	<b>DNA analysis for identification in contexts involving missing persons: operational issues.....</b>	<b>123</b>
5.3	<b>ICRC Preparatory documents to workshop <i>Human remains: Management of human remains &amp; information on the dead</i> .....</b>	<b>125</b>
5.3.1	<b>Theme 1 - Autopsy protocols and recording <i>post mortem</i> data .....</b>	<b>125</b>
5.3.2	<b>Theme 2 - Collecting <i>ante mortem</i> data: a proposed standard formula.....</b>	<b>125</b>

## Human remains management

5.3.2.1	The information that should be collected about <i>missing persons presumed dead</i> ....	126
5.3.2.2	The information that should be noted for the persons interviewed.....	141
5.3.2.3	The information that should be collected from other people .....	141
5.3.3	Theme 3 - DNA analysis for identification in the context of missing persons: operational considerations.....	143
5.3.4	Theme 4 - Practical guidelines relating to the exhumation of remains, <i>post mortem</i> detection of torture and disinterment and analysis of skeletal remains .....	144
5.3.5	Theme 5 - Transfer and repatriation of remains.....	144
5.3.6	Theme 6 - Involving the family in the management, exhumation and identification of human remains .....	145
6.	Participants .....	147
6.1	Electronic workshop <i>Human remains &amp; forensic sciences</i> .....	147
6.2	Workshop <i>Human remains: Law, politics &amp; ethics</i> .....	147
6.3	Workshop <i>Human remains: management of remains and of information on the dead</i> .....	148
7.	Programs of the workshops .....	151
7.1	Workshop <i>Human remains: Law, politics &amp; ethics</i> .....	151
7.2	Workshop <i>Human remains: Management of the dead &amp; of information on the dead</i> .....	152
Annex A:	UN Manual on the effective prevention and investigation of extra-legal, arbitrary and summary executions - ST/CSDHA/12 - 1991 - IV. Model autopsy protocol which is the same as Guidelines for the conduct of United Nations inquiries into allegations of massacres, 1995 - Annex IV .....	155
Annex B:	<i>INTERPOL - DVI Autopsy Protocol</i> .....	162
Annex C:	Guidelines for the conduct of United Nations inquiries into allegations of massacres, 1995 - Annex IV - Appendix 1 - Post mortem detection of torture.....	163
Annex D:	Guidelines for the conduct of United Nations inquiries into allegations of massacres, 1995 - Annex IV - Appendix 2 - Drawings of parts of human body for identification of torture .....	164
Annex E:	Guidelines for the conduct of United Nations inquiries into allegations of massacres, 1995 - Annex V - Model Protocol for disinterment and analysis of skeletal remains..	187

### 1. Introduction

#### 1.1 Introduction to the process "The Missing"

This workshop is part of an interactive process of reflection launched by the International Committee of the Red Cross (ICRC) on the tragedy of people unaccounted for as a result of armed conflict or internal violence.

Uncertainty as to the fate of relatives is a harsh reality for countless families in all situations of armed conflict or internal violence, one that often continues for many years. Not only is this deeply distressing for the families, it can also hamper efforts aimed at achieving reconciliation and an enduring peace by contributing to further outbreaks of violence.

Accordingly, the ICRC's objective in launching this process, in cooperation with all those involved in dealing with the issue, is to:

- review all methods that could be employed to prevent disappearances in situations of armed conflict or internal violence more effectively, and respond to the needs of families that have lost contact with their loved ones;
- agree on common and complementary recommendations and operational practices with all those working to prevent disappearances, and respond appropriately when people are unaccounted for in a situation of armed conflict or internal violence;
- position this concern higher on the agendas of government authorities, the United Nations and non-governmental organizations.

The process is being conducted in two stages.

During the first stage, studies are being conducted by a number of research centers and workshops are being organized that bring together governmental and/or non-governmental experts on topics relating to the issue of disappearances. The studies and workshops are intended to help clarify needs and the means of meeting them and to define recommendations and the best operational practices to be implemented. The present workshop is one of those events, all of which are listed below:

- 2 electronic workshops:
  - Human remains & forensic sciences: preparatory electronic workshop,
  - The legal protection of personal data & human remains,
- 3 studies:
  - Mourning process & commemoration,
  - Overcoming the tensions between family needs and judicial procedures,
  - Study on existing mechanisms to clarify the fate of people unaccounted for,
- 6 workshops taking place in the following order:
  - Member of armed forces / armed groups: identification, family news, killed in action, prevention,
  - Human remains: Law, politics & ethics,
  - Support to families of people unaccounted for,
  - Human remains: management of remains and of information on the dead,
  - Means to prevent disappearances & to process missing cases,
  - Mechanisms to solve issues on people unaccounted for.

The preparatory phase of each workshop comprises:

- the establishment of reference documents based on international humanitarian law and human rights, and relevant lessons or experiences from past and present situations of armed conflict or violence;
- written contributions from experts invited to participate in the workshop concerned, such as senior military officers, senior government officials, historians, lawyers, medical, psychology or forensic specialists and academics.

Documents are made available to the participants via a dedicated Extranet that allows all of them to follow the entire process.

At the end of each workshop, the outcome is summarized by the ICRC and posted on the Extranet. Individual opinions are not recorded; neither the participants nor their organizations bear responsibility for the summary.

## Human remains management

In addition, the final report of the workshop, including the outcome, experts' contributions and the ICRC preparatory documents, will be prepared and subsequently published in English and French.

During the second stage, the ICRC will convene an international conference of the experts who took part in the workshops and of any other interested parties. The conference will be held in Geneva from 19 to 21 February 2003.

The results of the first stage will be submitted to the conference participants in the form of a document which will be compiled by the ICRC and which will contain all recommendations and best practices, for adoption by the international conference in February 2003. This document will take into account the outcome of all events; obviously, there will be some overlap between events, as the same topic may be dealt with from different perspectives.

The ICRC hopes that the conference results will be directly useful both to:

- individuals and organizations working in the political, humanitarian and human rights fields and active on the ground in situations of armed conflict or internal violence, and
- governments involved in developing international law and preventing or resolving conflicts, especially within the framework of the United Nations, for example through its Human Rights Commission, or within the International Red Cross and Red Crescent Movement, for example through the International Conference of the Red Cross and Red Crescent.

### 1.2 Workshops

#### 1.2.1 Electronic workshop *Human remains and forensic sciences*

This workshop, which was conducted via the ICRC extranet, drew on the expertise of four forensic specialists with extensive experience of the management, exhumation and identification of human remains. It generated a number of documents. The role and responsibilities of forensic scientists were considered from two points of view: legal and ethical, and field or operational. The specialists were also consulted about situations where human remains must be managed by non-specialists such as soldiers working under a UN mandate.

The workshop's final documents provided the basis for the preparatory documents used in the two formal workshops described below.

#### 1.2.2 Workshop *Human remains: Law, politics and ethics*

This formal workshop brought together 21 experts, most of whom had a background in forensics. Using documents prepared by the electronic workshops on *Human remains and forensic sciences* and on *The legal protection of personal data and human remains* as background material, the experts addressed essentially two themes.

##### **A. *The exhumation and identification of remains: the tension between justice and identification***

In this regard, the workshop recognized that families had a right to learn the fate of their relatives and that upholding that right meant that remains had to be identified. The role that forensic specialists play in the domestic context cannot be automatically extrapolated to the role they have in contexts involving missing people; there are major differences. In the domestic context, forensic specialists work as an extension of the domestic legal process. Identification of remains is an integral part of criminal investigation and goes hand-in-hand with the process of ascertaining the cause of death. However, in a context involving missing people, especially when the investigation involves the exhumation of mass graves, the cause of death may already be known or be obvious, and identification may be the most difficult and resource-intensive task. Forensic specialists may feel comfortable from an ethical perspective working to uphold human rights and investigating violations of international humanitarian law and of human rights, but this should include the family's right to learn the fate of relatives. The work of forensic specialists is necessary to ensure not only that justice is done but also that the best is done for the families, which involves identification of the remains.

The workshop also deliberated the need for an international body of forensic scientists that would deal with issues of concern to forensic specialists working in this domain, such as standards, qualifications, audits and employment contracts.

## Human remains management

### **B. Criteria for identification and the role of DNA analysis**

The workshop defined identification as "individualization by the attribution of birth name or other appropriate name to human remains" and drew up recommendations on who bears ultimate responsibility for identification.

Human remains can be identified in three ways:

- visual or normal or customary (relatives or acquaintances viewing the remains, possession of identity documents or tags);
- the weight of circumstantial evidence (matching of *ante mortem* data with information gathered during examination of the remains);
- scientific / objective (using dental records, fingerprints or DNA).

The above three methods do not necessarily follow on one other, but normal practice is that, as identification becomes more difficult, the emphasis shifts from "i" to "ii" to "iii". Whenever possible, a visual (normal or customary) identification should be supplemented with identification by one of the other two methods. Human remains may be identified using DNA typing when other investigative techniques of identification are inadequate.

The workshop made a number of general recommendations on the use of DNA analysis in contexts involving missing persons. At the same time, it recognized that identification programmes in which DNA has primacy are near-future possibilities and identified the conditions to be met before such programmes are established.

#### **1.2.3 Workshop Human remains: Management of remains and of information on the dead**

This formal workshop brought together 26 experts, most of whom had a background in forensic sciences. It focused on the interplay between the expertise, standards and constraints that apply in a given context.

Using documents prepared by the electronic workshops on *Human remains and forensic sciences* and on *The legal protection of personal data and human remains* and the formal workshop on *Human remains: law, politics and ethics* as background material, the workshop made recommendations on a number of themes.

1. It considered a standardized form for recording autopsy findings and examining remains in difficult circumstances.
2. It also considered a standardized form for recording *ante mortem* data.
3. The workshop recommended that the two forms be finalized and agreed on by experts in a future working group as a continuation of the process launched by the ICRC and that they be compatible in terms of language, terminology, software and training of personnel. The same working group will determine a minimum standard of practice for forensic scientists working in all contexts involving missing people.
4. The workshop made recommendations on the most appropriate means or combination of means of identification in different contexts. This included an examination of the operational feasibility of using DNA analysis for identification.
5. The workshop considered the operational feasibility of DNA analysis in the light of the legal and ethical principles established in the preceding workshops. It issued firm recommendations on considerations such as cost, logistics, communication to the families and communities, responsibility for errors and accreditation of laboratories.
6. Two participants undertook to enhance the existing guidelines for exhumation.
7. The extent to which families should be involved in the exhumation and identification of remains generated much debate. Such involvement could be both beneficial and harmful to the investigation and at the same time healing or traumatic for the families themselves. All agreed that while the families had of necessity to be involved, the extent of their involvement would depend entirely on the context, culture and society in question.
8. The workshop examined the guidelines prepared by other workshops regarding situations when non-specialists must manage human remains. The input of forensic specialists was useful in that their recommendations improved on existing guidelines with a view to ensuring a maximum of information was preserved for the purpose of subsequent identification.

### 2. Outcome: recommendations and best practices

#### 2.1 Workshop on *Human remains: law, politics and ethics*

Each of the following subsections corresponds to a workshop theme (see programme in section 7).

##### 2.1.1 Exhumation and identification of remains: the tension between justice and identification

###### 2.1.1.1 General recommendations

The workshop recognized that a forensic specialist's work in the context of missing persons may differ from his or her normal domestic practice. It generated the general recommendations set forth below.

###### 1. International humanitarian law and human rights law (see 2.1.1.2)

- A. The right of families to know the fate of their relatives provides the basis for correct guidelines (see 2.1.1.2).
- B. The content of 2.1.1.2 should be disseminated to all agencies and persons concerned with missing persons, including forensic specialists, police officers and prosecutors.
- C. Current human rights instruments relating to forensic science do not adequately address the rights of families to know the fate of their relatives (see 5.2.3).

###### 2. The role and responsibilities of forensic specialists (see 2.1.1.3 and 5.2.6)

- A. It must be recognized that a mark of civilization is that dead people are identified.
- B. Forensic specialists must be qualified and competent to work in the context of missing persons. They should only work within their individual sphere of expertise.
- C. Forensic specialists have an ethical obligation actively to advocate an identification process (which includes the collection of *ante mortem* data and in certain contexts of blood samples from the family).
- D. When examining remains, forensic specialists have an ethical duty to observe and record all information potentially relevant to identification.
- E. The procedures used must not destroy material that may be used at a later date.
- F. Forensic specialists must consider the families' rights and needs before, during and after exhumation.
- G. Consideration must be given to the disposal of unidentified remains in a way appropriate to the context.
- H. From an ethical viewpoint, human remains comprise both complete bodies and body parts.
- I. Forensic specialists must be familiar with the pertinent provisions of international humanitarian law and human rights law, especially those listed in 2.1.1.2, and should advocate their incorporation in the basic training of forensic specialists.
- J. Forensic specialists have a duty to obtain information about the ethical boundaries of their work and the threats they face in the context of missing persons (see 2.1.1.3).

###### 3. The need for best practice guidelines

- A. Best practice guidelines that take account of existing guidelines (such as the Minnesota Protocol) and minimum acceptable standards would make it easier to act within those ethical boundaries and ensure they are observed in all circumstances.
- B. Best practice guidelines on forensic work in the context of missing persons must be disseminated and promoted within the forensic community.
- C. Best practice guidelines must, wherever possible, accommodate local skills and expertise.
- D. Best practice guidelines must include the training of unspecialized or partially qualified personnel; such training should be planned in the early stages of the project.
- E. Consideration should be given to a standard format whereby a forensic specialist working in the field can provide an attestation of death in circumstances where the identity is known but there is little chance that the authorities will issue a formal death certificate.

###### 4. Forensic teams, the contracting agency and contracts (see 2.1.1.4)

- A. The terms of reference or contract must ensure that the mandate of the contracting agency is compatible with the ethical practice of forensic specialists.
- B. All forensic work must be carried out within the framework of a clear mandate. This includes consideration of the lawfulness of the work and other short and long-term considerations.
- C. The mandate must be underpinned by the principles of neutrality and impartiality.
- D. The contracting agency must recognize the role and responsibilities outlined in section B above and the need to adhere to best practice guidelines as referred to in section C above.

## Human remains management

- E. The contracting agency must provide adequate background information about the context, including political, cultural and security information.
  - F. The security of the investigating team and contributors has priority over the provision of evidence and identification.
5. **Involvement of families in exhumation and identification (see 2.1.1.5)**
- A. The contracting agency and forensic specialists must recognize the right of the families to information and to qualified representation during the investigation. It may prove beneficial to involve the families in the investigation; however, care must be taken that they do not compromise its integrity.
  - B. Involving the families may facilitate *ante mortem* data collection, heighten their confidence in the final conclusions and maximize the psychological and social benefits of identification and of the investigation's other findings.
6. **Protection of data and personal information (see 4.1 and 2.1.3)**
- A. Forensic specialists must recognize the commonly accepted legal principles relating to the protection of personal data, the identification of human remains and the protection of genetic information.
  - B. These principles are compatible with the use of such data for professional training and education in accordance with existing professional guidelines.
7. **An international body of forensic specialists (see 2.1.1.6)**
- A. There is a need for an international body whose mission statement relates to forensic specialists who work in the context of missing persons.
  - B. Consideration should be given to where such a body might best be located.
  - C. One workshop participant undertook to contact other international forensic and medical associations as a first step towards addressing this need.

### 2.1.1.2 The family's right to know the fate of relatives: rules of international law and recommendations applicable in armed conflicts and/or other situations of violence

1. Everyone has the right to respect for their family life, which includes the right to information about the fate of their loved ones.
2. Enforced disappearance is prohibited.
3. All appropriate measures must be taken to prevent persons from being unaccounted for as a result of armed conflict or internal violence and to account for persons reported missing as a result of such a situation.
4. All persons must be treated humanely, respected and protected by virtue of their inherent dignity as human beings.
5. All persons, even when displaced (as internally displaced persons or refugees), detained or living in occupied territories, have the right to correspond with their families.
6. Persons deprived of their liberty should be allowed to receive visitors.
7. A record must be kept of the particulars of persons deprived of their liberty.
8. All possible measures must be taken to provide information to the appropriate authorities or to the family of the captured or deceased regarding the identity, date and place of capture and any particulars concerning wounds / illness and location and cause of death.
9. Each party to the armed conflict must establish an official Graves Registration Service to see to the dead and to record the particulars of graves and burials.
10. Each party to the conflict must establish an Information Bureau to centralize all information on the wounded, sick and shipwrecked, on persons deprived of their liberty and on the dead, without adverse distinction, and provide this information to the appropriate authorities or to the family via a neutral intermediary and to the ICRC Central Tracing Agency.

## Human remains management

### References:

- GC I: Arts. 3, 16, 17  
GC II: Arts. 3, 19, 20  
GC III: Arts. 3, 69 - 71, 120, 122, 123  
GC IV: Arts. 3, 25, 26, 105 - 107, 116, 129, 130, 136, 137, 140  
AP I: Arts. 32 - 34, 75  
AP II: Arts. 4, 5  
HC IV (R): Arts. 14, 16  
Universal Declaration of Human Rights (1948)  
International Covenant on Civil and Political Rights (1966)  
American Convention on Human Rights (1969)  
European Convention for the Protection of Human Rights and Fundamental Freedoms (1950)  
Inter-American Convention on Enforced Disappearances (1994)  
Inter-American Commission: Report No. 136/99, 22 December 1999, *Case of Ignacio Ellacría et al*, Case No. 10.488, par. 221 & 224.  
*Lucio Parada Cea et al*, Report 1/99, 27 January 1999, Case No. 10.480, par. 151.  
Inter-American Court: *Velasquez Rodriguez Case* (Honduras), Judgment 29 July 1988, Series C: Decisions and Judgments, No.4, par. 181, 166 & 174.  
*Godinez Cruz Case*, Judgment 20 January 1989, Series C: Decisions and Judgments, No.5, par.191.  
*Castillo Paéz case*, Judgment 3 November 1997, par.90.  
*Blake case*, Judgment 24 January 1998, par. 97: art.8.1 & p.116  
European Court of Human Rights: Judgment of 25 May 1998, *Matter of Kurt c. Turkey*, Case No.15/1997/799/1002, par. 134  
Judgment of 10 May 2001, *Cyprius c. Turkey*, Case No. 25781/94  
Human Rights Committee: *María del Carmen Almeida de Quintero and Elena Quintero de Almeida case* (Uruguay), decision of 21 July 1983, Communication No. 107/1981, par. 14.  
UN GA resolution 3220 (XXIX) of 1974 - Assistance and cooperation in accounting for persons who are missing or dead in armed conflicts  
UN GA resolution 47/133 of 1992 - Declaration on the Protection of all Persons from Enforced Disappearance  
HRC E/CN.4/1435, UN Report of the Working Group on Enforced Disappearances (22 January 1981)  
Resolution V of the 22nd International Conference of the Red Cross and Red Crescent (Teheran, 1973) - The missing and dead in armed conflicts  
Resolution II of the 24th International Conference of the Red Cross and Red Crescent (Manila, 1981) - Forced or involuntary disappearances  
Resolution XIII of the 25th International Conference of the Red Cross and Red Crescent (Geneva, 1986) - Obtaining and transmitting personal data as a means of protection and preventing disappearances  
Resolution 2 of the 26th International Conference of the Red Cross and Red Crescent (Geneva, 1996) - Protection of the civilian population in period of armed conflict  
Plan of Action for the years 2000-2003, adopted by the 27th International Conference of the Red Cross and Red Crescent (Geneva, 1999)

### 2.1.1.3 Forensic specialists: does working in a context involving missing persons change their role and responsibilities?

1. The role that forensic specialists play in the domestic context cannot be automatically extrapolated to the role they have in contexts involving missing persons; there are some important differences. In the domestic context, forensic specialists work as an extension of the domestic legal process. Identification of remains is an integral part of criminal investigation and goes hand-in-hand with ascertaining the cause of death. However, in a context involving missing persons, especially when the investigation involves the exhumation of mass graves, the cause of death may already be known or be obvious, and identification may be the most difficult and resource-intensive task.
2. An important consideration is that in the case of a mass murder perpetrated in an armed conflict or a situation of internal violence, exhumation can provide evidence for prosecution even if the individual victims are not identified. The two activities may proceed on separate time scales and with separate resource requirements. This can lead to the unfortunate situation whereby remains are exhumed and the cause of death established but,

## Human remains management

because the process of identification is much more time-consuming, the bodies re-interred. This situation is unacceptable as it does not allow the families concerned to be informed of the fate of missing loved ones or to receive the remains. Identification for the purposes of informing the family and returning remains is just as important as providing evidence and constitutes due recognition of the rights of families.

3. When conducting autopsies, forensic specialists should recognize the distinction between establishing cause of death and identification, even though the two may overlap considerably. Identification of bodies of soldiers who have been killed in action may involve no criminal considerations; in contrast, the exhumation of a mass grave may provide all the evidence a tribunal needs but it may not be necessary to identify the remains for that purpose.
4. In brief, while forensic specialists may feel comfortable from an ethical perspective working to uphold human rights and investigating violations of international humanitarian law and of human rights law, doing so includes the rights of the family to know the fate of relatives (see 2.1.1.2). The work of forensic specialists is necessary to ensure that justice is done *and* that the best is done for the families.
5. In the context of missing persons, the authorities have well-defined legal obligations. Forensic specialists must be familiar with those obligations as they help to identify where and in what way the results of any forensic work may be manipulated. Forensic specialists must address certain basic issues before exhuming or identifying remains, namely:
  - A. how to inform and return remains to the family;
  - B. how to inform and return remains to the authorities;
  - C. how criminal justice works in a domestic and international context in which violations of international humanitarian law / human rights law are being investigated;
  - D. how their work will affect the legal and political process.
6. Forensic specialists must recommend that a mechanism be put in place whereby the remains will be returned to the family either by the authorities or by a competent agency. Thought must be given to the whole process before the forensic specialist becomes involved; it cannot be assumed that the entire chain of responsibility that usually exists in a domestic context is in place.
7. Forensic specialists wishing to become involved in cases involving violations of international humanitarian law or human rights law must realize that there are serious pitfalls. Their role and responsibilities may entail examining those who have been killed or injured in circumstances of torture or illegal imprisonment, or other circumstances that amount to such violations. This can place forensic specialists in extremely compromising situations, which may, to varying degrees, amount to participation in the violations. For example, forensic specialists may participate:
  - A. consciously, by failing to record and effectively document signs of abuse, or by failing to ensure that abuse is reported to the appropriate authorities;
  - B. reluctantly, where their own or professional values are outweighed by pressure from government or other agencies; or
  - C. unconsciously, where insufficient training or skills result in failure to recognize and record abuses adequately.
8. Any form of participation in violations of international humanitarian law or human rights law amounts to a breach of the forensic practitioner's professional ethical obligations. Decisions to adhere, or not to adhere, to ethical standards are made consciously or unconsciously by individuals, taking into account other matters such as their own safety and security and that of others.

### 2.1.1.4 Forensic teams, contracts, contracting agencies

1. The authorities have ultimate responsibility for the management, exhumation and identification of remains. However, in the context of missing persons, other agencies may have to undertake this role and bring forensic specialists to the area.
2. The term "forensic science" is a collective term for a group of disciplines. These include:
  - A. forensic pathology,
  - B. forensic archaeology
  - C. forensic anthropology,
  - D. forensic odontology,

## Human remains management

- E. forensic entomology,
  - F. forensic radiology,
  - G. forensic fingerprint identification,
  - H. photography,
  - I. molecular biology,
  - J. mortuary science.
3. When these specialists move from their everyday domestic context to work in an international context, often for the first time and in a foreign jurisdiction, a specific person with relevant experience needs to be placed in charge of the examination of the remains. *This is not the same as being in overall charge of the team or operation.* This person needs to have the qualifications, skills and experience to determine:
- A. the identity of the deceased;
  - B. the pathologies (including injuries) present in the deceased;
  - C. the cause of death.
4. This person needs to be a medical practitioner with recognized qualifications, skills and experience in forensic pathology. His or her conclusions must be accepted as credible by local officials, the families and (national and international) tribunals. Therefore, the opinion, work and contract of a forensic pathologist may be different to that of a forensic anthropologist or a forensic archaeologist.
5. Before starting work, forensic specialists should make sure that the following questions are addressed when they are briefed or advised by the contracting agency and the relevant authority:
- A. What is the legal framework within which the forensic specialist will be working? The answers to other questions may determine this:
    - a. Which domestic law applies?
    - b. What part of the proposed work may be legal and what part may be illegal if performed by a foreign forensic specialist? For example, it may be lawful to watch a *post mortem* examination being performed by a local pathologist but unlawful, or considered unlawful under national law, to conduct an exhumation.
    - c. Are his or her qualifications recognized by the authorities?
    - d. Is the contract with the employing agency recognized by the authorities?
    - e. What legal support is available if the forensic specialist is arrested (whether justifiably or unjustifiably) for doing his or her work?
    - f. Is the work in fact being done in a context which is against or might be deemed to be against domestic law?
  - B. What is the mandate and legal standing of the employing agency (if this is not the authorities) in the given context?
  - C. Can it be assumed that such work performed under a United Nations mandate automatically pre-empts domestic law?
  - D. Has the forensic work been incorporated into any kind of peace process to which the parties to the conflict are committed?
6. Forensic specialists must understand the different contexts and priorities that the employing agency might attribute to their work. They must understand the mission of the employing agency and are responsible for ensuring that the agency is recognized as competent and credible and is willing to work with other agencies. Forensic specialists should also be aware of the wider agenda such an agency may have, e.g., the promotion of human rights and investigating violations (agencies involved in human rights advocacy, such as Physicians for Human Rights and Human Rights Watch); the promotion of international humanitarian law while preserving neutrality and impartiality (e.g., the ICRC); the pursuit of international justice (e.g., an international criminal tribunal). There may be points of compatibility and incompatibility between the different entities and their legal mandates.
7. The workshop recognized that much of the above relating to the role and responsibilities of forensic specialists should be recognized by contracting agencies and reflected in contracts.
- A. A contract by which a forensic specialist is engaged to work in a context specifically involving missing persons should include the following:
    - a. an affirmation of professional qualifications;
    - b. a commitment to work by standard guidelines relating to exhumation, autopsies **and** identification;

## Human remains management

- c. a commitment to, if necessary, exhume the remains, identify the body and establish the cause of death on an impartial and objective basis;
  - d. a commitment to consider the family in parallel in all matters pertaining to remains and to ensure that the authorities or employing agency have done everything possible to make sure that the families are informed and supported;
  - e. a commitment to treat any remains with due respect;
  - f. a commitment to brief any forensic specialist who replaces the contractee and to affirm the obligation that that person must continue to work by the same guidelines;
  - g. an indication of how this work will fit in with the mandate and legal status of the employing agency;
  - h. a clear understanding of who bears ultimate responsibility for exhuming remains, making the identification and issuing a death certificate if the authorities are unable or unwilling to do this;
  - i. an assurance that the contracting agency has obtained or will obtain security guarantees from the authorities;
  - j. a reference to the handling and preservation of all evidence by standard means;
  - k. an understanding that exhumation will include both identification and cause of death;
  - l. a clear indication of whether or not the forensic specialist is expected to present findings in court;
  - m. a commitment that health and safety procedures will be followed;
  - n. a commitment that adequate insurance coverage - such as malpractice insurance - has been provided for all eventualities, as the coverage pertaining to the specialist's domestic work may not apply;
  - o. in keeping with normal forensic practice, an agreement that the practitioner has the right to copies of documents and photos for which he or she was responsible, subject to an undertaking of confidentiality, and acknowledgement that copyright lies with the employing agency.
- B. Consideration of these points will help forensic specialists work within an ethical framework while promoting the application of international humanitarian law and human rights law and at the same time minimizing the families' distress. Failure to take account of these points could undermine the forensic specialist's credibility.

### 2.1.1.5 The families of missing persons: towards a positive involvement

The workshop considered it important to generate guidelines on how to keep the families of missing people informed. Agencies involved in the management, exhumation and identification of remains should consider the following:

1. Any investigation or exhumation is carried out in constant interaction with the community and with the families or their representatives.
2. Undignified or unskilful handling of remains may further traumatize the family.
3. The family must be given a realistic expectation of the outcome, given the state of the remains, number of bodies, etc.
4. The families must be provided with information and psychological support.
5. The subsequent process of identification must be explained to the families while the process is ongoing.
6. The families must be told that identification will rely on simple or traditional identification techniques first and that more sophisticated technology can only be used if it is available in the context.
7. The families should be approached as soon as possible after an exhumation is planned regarding the provision of *ante mortem* data.
8. The notion of "family" may vary with the context. There need to be clear guidelines on how to handle divided families.

### 2.1.1.6 An international standard-setting body for forensic specialists

1. The workshop found that there was an obvious need to establish an international body or network of forensic specialists (see 2.1.1.1, G).
2. Such a body or network should be responsible for:
  - A. drawing together the disciplines that make up the forensic sciences;
  - B. disseminating guidelines and standards of practice;
  - C. ethical issues;
  - D. professional credentials;
  - E. providing advice to forensic specialists and contracting bodies;
  - F. auditing and evaluating field activities;

## Human remains management

- G. language issues (translation and professional lexicon);
  - H. lobbying governments to make forensic expertise and material resources available for international work;
  - I. lobbying for national or regional "clearing houses" for dealing with missing people (see 3.1.4).
3. The workshop recognized that such a body should not be a centralized bureaucracy and should avoid being politicized. It should be impartial with respect to the nationality of its members.

### 2.1.2 Criteria for identification and the role of DNA analysis

#### 2.1.2.1 General recommendations

The workshop drew up recommendations with respect to:

##### 1. Identification:

- A. Identification is defined as "individualization by the attribution of birth name or other appropriate name to human remains".
- B. Identification is one aspect of the investigation into a death, which seeks answers to other questions (e.g., the cause of death).
- C. Document 5.2.13 does not propose a correct strategy for identification.
- D. Identification
  - a. An identification can be made in three ways:
    - I. visual or normal or customary (relatives or acquaintances viewing the remains, identity documents or tags);
    - II. the weight of circumstantial evidence (matching of *ante mortem* data with information collected during the examination);
    - III. scientific / objective methods (dental records, fingerprints or DNA).
  - b. The above three steps do not necessarily follow on one other, but normal practice is that, as identification becomes more difficult, the emphasis moves from "i" to "ii" to "iii".
  - c. Whenever possible, a visual (normal or customary) identification should be supplemented with identification by one of the other two methods.
- E. Whatever the approach to identification, it must be adapted to the context.
- F. Identification of human remains through DNA typing should be undertaken when other investigative techniques of identification are not adequate (see section D below and 2.1.3).
- G. DNA technologies relevant to identification are advancing very rapidly and so consideration must be given to near-future identification programmes in which DNA analysis has primacy.

##### 2. Responsibility and accountability for the examination and identification of human remains

- A. The authorities have a responsibility to ensure that human remains are examined and identified by qualified and competent people.
- B. The examination of remains is the responsibility of a legally qualified medical practitioner who is a qualified forensic pathologist.
- C. Identification is the responsibility of a competent, qualified and experienced person who should make the identification by integrating all the relevant information available. This person should be medically qualified or a legal officer so defined in law.
- D. Issuing the medical certificate of death is the responsibility of the medically qualified person or legal officer who was responsible for making the identification.

##### 3. Working in a context involving missing persons where the authorities may not be competent or cooperative (see 2.1.1)

- A. Constraints on resources, both human and financial, or the circumstances of the particular mission may justify a lapse in the standards set forth in B above. This does not absolve the contracting agency of responsibility for the processes by which human remains are examined and identified (see 2.1.1.3).
- B. Human remains are examined and identified by means of a team effort.
  - a. However, the process should be under the overall responsibility of a professional:
    - I. who has the qualifications, skills and experience to make conclusions about the deceased's identify, the pathology (including injuries) present in the deceased and the cause and manner of death;
    - II. who practices his or her profession within an organized ethical framework;
    - III. who can be held accountable for errors or unethical practices.

## Human remains management

- b. It is therefore preferable that this person be a forensic pathologist, as this reflects legal arrangements in most parts of the world.
  - C. It is the responsibility of the head of the forensic team to decide which method or methods of identification are most appropriate.
  - D. It is the responsibility of the head of the forensic team to ensure that relatives, the community and the authorities are informed about the limits of the methods chosen to identify human remains so as not to raise expectations.
  - E. Relevant entities such as Interpol-DVI should be encouraged to adapt their data collection forms.
  - F. When there is no competent authority, regional or international organizations can be instrumental in:
    - a. having families or close acquaintances identify human remains;
    - b. preserving as much information as possible about:
      - I. missing persons;
      - II. human remains which have not been identified officially;
      - III. unidentified human remains.
4. **The use of DNA analysis in identification in a context involving missing persons:**
- A. Document 5.2.14 needs altering as an introduction to DNA analysis in identification (see 2.1.2.2 below).
  - B. DNA analysis must not preclude the use of other objective means of identification.
  - C. The decision to use DNA analysis should be based on sound scientific and practical considerations.
  - D. DNA must not be considered as the sole method available to make a positive identification because:
    - a. it may put relatives under duress to provide blood samples (see 4.1.3);
    - b. it may preclude the use of other sound and practical means of positive identification;
    - c. it does not rule out laboratory errors, e.g., incorrect labelling of samples.
  - E. Laws must not be passed which require mandatory DNA analysis for the purpose of identification.
  - F. When DNA analysis is deemed necessary for identification, the laboratory performing the analysis must not operate on the basis of maximum profit. Commercial considerations should be minimized and the accounts must be externally audited.
  - G. With reference to the principles in 4.1.3, consideration should be given to the use of *anonymized* data for the purposes of research, for example, to establish allele frequencies. This would require the input of lawyers, population geneticists, ethicists and laboratory researchers.
  - H. Any contract with a laboratory must include a reference to the commonly agreed principles contained in 4.1.1 and 4.1.3.
  - I. It is the responsibility of the head of the forensic team to remind the contracting laboratory of these principles.
  - J. In the pre-investigation phase, the social, religious and cultural aspects of the community concerned must be taken into consideration. The families and the community will accept the outcome more readily if they have confidence in the investigation.
  - K. Forensic specialists have a duty to ensure that the donors of reference samples are informed about the rules governing protection of personal and genetic information.
5. **The criteria that need to be satisfied before one can give primacy to DNA techniques for identification over the traditional course of matching *ante* and *post mortem* data**
- A. The DNA techniques must be reliable and scientifically valid.
  - B. The information technology for the analysis of DNA and matching must be reliable and valid.
  - C. The use of DNA techniques must entail an additional social benefit that outweighs the additional cost.
6. **Preconditions for recommending a strategy based on the primacy of DNA in a particular situation**
- A. The additional cost and complexity must be outweighed by a foreseeable additional social benefit.
  - B. There must be communication, information and counselling strategies for communities and individuals.
  - C. The DNA techniques must be applicable to the majority of cases.
  - D. Appropriate mechanisms must exist for informing the families about the process, taking into account, for example, confidentiality, follow up and services.
  - E. Strategies must exist for dealing with errors of identification and partial, commingled or unidentified human remains.

## Human remains management

- F. There should be an "exit strategy".
- G. Incidental information such as non-paternity - in individual cases and as a community statistic - is subject to the commonly agreed principles on the protection of genetic information (see 4.1.3)
- H. Prior consideration must be given to the positive and negative unintended impact on pre-existing legal and forensic services.

### 2.1.2.2 Introduction to using DNA for identification in the context of missing persons

The identification of human remains involves complex scientific, technical, legal, ethical and cultural issues. In recent years, the possibilities for identification have been expanded, improved and rendered more complex by the emergence of technologies that permit analysis of DNA in remains and in people who might be relatives of missing persons. DNA analysis using certain techniques can apparently provide near 100% certainty of proof of identity. DNA tests carry an equally important potential to exclude a family relationship. This workshop only considered the legal and ethical aspects of using DNA analysis for identification in a context involving missing persons. Certain operational issues are addressed in 5.2.15. Specific scientific and technical aspects will be considered in a later workshop, along with the relevant social and cultural issues.

1. Using DNA to identify remains is a *five-step process* that involves:
  - A. retrieving DNA from the remains;
  - B. retrieving DNA from likely relatives of the missing person *or* from the missing person's hair, saliva stains or unwashed underclothes;
  - C. profiling the DNA (by marker identification for nuclear DNA or by sequencing of sections in mitochondria DNA - see below) from both sources;
  - D. matching the results of the profiling processes;
  - E. deciding on the degree of matching that is compatible with the claimed relationship between the person (the remains) and the presumed family member.
2. Two sorts of DNA are used for the purposes of identification.
  - A. *Nuclear DNA*
    - a. Nuclear DNA is relatively easy and fast to analyze. It is best extracted from blood, soft tissue or blood stains. It degrades in a few weeks if the remains are not carefully stored. Although it has proven difficult to extract suitable nuclear DNA from bones in the past, the technology involved has advanced rapidly.
    - b. The most accurate matching is done *either* when quality nuclear DNA of the missing person can be harvested (e.g., from hair, saliva, etc.) *or* when both parents of the presumed missing person can give a blood sample. Nuclear DNA is much more difficult to use for matching with other relatives. Obviously, considerable complications arise when the presumed father is not the biological father.
    - c. For identification purposes, there are about 30 "loci" identified in human nuclear DNA, each of which has between 4 and 30 variables or "alleles". Each person's nuclear DNA is duplex and the alleles differ between each of the two chromosomes (one chromosome coming from the father and from the mother.) There are thus many millions of possibilities; however, any variation in markers must be found in either the mother's or the father's nuclear DNA. There are a number of commercial kits for testing these markers.
  - B. *Mitochondrial DNA*
    - a. Analysis of mitochondrial DNA is slow, difficult and very expensive. The advantage of its use is that it is easier to extract from bones and teeth and so can be used to test old remains.
    - b. Mitochondrial DNA is passed to a person only through the maternal line. This means a person's remains can be matched to the mother, maternal grandmother or maternal aunts or uncles, i.e., it can be used for matching more distant relatives. It also means that mitochondrial DNA is not unique to any one person. Furthermore, certain specific sequences of mitochondrial DNA may be shared to a greater or lesser extent with other apparently unrelated people in the same population.
    - c. The analysis is difficult because it is not done by detection of markers with a kit but by sequencing (base by base) of the DNA. Two sections of mitochondrial DNA are variable and it is these sections which are sequenced. The sequence of any one person's mitochondrial DNA is recorded in terms of how it differs from a reference sequence (the Anderson sequence).

## Human remains management

### 3. *Software considerations*

- A. In small numbers, the matching can be done on an individual basis, i.e., by direct vision of the results of the analysis.
- B. The software to do the matching for large numbers is in a varied state of development within different agencies such as Interpol-DVI, the US Armed Forces DNA Identification Laboratory, the Federal Bureau of Investigation, the Royal Canadian Mounted Police and the International Commission of Missing Persons.

### **2.1.3 The legal protection of personal data and human remains - Comments (see 4.1)**

The workshop made the following comments on the outcome of the electronic workshop, *The legal protection of personal data and human remains* (document 4.1):

- 1. Document 4.1.3 - Principle 2: the word "only" should be removed.
- 2. Document 4.1.3 - Principle 3: "informed consent" should be understood as the written and signed consent of all the parties concerned.
- 3. Document 4.1.3 - Principle 6: should be considered in an "exit strategy".
- 4. Document 4.1.3 - Two additional principles were proposed:
  - A. DNA data must be kept separately from other personal data.
  - B. Best practice guidelines must be developed for archiving the results of DNA analysis.

These comments must be examined in the context of the full report on the electronic workshop, *The legal protection of personal data and human remains* (ICRC/TheMissing/07.2002/EN/1).

### 2.2 Workshop on *Human remains: management of human remains and information on the dead*

#### 2.2.1 General recommendations

1. The workshop recognized that in contexts involving missing people a forensic specialist's work may differ from normal domestic practice. After taking account of the outcome of the preceding workshops (*Human remains: law politics and ethics* (see 2.1); *The legal protection of personal data and human remains* (see 4.1); *Members of armed forces and armed groups: identification, family news, killed in action, prevention* (see 4.2)) and ICRC preparatory documents (see 5.3), the workshop generated a number of general recommendations on the points below.
  - A. Standards of practice for forensic specialists and professionalism
    - a. It was recognized that in contexts involving missing people forensic scientists might have to work under severe constraints. They therefore needed minimum acceptable standards of practice, below which no work should be performed, no matter what the circumstances (see 2.2.2.5.D).
    - b. Forensic specialists working in contexts involving missing people must demonstrate a level of professionalism that goes beyond consideration of the standards of practice. A professional approach to the issue of human remains can provide the basis for a much needed dialogue between two parties locked in conflict. Likewise, it may be possible to show that the enemy's remains are being treated with respect; this may serve as one means of building confidence and even lessening hostilities. In brief, professionalism in forensic science implies a degree of respect and neutrality that transcends conflict.
    - c. Professionalism among forensic specialists can be a major factor in promoting international humanitarian law, human rights, accountability and a process of reconciliation.
    - d. Correct guidelines can serve to empower forensic specialists working in new, difficult or highly political circumstances.
    - e. Forensic specialists working in contexts involving missing people have a duty to pass on their knowledge and experience to professionals from other domains who are working with human remains.
  - B. Working in different cultures or contexts
    - a. The importance of recognizing the different cultures in which forensic specialists may be called on to work was repeatedly stressed. All forensic specialists have an obligation to ensure that they have adequate knowledge and an understanding of the context in which they will work. Not to do so amounts to negligence.
  - C. Taking the issue of missing persons to a broader public
    - a. The issues raised in connection with the workshop, especially with forensic sciences, were considered far too important to be confined to the circles of people and agencies directly concerned. The workshop recommended that they be promoted in scientific, academic and educational circles by way of presentations and publications.
  - D. The tension between justice and family needs
    - a. The International Criminal Tribunal for the former Yugoslavia (ICTY) should be formally invited to comment on 2.1.1.1.2.C and D.
  - E. As a continuation of the process launched by the ICRC in respect of missing persons, the workshop recommended further expert work on:
    - a. the development of compatible standard *post mortem* and *ante mortem* data collection systems;
    - b. the standards of forensic practice applicable in contexts involving missing people;
    - c. the means and combinations of means of making positive identifications in different contexts;
    - d. guidelines for the exhumation of graves;
    - e. the accreditation of laboratories performing DNA analyses in contexts involving missing people.

#### 2.2.2 Autopsy protocols and records of *post mortem* data

1. The workshop discussed the applicability of the Minnesota Protocol (Annex A) and the Interpol DVI autopsy protocol (Annex B) in contexts involving missing people. It also considered how or whether autopsies could be abbreviated in difficult circumstances.

## Human remains management

2. Document 3.2.10 serves as a good introduction because it stresses the need for a standardized approach to autopsy protocols and records of *post mortem* data.
3. The objective is to ensure that human remains are subject to one examination only. The same examination should serve to establish the cause of death *and* record the information required for identification. Examinations should not have to be repeated because previous examinations were incomplete.
4. The workload anticipated for any given action or investigation must be assessed realistically and professionally.
5. In contexts involving missing persons:
  - A. the advantages of the Minnesota Protocol are that:
    - a. it is widely recognized and comprehensive;
    - b. it represents standards of practice;
  - B. the disadvantages are that:
    - a. it describes standard autopsy procedure and is therefore redundant in cases where the autopsy is conducted by a qualified forensic pathologist;
    - b. it is difficult to apply in certain situations;
    - c. it does not provide the means to document findings;
    - d. it is awkward for an inexperienced examiner to read it as a checklist;
    - e. it does not incorporate examinations of skeletal or partial remains;
    - f. it is not compatible with an electronic format.
  - C. The term "prosector" should indicate a person competent to perform autopsies but who is under the ultimate responsibility of a forensic pathologist (see 2.1.2.1.2.B.)
  - D. The Minnesota Protocol should be reviewed with a view to extracting those elements which represent a minimum standard of practice (see 2.2.2.10.)
6. In contexts involving missing persons:
  - A. the advantages of the Interpol DVI autopsy protocol are that:
    - a. it is widely recognized, adapted for international use and has been translated into a number of languages;
    - b. it is easily converted into electronic format;
    - c. it serves as a checklist;
    - d. it provides an easy means of documenting autopsy findings;
  - B. the disadvantages are that:
    - a. it contains no useful information on the examination of partial remains, not even in the part relating to missing body parts;
    - b. it does not permit the systematic documentation of findings pertaining to injuries and cause of death;
    - c. it does not include a section on the taking of samples (such as DNA samples, toxicological samples).
7. One standardized *post mortem* form should be drawn up that takes account of the advantages and disadvantages of both the Minnesota Protocol and the Interpol DVI autopsy form. This is a matter for a future working group to deal with.
8. The standardized form:
  - A. must be designed to serve as both checklist and data collection form;
  - B. must be designed to be compatible with appropriate software;
  - C. must be designed to be compatible with a corresponding standardized *ante mortem* form (2.2.4.6);
  - D. must be written in an international language and be able to accommodate a local language;
  - E. must use recognized terms in a consistent manner which permit translation;
  - F. must permit inclusion of an autopsy report and a conclusion;
  - G. must include a reference to the chain of custody for the samples taken;
  - H. must include a section on taking samples and on the chain of custody of those samples;
  - I. must be able to accommodate future revisions;
  - J. must be accompanied by a user manual;
  - K. requires specific training of personnel;
  - L. must, when completed, be widely available and accessible via the Internet.

## Human remains management

9. The principal disadvantages of such a standardized form are:
  - A. the further work required to prepare it;
  - B. the drag it will exercise on examinations and recording of the findings, a point to be borne in mind when planning and funding an investigation;
10. The working group that undertakes to design the form should also review the question of minimum acceptable standards (see 2.2.2.5.D).
11. Both the Minnesota Protocol and the Interpol DVI autopsy protocol should *as an interim measure* be made available to forensic specialists currently working on issues related to missing persons.
12. The ICRC preparatory document for this theme (5.3.1) would, if modified, serve as a guide for external examinations (see 2.2.3.5).

### 2.2.3 When it is not possible to conduct an autopsy

1. The workshop recognized that forensic pathologists may, in contexts involving missing persons, find themselves in situations where they cannot perform a full autopsy. It may be necessary under difficult conditions, with little time and without access to mortuary facilities, to examine a number of bodies with a view to both identifying them and establishing the cause of death. This poses problems for any forensic specialist, but the workshop agreed that performing only an external examination would be compatible with proper professional conduct given the constraints. In this regard, it was acknowledged that such situations are recognized in the introduction to the Minnesota Protocol: "Variation from this protocol may be inevitable or even preferable in some cases. It is suggested, however, that any major deviations, with supporting reasons, should be noted". The objective of such an examination is to collect and preserve as much information as possible with a view to maximizing the chances of subsequent identification.
2. The person best qualified to perform abbreviated examinations of fresh bodies is a forensic pathologist. While forensic anthropologists might be best equipped to so examine skeletal remains, the guidelines relating to identification and death certificates should be borne in mind (2.1.2.1.2).
3. In such situations, interaction between the community, the families, politicians, the armed forces and the forensic specialist is likely to be fraught and difficult (2.2.10.2.B).
4. In order to maximize the chances for subsequent identification, each body must be labelled with a body number, place and date (2.2.9.2.B.d), and the remains managed in accordance with the checklists in 2.2.9.
5. The records on the external examination should comprise the following details as a minimum:
  - A. estimated time since death;
  - B. the face and the whole body should be photographed both clothed and unclothed;
  - C. all shoes, clothes and personal effects should be noted and stored;
  - D. all signs of external injury should be recorded (see section 2.1.1.3);
  - E. the following should be recorded:
    - a. skin colour;
    - b. likely ancestry;
    - c. hair colour;
    - d. sex;
    - e. height;
    - f. weight;
    - g. likely age;
    - h. general build, e.g. fat or thin.
  - F. the unclothed body should be examined for distinctive features such as:
    - a. tattoos;
    - b. birthmarks;
    - c. unusual hair distribution;
    - d. scars (surgical or traumatic);
    - e. nicotine staining of fingers;
    - f. state of finger nails;
    - g. obvious deformities or malformations;
  - G. if appropriate, fingerprints should be taken;

## Human remains management

- H. any teeth should be examined and if possible x-rayed;
  - I. samples should be taken only for the purposes of identification or to establish the cause of death.
6. In the circumstances in question, it may be appropriate to take samples of hair (including of the roots) for subsequent DNA analysis. If enough syringes and needles are available and the bodies have been dead for less than 48 hours, it may be more appropriate to take blood samples from major vessels. *All samples must be clearly labelled with the same information as on the body label.* Consideration must be given to storing, registering and transporting these samples; all may be difficult in the circumstances.
7. If the bodies are not claimed by the families or the competent authorities, they should be stored or temporarily buried in accordance with the guidelines set forth in 4.2.3.2. If possible, the forensic specialist should record where unidentified remains are stored or buried by body number.

### 2.2.4 Towards a standardized system of *ante mortem* data collection

1. The objective of this part of the workshop was to reach a consensus on the steps to be taken to develop a standardized system of collecting *ante mortem* data. A comparison was made of the forms already used by Interpol DVI, Physicians for Human Rights Cyprus, Physicians for Human Rights Bosnia and the Argentine Forensic Anthropology Team. The ICRC preparatory document included a proposal for a standard form (see 5.3.2). The workshop agreed that it would be valuable to have one standard form applicable in all contexts involving missing people.
2. The workshop recalled the purpose of an *ante mortem* form as defined by Interpol DVI: "The *ante mortem* form is designed for listing all relevant information that may be obtained from next-of-kin and other relevant sources, on the possible victim or missing person, which may assist in an identification, in order to compare that information with data obtained from human remains".
3. The workshop found that account had to be taken of many other important considerations beyond simply what information was recorded for each missing person. These include:
  - A. how, where and when the data were collected;
  - B. who collected the data;
  - C. whether interpreters were used in the interview;
  - D. whether or not the family was further traumatized by the collection process;
  - E. whether the family's hopes were needlessly raised by the fact that *ante mortem* data was being collected;
  - F. the relationship between the interviewer and interviewee;
  - G. the experience, sensitivity and understanding of the interviewer;
  - H. the need to double check all information with different sources;
  - I. the time that had elapsed since the incident;
  - J. the cultural, social, historical, political and security contexts;
  - K. whether the interview was combined with a criminal investigation;
  - L. whether the interviewee was a family member, witness or perpetrator;
  - M. the role of the collection process in the process of reconciliation and the promotion of international humanitarian law and human rights law;
  - N. the fact that one interview could open other, new cases;
  - O. the sequence of events and location of likely burial sites.
4. It was recalled that only such data as was deemed necessary for the purpose identified at the time of collection or beforehand should be collected and processed (see 4.1.1).
5. The community should be informed about the process so as to maximize its cooperation (see 2.1.1.5).
6. A standard form for *ante mortem* data collection should be developed by a future working group. The form must:
  - A. exist in an appropriate electronic format and be developed with professional data handlers;
  - B. contain fields which correspond to "hard" identifying features such as:
    - a. tattoos;
    - b. birthmarks;
    - c. unusual hair distribution;
    - d. scars (surgical or traumatic);
    - e. nicotine staining of fingers;
    - f. state of finger nails;

## Human remains management

- g. obvious deformities or malformations;
  - h. medical or dental records;
- C. be compatible in terms of language, terminology and software with the proposed standardized *post mortem* form (see 2.2.2.8);
  - D. contain enough blank fields that it can be used in a wide variety of contexts;
  - E. reflect the possibilities of intentional acts to confuse identification, e.g. a mass grave in which the ID cards have been redistributed;
  - F. accommodate the taking and recording of samples for DNA testing (this implies that the missing person's genealogy must also be recorded in some circumstances);
  - G. accommodate the existence of alternative sources for the missing person's DNA, such as hairbrushes or razors;
  - H. be field tested before being finalized;
  - I. be developed with a user guide (those using the standard *ante mortem* form will have to be carefully selected and trained).
7. The interviewer will need psychological support.
  8. The objective is one interview with the family; multiple interviews and later requests for further information or samples for DNA analysis might traumatize the family further. In contexts where there is a strong presumption that the missing person is dead, *ante mortem* data could be collected at the same time as the tracing request is lodged.
  9. If the conditions for establishing a programme using DNA analysis are fulfilled in a particular context (see 2.1.2.1), samples could be taken at the same time as the *ante mortem* data is collected. The workshop agreed that in principle both *ante mortem* data and DNA samples should be collected as soon as possible, as the reference population gradually disperses with time and memories of important details fade.
  10. All human remains and personal data, including data derived from DNA analysis, should be protected in accordance with agreed legal principles (see 4.1).
  11. The workshop noted that the proposed standard form for *ante mortem* data contained information that would not only lead to identification but might also serve as evidence in a criminal investigation. This was acceptable to the workshop as it constituted an exact parallel to the "duality" of the *post mortem* examination and the apparent "tension" autopsies can generate between identification and judicial processes.
  12. With regard to the ICRC's proposed form for *ante mortem* data collection, the workshop made some general observations:
    - A. it was long; it would only rarely be possible to ask all questions;
    - B. it may not be appropriate to ask all questions in a given situation;
    - C. it needed to be in electronic format.
  13. Suggested specific changes to the proposed standard form are to be found in 2.2.11; they are for consideration by a future working group.

### 2.2.5 Standard criteria for identification

1. On this theme, the workshop reviewed the three principal means by which a positive identification could be made (2.1.2.1.1.D), in each case in the light of whether the remains were whole bodies, multiple and numerous, skeletal, commingled or partial, and bearing in mind a previous workshop's definition of identification (2.1.2.1.1.A).
2. General comments about identification
  - A. The decision on which means of identification to use depends on the context and the relevant security, political, cultural, legal, technical and scientific considerations.
  - B. Those involved in the project *The Missing* and its follow-up need to be aware of and adapt to rapid technological change in this field.

## Human remains management

- C. The new knowledge gained and the techniques developed by those working in this context should be freely and publicly available for future work.
  - D. While visual identification may be the only pragmatic option, it is known to carry a significant risk of misidentification and should therefore only be used when the bodies are fresh and their identities relatively certain. In all other cases, more objective methods should be used.
  - E. Where visual identification is used, consideration should be given to collecting a sample for DNA analysis should the need arise; however, even this apparently simple measure may be difficult to apply in the field.
  - F. When identification is being attempted by matching *ante mortem* data with *post mortem* data, some "hard" features such as previous medical conditions and frontal sinus radiology equate with "scientific" means. Without such "hard" identifiers, there is a significant risk of false identification (which in fact amounts to declaring a presumptive identification as a positive identification).
  - G. In this regard, the International Commission on Missing Persons should be requested to report on the unique experience it has gained from its work in Bosnia, where identifications previously made by matching *ante mortem* data with *post mortem* data are confirmed or refuted using DNA analysis.
3. It was recognized that the three means of making a positive identification may frequently be combined. The workshop found it useful to list the means or combinations of means of identification and describe example contexts in which they could be used to make positive identifications. (This exercise did not take into account the legal aspects of identification.) A total of six means or combinations of means were described as appropriate in a variety of contexts:
- A. *Identification by visual / normal / customary means only.* This might apply in a difficult security situation with recently killed, whole bodies, where the families are present and no other possibility for formal identification exists.
  - B. *Identification by visual / normal / customary means plus matching of ante mortem data with post mortem data.* This is appropriate in situations similar to "A" above but where there is more time, greater doubt as to identity, or the family is not immediately present and there is no possibility of using scientific / objective means. Any positive identification should, if possible, be agreed by two qualified people (2.1.2.1.2.C).
  - C. *Identification by visual / normal / customary means plus a scientific / objective means.* This is appropriate in situations similar to "A" above but in which there is a possibility to use scientific / objective means, more time, greater doubt as to identity, or a dispute with legal implications. It may be appropriate in cases of re-exhumation.
  - D. *Identification by matching ante mortem data with post mortem data only.* A positive identification can only be made if "hard" identification features match. The identification should, if possible, be agreed by two qualified people (2.1.2.1.2.C). In the absence of "hard" identification features, matching *ante mortem* data with *post mortem* data may be used to supplement both "A" above and "F" below.
  - E. *Identification by matching ante mortem data with post mortem data plus scientific / objective means.* An identification by these means is the most certain route to true identification.
  - F. *Identification by scientific / objective means only.* This refers to matching of fingerprints, matching of *ante mortem* dental records with *post mortem* dental examination or DNA analysis. Each has its advantages and disadvantages in contexts involving missing people:
    - a. all require additional expertise and possibly laboratory resources;
    - b. fingerprints can lead to the rapid identification of fresh bodies if *ante mortem* prints are available;
    - c. the principal disadvantages of using finger prints is that they require soft tissue on the hands and existing *ante mortem* records, which are unavailable in many contexts;
    - d. matching of *ante mortem* dental records with the findings of a *post mortem* dental examination is most appropriate when the remains are burnt, skeletal or in an advanced state of decomposition; as with fingerprints, however, *ante mortem* dental records are a prerequisite which is rarely available in the contexts concerned;
    - e. with regard to DNA analysis, see 2.1.2.1.4 to 2.1.2.1.6, 2.1.2.2 and 2.2.6. DNA is the only means, apart from those alluded to in "D" above, of making an objective / scientific identification if there are skeletal remains but no *ante mortem* dental records. DNA analysis provides the only reliable means of identifying and assembling partial remains.

## Human remains management

4. The purpose of 2.2.5.3.A to 2.2.5.3.F is to show how the different means of identification may be used separately or in combination, depending on the context. The workshop recommended that a future working group conduct a more detailed analysis of how this schema might alter in four situations:
  - A. the presence of one or several non-decomposed bodies;
  - B. the presence of numerous non-decomposed bodies;
  - C. the presence of one or several sets of skeletal remains;
  - D. the presence of numerous sets of skeletal remains.

### **2.2.6 General recommendations on the use of DNA analysis in contexts involving missing persons (see 2.1.2.1.4 to 6 and 2.1.2.2)**

1. When it comes to DNA samples, where they are analysed (in or outside the country concerned) spells a big difference in terms of resources and logistics.
2. Even when identification using DNA is not required, samples can be taken from both the remains and the reference population and stored without analysis; this ensures the possibility of DNA analysis at a future date.
3. Samples collected but not analyzed are subject to the same legal protection as analyzed samples (4.1).
4. In contexts involving missing people, all DNA analyses must be performed in laboratories that can ensure:
  - A. quality of accredited standards established by bodies such as the FBI's Technical Working Group on DNA Analysis Methods (TWGDAM);
  - B. that the remains, samples and data are handled as stipulated by established legal principles (4.1); that research is subject to a process of ethical review (see also 2.1.2.1.4.G).
5. The responsibility for ensuring accreditation could fall to an international body such as that foreseen in document 2.1.1.6.
6. The workshop considered Principle 2 (document 4.1.3) to be no longer valid. It may represent a commonly agreed *legal* principle but the law, by necessity, develops in the wake of technology; this legal principle does not accommodate the most recent technological advances in this field (see also 2.1.3).

### **2.2.7 Recommendations on the operational feasibility (i.e. in the field) of DNA analysis (in response to document 5.3.3)**

1. The recommendations made by the working group largely related to methods of analysing nuclear DNA, although it was recognized that in some cases only mitochondrial DNA can be used (see 2.1.2.2).
2. Prior to a decision being made about the use and type of DNA analysis in a particular context, an expert evaluation must be made. This will to some extent determine the resources required.
3. The financial costs must be considered; these vary depending on the number of analyses required and the cost of each analysis in whichever laboratory undertakes to perform them.
4. A prerequisite for any large-scale identification programme is that all the entities concerned must agree on a communication strategy to inform the communities and families (see Principle 3 in 4.1.3; 2.1.2.1.6.B and 5.3.3.3.A and B). The information must be realistic but not discouraging. It should mention:
  - A. that DNA is not always required for identification;
  - B. that it is not always possible to extract DNA from remains;
  - C. that positive results will not always be achieved.
5. Logistic implications should be considered beforehand; these include storage, transport and a chain of custody that is agreed by all agencies. The number of agencies involved, including the number of laboratories, should be kept to a minimum.
6. If no coordinating body bears overall responsibility for taking and labelling samples, the transport and analysis of samples should be defined in advance on the basis of competence and agreed by written contract.
7. The sustainability of any programme involving DNA analysis depends on the relationship between the evaluation and the objectives.
8. The existing tests for analysing nuclear DNA, such as Powerplex, have been validated from a scientific point of view for confirming or refuting a presumed family relationship. This is separate from the validation of whether the

## Human remains management

laboratory concerned works to accreditable standards (see 2.2.6.4). Part of validating any technique in a given laboratory involves duplicating each test. The tests used to analyse mitochondrial DNA in order to confirm or refute a presumed family relationship are extremely complex from the point of view of both DNA structure and population statistics.

9. The software required to analyse DNA and store the results is part of the package bought with the equipment.
10. Different versions of software for matching databases of nuclear DNA are being used by institutions such as the Royal Canadian Mounted Police (RCMP), the US Armed Forces DNA Identification Laboratory (AFDIL) and the International Commission for Missing Persons (ICMP). That of the RCMP is available commercially but is very expensive. The AFDIL and ICMP software are not yet available but it is hoped they will be in the near future.
11. Requests for DNA analysis for the purposes of identification may be generated by individuals, families, communities, agencies or governments. Further work needs to be done to develop a consistent system whereby such requests are evaluated on a case-by-case basis.
12. Even if a laboratory doing DNA analysis is of the highest standard, it may not have the technical or human resources to accept an increased workload at short notice.
13. Requests by governments, agencies or individuals to re-exhume remains which have been identified by traditional means in the past for the purpose of DNA analysis should be examined on a case-by-case basis (see 2.2.5.3.C-F).

### 2.2.8 Exhumation of human remains

1. Under theme 4, the workshop was supposed to review three documents relating to *post mortem* detection of torture (annexes C and D) and the disinterment and analysis of skeletal remains (annex E). Time constraints did not permit consideration of *post mortem* detection of torture. The workshop felt that the examination of skeletal remains was adequately covered by the recommendations made in 2.2.2. Thus only exhumation was considered.
2. Document 3.2.1 (Burial site questionnaire) is a useful tool for guiding an exhumation team to the correct location.
3. The workshop recommended that the steps in exhumation (taken from document 5.3.4) serve as a guide for future work. Two workshop participants, both with considerable experience in exhuming mass graves, agreed to draw up correct guidelines based on the following steps, which should be taken in strict order:
  - A. locate the grave site;
  - B. establish a security perimeter;
  - C. if permitted, photograph and document surface features / evidence;
  - D. establish the boundaries of the grave;
  - E. remove the soil covering the remains;
  - F. expose the remains;
  - G. map and photograph the remains;
  - H. note the position of, label distinctly and keep separate any personnel effects or other objects not attached to the remains (e.g. keys, bullets);
  - I. label distinctly and individually all remains, whether parts or whole bodies;
  - J. remove the remains (while keeping them as an entire body if possible);
  - K. store the remains;
  - L. if appropriate, permit the family immediate visual access to the remains for identification purposes.

### 2.2.9 Management of human remains without forensic specialists (review of 4.2)

1. Background information
  - A. The uncollected bodies and partial remains of both combatants and civilians killed in armed conflict or as a result of internal violence may be lying on the surface or may be more or less extensively covered.
  - B. If the remains have not been buried, their collection and identification are rendered increasingly difficult as time passes. Important points to bear in mind are:
    - a. decomposition is rapid when remains are exposed to a warm climate, humidity, rain, etc.;
    - b. animals may remove and scatter the remains;
    - c. bones may be removed;

## Human remains management

- d. decomposition, loss of bones and scattering increase with time;
- e. heavy clothing will slow down the process of disarticulation;
- f. climate and seasonal change are important determinants of the ease with which surface remains are found.

### B. General recommendations:

- a. All work involving human remains should be done by specialists. This may not always be possible. The objective of involving non-specialists is to maximize the chances of systematic evaluation of the event and identification at a later date.
- b. The emotional impact on those exhuming or working on the bodies must be considered as they will not be familiar with this kind of work. Government, military or agency personnel who may be called on to manage or handle remains must be adequately prepared and trained. They must be offered psychological support and counselling.
- c. Non-specialist personnel should be trained by forensic experts.
- d. There is no risk of infectious disease when the cause of death is traumatic unless the people were infected beforehand with e.g. HIV or hepatitis B. Therefore precautions should be taken such as wearing gloves.
- e. Non-specialists can gather data (see 2.2.9.2.C.b) but should avoid drawing conclusions, e.g. about the cause of death.
- f. The family may identify and claim the remains at any stage. Indeed, this may be appropriate in some circumstances (see 2.2.5.3.A).

## 2. Checklists

### A. Do not:

- a. open graves without specialist expertise unless absolutely necessary;
- b. destroy anything that might be related to identification or evaluation of cause of death, e.g. remains, personal effects, clothes, etc.;
- c. move the body without consulting the checklist in 2.2.9.2.C;
- d. remove the remains from the site unless absolutely necessary;
- e. separate personal effects from the remains without first documenting and labelling them;
- f. mix body parts or attribute body parts to incomplete remains;
- g. mix personnel effects, clothes, etc.

### B. In all situations:

- a. ensure that the bodies are not situated in a mine field or booby-trapped;
- b. record the date, the time since the incident, the kind of incident that led to death and the location of the remains;
- c. if possible, count (as opposed to estimate) the number of bodies and assess the general state of the remains;
- d. attribute a reference number to each body and record this number with place and date on a plastic or metal marker which is then attached to the corresponding body;
- e. likewise number and label separate body parts;
- f. note where each numbered body is situated in the grave, if possible using a map or chart;
- g. note any indication of whether the remains are those of combatants or civilians;
- h. consider informing the families and the "host" community;
- i. body parts should be treated with the same respect as whole bodies;
- j. if the deaths are recent and depending on the context in which death occurred, consider ascertaining the total number of wounded by visiting hospitals or first aid posts;
- k. bear in mind that a person who has lost a limb in an explosion or as a result of an amputation may not be dead; he or she may have survived and be in hospital;
- l. survivors who are in hospital may possess information which is useful for identifying the dead.

## Human remains management

- C. For each body, time permitting:
- a. if permitted or allowed, photograph the body before moving it and then photograph the face, including the label in the photograph (this could also be done with a video camera);
  - b. on a piece of paper bearing the body number, place and date (2.2.9.2.B.d):
    - I. note any obvious injuries and if possible photograph them;
    - II. note - but do not interpret - anything else, such as missing limbs, hands tied or obvious signs of mistreatment or mutilation;
    - III. note any clothing and shoes;
    - IV. note any personal effects (e.g. watches, jewellery, etc.);
    - V. note any other distinctive features that might help identify the remains (e.g. tattoos, visible gold teeth);
    - VI. check for any identity documents or identity tags;
  - c. collect, group and number personal effects according to the individual number of the body *and store them separately in bags* labelled with the corresponding reference number, place and date;
  - d. ensure that half of any identification tag is included with the belongings;
  - e. if body bags or coffins are not available, wrap the remains in a blanket or sheet.
- D. If the remains must be moved to a temporary storage place in a vehicle:
- a. place them in the vehicle with great care;
  - b. ensure bodies and the corresponding personal belongings are transported in the same vehicle;
  - c. keep a copy of all records and notes;
  - d. ensure one copy is given to an appropriate authority or agency.
- E. If the remains are not to be buried immediately, they should ideally be stored:
- a. in a place that is secure from entry at all times;
  - b. where they are hidden from public view;
  - c. at a temperature of 4° C;
  - d. in a dry atmosphere;
  - e. in a sufficiently large area with adequate lighting to work on and move the remains;
  - f. in a place where they can be viewed by the family in conditions that are as dignified as possible;
  - g. in a place that provides easy access to vehicles for loading and unloading;
  - h. in a place with easy access to where any subsequent forensic work will be conducted;
  - i. in a place with a smooth, washable floor;
  - j. if many old remains are being identified, preferably in a place with a separate area equipped with a hose and washing/drying facilities for clothes and other personal effects.
- F. If the above conditions for temporary storage are not available, the only option may be emergency burial (whether or not the body has been identified by identification tags or personnel papers, etc.) The guidelines in 4.2.3.2.H should be referred to.
- G. For recovering buried or hidden remains without forensic expertise, the checklists in document 4.2.4 should be referred to.
- H. When remains must be transferred or repatriated, the checklist in 5.3.5 should be referred to.

### 2.2.10 Involvement of communities and families in the management, exhumation and identification of human remains (response to 5.3.6)

1. The guidelines in 2.1.1.5 were affirmed.
2. General considerations
  - A. The request for an exhumation programme may come from the missing person's community or family

## Human remains management

- B. The relationship between the forensic specialists and the families and communities is always complex. A forensic specialist may feel uncomfortable with this relationship, which is influenced by:
    - a. how information is transmitted to the communities and families,
    - b. the purpose of the investigation, i.e. whether the focus is on identification or on a criminal investigation;
    - c. the extent and timeframe of the investigation;
    - d. who is conducting the investigation, e.g. the police, the armed forces, a government agency, an NGO, an international forensic team, a UN body, etc.; the presence of forensic specialists who held the same position in a previous, perpetrating government will generate considerable suspicion;
    - e. whether the perpetrators are still at large in the community, as their presence will affect whether relatives locate graves, testify or provide *ante mortem* data;
    - f. whether the families believe any information resulting from the investigation will be used for their benefit or for genuine justice;
    - g. whether the forensic specialists and other team members attend the funerals of the people whose remains they have identified.
  - C. The social and psychological impact on the communities and families should be documented for future reference.
3. How are communities and families involved in the exhumation and identification of remains?
- A. Any community or family will be deeply traumatized if its members are killed or massacred. Uncertainty about the fate of missing persons and the process of identifying any remains may simply compound the trauma.
  - B. The extent to which the communities or families are involved in the exhumation or identification process should be decided on a case-by-case basis taking into account:
    - a. the outcome of any consultation with the communities and families;
    - b. whether the family wishes to be present or represented by a qualified or other person;
    - c. the overall possible benefit for the families;
    - d. the possibility that the investigation will be comprised, including by political interference;
    - e. the possibility that the families will be further traumatized, especially if the investigation is unnecessarily prolonged, the information collected in an insensitive manner or the remains perceived to have been handled unprofessionally, with a lack of dignity or disrespectfully;
    - f. security considerations.
  - C. In addition, the community or family may:
    - a. know where the remains or graves are or are likely to be situated (including on territory controlled by the former enemy);
    - b. facilitate identification of remains after recovery;
    - c. provide on-site security;
    - d. wish to veto the exhumation (this requires careful consideration).
4. Informing communities and families about exhumations
- A. It is essential in all contexts to have a communication strategy, the objective of which is to inform and regularly update the communities and families about an exhumation and give them a realistic appraisal of the outcome.
  - B. The following should be borne in mind:
    - a. family observation of the exhumation process may lead to easier acceptance of the results;
    - b. religious or community leaders (who have no connection to the authorities) should be contacted;
    - c. it may be appropriate to discuss some kind of memorial at an early stage;
    - d. any psychiatrists, psychologists, social workers or traditional healers who might be working with the families should be contacted, informed and, if possible, involved.

## Human remains management

5. Informing families of the death of a relative and returning personal effects and remains
  - A. Informing families of the death of their relative(s) and returning remains or personal effects must be planned and done as soon as possible taking into consideration the cultural and religious context:
    - a. the member of the family who is to receive the information, remains or personal effects should be decided in advance (this may be an adult son or daughter, the head of household or eldest family member according to the local culture or society);
    - b. whenever possible an appointment should be made in advance to ensure the presence of the family member(s) who should be present;
    - c. the families should be informed that other people can be present;
    - d. those bringing the information, remains or personal effects should be accompanied by a community or religious leader (and/or by a health professional) who will have received all available information beforehand and be in a position to pass it directly to the family and to provide the necessary support;
    - e. prior knowledge of what support is available within the community may be useful.
  - B. In addition, before returning human remains, the following should be considered:
    - a. how the remains will be delivered,
    - b. the status of the remains, in order to prepare the family for the possibility, or not, of viewing them;
    - c. the likely options vis-à-vis burial, cremation, etc.;
    - d. whether or not the family should be offered support for the funeral.
  - C. A document, if possible an official document, confirming the death of the relative and setting in motion the legal consequences should be transmitted to the family, as per the rules set forth in 5.A. It must be decided whether it is appropriate to deliver the document with the remains or at a later date.
  - D. Strong emotions may be expressed. Staff informing families of the death of a relative and returning personal effects or human remains must be prepared and supported psychologically for such tasks so that they do not develop "secondary traumatization".

### 2.2.11 *Ante mortem* table - List of information items

The tables below include the corrections requested by the workshop to the standard proposal (see 5.3.2 *Theme 2 - Collecting ante mortem data: a proposed standard formula*). Items of information in bold and italics should be included in a software programme designed to match *ante* and *post mortem* data.

These tables will need to be improved by further expert work in a continuation of the process launched by the ICRC (see 2.2.1 E).

#### 2.2.11.1 The information that should be collected about the *missing person presumed dead*

##### Section 1

Personal data on the missing person - basic	Comment
1.1 Full name	
1.2 Alias	
1.3 Father's name	
1.4 Mother's name	
1.5 Marital status	
1.6 Name of spouse/fiancée	
1.7 If married, surname before marriage	
1.8 Sex	
1.9 Date of birth	
1.10 Age	
1.11 Place of birth	
1.12 District of birth	
1.13 Province of birth	
1.14 Country of birth	
<b>1.15 Ancestry (Caucasoid, Mongoloid, Negroid)</b>	
1.15 Nationality	
1.17 ID card number	

## Human remains management

Personal data on the missing person - basic	Comment
1.18 Religion	
1.19 Rank	
1.20 Military number	

### Section 2

Personal data on the missing person - Last known permanent address	Comment
2.1 Last known phone number	
2.2 Last known address	
2.3 Last known place	
2.4 Last known district	
2.5 Last known province	
2.6 Last known country	

### Section 3

Personal data on the missing person - occupational status	Comment
3.1 Occupation	
3.2 Last place of work (company)	
3.3 Place	
3.4 District	
3.5 Province	
3.6 Country	
3.7 Previous occupation	
3.8 Place of work (company)	
3.9 Place	
3.10 District	
3.11 Province	
3.12 Country	
3.13 Name of the school	
3.14 Place	
3.15 District	
3.16 Province	
3.17 Country	
3.18 Was the missing person affiliated to any organization? If yes, please provide the necessary details.	

### Section 4

Personal data on the missing person - Photographs / Documents	Comment
<b>4.1 Photographs: close up photo smiling, with open mouth AND close mouth, enclosed, obtainable</b>	
<b>4.2 Documents: official records, police records, medical records, hospital records, hospital x-rays, dental records, dental x-rays, dental place, other records.</b>	

### Section 5

Personal data on the missing person - blood relation	Comment
<b>5.1 DNA</b>	Question to be defined more clearly. Genealogical tree to be included.

### Section 6

Personal data on the missing person - fingerprint	Comment
<b>6.1 Ever fingerprinted?</b>	

## Human remains management

### Section 7

Personal data on the missing person - physical description	Comment
7.1 Height (when measured? how obtained? how reliable?)	
7.2 Weight (when measured? how obtained? how reliable?)	
7.3 Build	There might be a necessity to subdivide this question.
7.4 Is the person right-handed, left-handed or ambidextrous?	

### Section 8

Personal data on the missing person - hair	Comment
8.1 Baldness	
<b>8.2 Hair color</b>	
<b>8.3 Type (natural, artificial hairpiece)</b>	
<b>8.4 Shade (light, medium, dark, turning gray)</b>	
<b>8.5 Thickness</b>	
<b>8.6 Does the missing person have any hair gray?</b>	
<b>8.7 Did the missing person dye his/her hair?</b>	
<b>8.8 If yes, did he/she use color or henna?</b>	
<b>8.9 Hair length</b>	
8.10 Style (straight, wavy, curly, parted)	

### Section 9

Personal data on the missing person - facial hair	Comment
9.1 Beard type	
9.2 Beard color	
9.3 Moustache type	
9.4 Moustache color	

### Section 10

Personal data on the missing person - body hair	Comment
10.1 Hair on the chest (extent)	This section is too detailed.
10.2 Chest hair color	
10.3 Hair on the back (extent)	
10.4 Back hair color	
10.5 Pubic hair (extent)	
10.6 Pubic hair color	

### Section 11

Personal data on the missing person - ears	Comment
11.1 Size	Too detailed. To be removed.
11.2 Angle	
11.3 Ear lobes	

### Section 12

Personal data on the missing person - mouth	Comment
12.1 Shape / other	Too detailed. To be removed.
12.2 Lips: shape / other	

### Section 13

Personal data on the missing person - forehead	Comment
13.1 Height/width / inclination	Too detailed. To be removed.

## Human remains management

### Section 14

Personal data on the missing person - glasses	Comment
14.1 Did he/she wear glasses? <i>Always? y/n</i>	
14.2 Did a prescription exist? Is it available? enclosed?	
14.3 What were the glasses for ( <i>myopia, astigmatism, farsightedness</i> )?	
14.4 What did the glasses look like? frame type	
14.5 What color were the frames?	
14.6 Optometrist	
14.6 Did he/she wear contact lenses?	

### Section 15

Personal data on the missing person - eyes	Comment
15.1 Eyes Color	
15.2 Shade, distance between eyes	Too detailed. To be removed.
15.3 Eyebrows : shape / thickness	

### Section 16

Personal data on the missing person - nose	Comment
16.1 Size / shape + peculiarities, curve/angle	

### Section 17

Personal data on the missing person - chin	Comment
17.1 Size / inclination + shape, + peculiarities	

### Section 18

Personal data on the missing person - neck	Comment
18.1 Length / shape, + peculiarities	

### Section 19

Personal data on the missing person - hands	Comment
19.1 Shape / Size, Nail length, peculiarities	

### Section 20

Personal data on the missing person - feet	Comment
20.1 Shape / size, nail length, peculiarities	

### Section 21

Personal data on the missing person - skin traits	Comment
21.1 Does the missing person have any tattoos or piercing? If yes, please describe below:	
21.2 Does the missing person have any injury scars, surgical scars or surface scars (burned)? If yes, describe below:	
21.3 Does the missing person have any other marks on his/her skin? If yes, describe:	
21.4 Circumcision	

### Section 22

Personal data on the missing person - smoking habits	Comment
22.1 Did he/she smoke? If yes, what did he/she smoke (cigarettes, cigars, pipe, chew tobacco?)	
22.2 Did he/she have a cigarette lighter? Please describe it.	
22.3 Do you remember the brand of the cigarettes? Please describe it.	
22.4 Did he/she use a cigarette holder? Please describe it.	

## Human remains management

### Section 23

Personal data on the missing person - general medical history	Comment
<b>23.1 Has the missing person had any operation on the brain or head? When was the operation?</b>	
<b>23.2 Has the person ever had operations on any bones, including the jaw, spine or arms? If yes, what bone? What operation?</b>	
<b>23.3 Does he/she have any medical devices or implants in his/her body such as: intrauterine contraceptive devices, pacemaker, screws, wires or artificial joints? If yes, name them.</b>	
<b>23.4 Has he/she ever had a broken bone? If yes, did he/she go to the doctor or hospital for the broken bone? Which bone was broken?</b>	
23.5 On which side of the body was the bone broken?	
23.6 Date of the broken bone.	
23.7 Was a splinter or cast used?	
23.8 Where was he/she treated for this broken bone?	
<b>23.9 Does the person walk with a permanent limp? Give the reason for the limp?</b>	
23.10 Why does he/she have the limp? Was he/she born with the limp or did he/she acquire it?	
23.11 Did your relative have any deformity of the spine? If yes, please describe what the deformity looked like.	
23.12 Did he/she have any problems/pain with the joints? Shoulders, back, knees. What was the location of the joint problems?	
<b>23.13 Does the missing person have any other special visible characteristics from childhood or adulthood, such as curvature of the spine, arthritis, harelip or other deformities of the head, face, upper extremity, for example? Did the person acquire any deformity from this? What sort of deformity did the person have?</b>	

### Section 24

Personal data on the missing person - amputation, missing body parts, device	Comment
<b>24.1 Did he/she have an amputated / a missing body limb? Which limb? Please provide more information.</b>	
<b>24.2 Explain if the limb been missing since birth?</b>	
24.3 Was it surgically removed?	
<b>24.4 Did he/she have any artificial limbs (arm or leg)? If yes, which limb?</b>	
24.5 Was the limb absent as a result of injury or accident at or near the time of disappearance/death?"	
24.6 Did your relative have any surgery to the head? If yes, what kind of surgery?	To be removed. Repetition with section 23.
24.7 Did he/she ever have a cyst on their head?	
24.8 Did the relative have any medical devices (pacemaker for heart, valves in heart, rods in back, plates or screws)? If yes, what medical device did he have?	Another term should be found for "medical device". Might have to be removed. Repetition with first questions of section 24?
24.9 When was the device implanted?	Might have to be removed. Repetition with first questions of section 24?
	Should information be added on ear infection and craniotomy?

### Section 25

Personal data on the missing person - for a woman	Comment
<b>25.1 Was the missing person pregnant when she disappeared?</b>	Could go together with obstetric history in section 27.

## Human remains management

### Section 26

Personal data on the missing person - medical records	Comment
<b>26.1 Did your relative suffer from any medical condition that required medication or special medical equipment? Did he/she have problems such as arthritis, TB, severe heart disease, kidney dialysis, severe lung disease, asthma, skin condition?</b>	
<b>26.2 What medication might he/she have been carrying (asthma, inhaler, skin cream tubes, syringe for insulin, pill bottles)?</b>	
<b>26.3 Was he/she taking medication at the time of the disappearance/death? If yes, what medication was he/she taking?</b>	
26.4 What did he/she carry their medication in?	
26.5 Has he/she been in hospital?	
26.6 What was he/she treated for in the hospital?	
26.7 In which hospital and when?	
26.8 Did he/she have a physician?	
26.9 Do you know who operated on him/her?	
26.10 If yes, what is the name of the physician? Where is he/she working?	

### Section 27

Personal data on the missing person - medical records available	Comment
27.1 Medical records list: symptoms, findings, diagnoses, treatment, prescriptions, reference to specialist, operations scars, fractures, organs missing, hospitalization, other	
27.2 Regular use of smoking, alcohol, medicine, narcotics, quat, Betel Nut or other	
27.3 Infectious disease: hepatitis, HIV / AIDS, tuberculosis, other	
27.4 In women: abortions, births, hysterectomy	
27.5 Blood group	
27.6 Further medical information	
27.7 X-rays showing specific conditions	To be added: any x-ray available? at any age?
27.8 Organs removed	
27.9 Prostheses	
27.10 Other artificial aids	To be removed.

### Section 28

Personal data on the missing person - dental history	Comment
28.1 Did your relative have a dentist or go to a dental clinic?	
28.2 Number and/or describe: fillings, extraction, crowns, silver teeth, gold teeth, black/brown teeth, broken teeth, decayed teeth, bridges, dentures.	
28.3 Did he/she suffer from toothaches?	
28.4 When he/she smiled, what did you notice about his/her teeth?	
<b>28.5 Was your relative's jaw pushed out, pulled in or normally aligned?</b>	
28.6 Did he/she have overlapping teeth?	
<b>28.7 Did he/she have a gap between their teeth?</b>	
<b>28.8 Is there any additional information you can give me about his/her teeth (rotation of teeth)?</b>	
28.9 Are you aware of the existence of any dental records?	
28.10 X-rays available or further material?	

### Section 29

Personal data on the missing person - clothes	Comment
<b>29.1 Clothing and shoes (carried on person or in luggage). Hat, overcoat, scarf, gloves, coat, pullover, tie, shirt, waistcoat, vest, trousers, underpants, socks, dress, cardigan, blouse, skirt, petticoat, chemise, brassiere, panties, girdle, corset, stockings, tights, belt buckle, braces, other.</b>	

## Human remains management

### Section 30

Personal data on the missing person - shoes	Comment
<b>30.1 What was his/her shoe size?</b>	
30.2 Shoes: type, light, heavy, boots, other / material, color, design, label, size.	

### Section 31

Personal data on the missing person - personal effects	Comment
<b>31.1 Watch: always wore: y/n?</b> <i>Digital, analogue, other / material, color, design, make, inscription.</i>	
<b>31.2 Jewelry: wedding ring, other rings, earrings, ear clips, neck chains, necklace, bracelets, other chains, pendant on chain, piercing trinkets, nose ring, anklet, other, etc.</b>	
31.3 Identity papers: passport, driver's license, credit cards, identity card, donor card, travelers check's, personal check's, health card, other.	
31.4 What did he/she normally carry in their pockets? keys, wallet, photos, gifts, pocketknives, comb, rosary beads, purse, money belt, badges/keys, currency, other.	

### Section 32

Personal data on the missing person - Information related directly to the moment of disappearance / death	Comment
32.1 When was the last time you saw the missing person? If not exact date, then record the date interval. Date last saw the missing person.	
32.2 Where did you last see the missing person? Explain circumstances.	
32.3 Did another person see the missing person later? If yes when and where was the last time the missing person was seen? If not exact date, then record the date interval. Date last saw the missing person. Please provide the source of the information and indicate if the source is a direct witness or second hand information.	
32.4 Was the person in someone's custody the last time you saw him/her? If yes, in whose custody was he/she taken away?	
32.5 Do you have any information on those persons?	
32.6 Was he/she with other people who are still missing? If yes, do you know the names?	
<b>32.7 Was your relative wounded at the time of the disappearance/death? If yes, what was the date of injury?</b>	
32.8 What is the source of this information?	
<b>32.9 What caused the injury?</b>	
<b>32.10 What part of the body was wounded?</b>	
<b>32.11 Was he/she hospitalized before his/her disappearance/death? If yes, where?</b>	
32.12 Location where he/she was wounded/arrested?	
32.13 Do you know who was with him/her at the time? If yes, please give details.	
32.14 Have you ever heard from another person that he/she may have died?	
32.15 Do you know where they saw his/her body?	
32.16 Was there a witness who saw his/her body?	
32.17 When did the witness see his/her body? What is the witness' name + full address	
32.18 Did you give written testimony about the circumstances of last sighting or disappearance? If yes, where is that information?	
32.19 Do you know where they saw his/her body, where was it?	
32.20 Did you give a written testimony about the circumstances in which the person was last sighted or disappeared? If yes, where is that information?	
32.21 Do you know where they saw his/her body, where was it?	
32.22 Is there written testimony given by witnesses about the death of the missing person? If yes, where is that information?	

## Human remains management

Personal data on the missing person - Information related directly to the moment of disappearance / death	Comment
32.23 Were exhumed your relative's remains? If yes, were the remains given to you?	
32.24 If yes to section 32.24 then where are the remains of your relative today's (buried, placed in an ossuary or cemetery)?	
32.25 Is there any other information that you wish to add?	
32.26 Person to be contacted in case of a positive identification of remains (name, relation, phone number, address)	

### Section 33

Personal data on the missing person - Witness	Comment
33.1 What is the name of the person who last saw the missing person?	
33.2 Street	
33.3 Town/village	
33.4 District	
33.5 Province	
33.6 Country	
33.7 E-mail	
33.8 What is the relationship of the informant to the missing person?	
33.9 Do you know a contact person for him/her?	

## 2.2.11.2 The information that should be noted for the persons interviewed

### Section 34

Personal data on the person interviewed	Comment
34.1 Full name	
34.2 Alias	
34.3 Father's name	
34.4 Mother's name	
34.5 Date of birth	
34.6 Surname before marriage	
34.7 The missing person is my: (relationship)	
34.8 Phone number	
34.9 Street	
34.10 Town/village	
34.11 District	
34.12 Province	
34.13 Country	
34.14 E-mail	
34.15 Date of interview	
34.16 Place of interview	
34.17 Interview conducted by	
34.18 Language of the interview	
34.19 Interview conducted with or without interpreter	

## 2.2.11.3 The information that should be collected from other people

### Section 35

Personal data on the missing person - witness/other source of information	Comment
35.1 Full name	
35.2 The missing person is his/her: (relationship)	
35.3 Phone number	
35.4 Street	
35.5 Place	
35.6 District	

## Human remains management

Personal data on the missing person - witness/other source of information	Comment
35.7 Province	
35.8 Country	
35.9 E-mail	

### Section 36

Personal data on the missing person - next-of-kin	Comment
36.1 Full name	
36.2 The missing person is his/her: (relationship)	
36.3 Phone number	
36.4 Street	
36.5 Place	
36.6 District	
36.7 Province	
36.8 Country	
36.9 E-mail	

### Section 37

Personal data on the missing person - for visual recognition	Comment
37.1 Full Name	
37.2 The missing person is his/her: (relationship)	
37.3 Phone Number	
37.4 Street	
37.5 Place	
37.6 District	
37.7 Province	
37.8 Country	
37.9 E-mail	

### Section 38

Personal data on the missing person - doctor	Comment
38.1 Family doctor's name	
38.2 Phone Number	
38.3 Street	
38.4 Place	
38.5 District	
38.6 Province	
38.7 Country	
38.8 E-mail	

### Section 39

Personal data on the missing person - dentist	Comment
39.1 Family dentist's name	
39.2 Phone	
39.3 Street	
39.4 Place	
39.5 District	
39.6 Province	
39.7 Country	
39.8 E-mail	

## Human remains management

### Section 40

Personal data on the missing person - closest maternal relatives	Comment
40.1 First name	
40.2 Last name	
40.3 Father's name	
40.4 If a married woman: surname before marriage	
40.5 The missing person is his/her: (relationship)	
40.6 Street	
40.7 Place	
40.8 District	
40.9 Province	
40.10 Country	
40.11 E-mail	

### 3. Experts' contributions

#### 3.1 Experts' contributions to workshop *Human remains: Law, Politics & Ethics*

##### 3.1.1 By Dr Djordje Alempijevic, M.D., M.Sc., Institute of Forensic Medicine, School of Medicine, University of Belgrade (Yugoslavia)

### Identification of human remains – what we ought to learn from Former Yugoslavia?

#### INTRODUCTION

If one uses William Eckhardt's definition of war ("any armed conflict which includes one or more governments, and causes deaths of 1000 or more people per year"), then there have been almost 500 wars since about 1700, resulting in at least 101 million deaths. More than 90% of these deaths have occurred in the last century (i.e. 20th century). The proportion of deaths in civilians relative to combatants has increased steadily with civilians accounting for 85% of war deaths in the 1980s<sup>1/ 2/</sup>.

There is usually clear link between war and a large-scale abuse of human rights. Extrajudicial executions present a pure example of violation of basic human rights – right to live. In the 1970s, a virulent strain of abuse began to proliferate in Latin America. Those under suspicion by their government began to "disappear", victims of extrajudicial execution<sup>3/</sup>. Extrajudicial execution should be considered as a crime both, related to human rights as well as to International Humanitarian Law.

#### CONFLICT IN FORMER YUGOSLAVIA

War in Former Yugoslavia started in 1991. Armed conflicts in Croatia and Bosnia and Herzegovina lasted until 1995 when Dayton Peace Agreement was signed. Almost three years later (1998) Kosovo crisis had its outbreak resulting in armed conflict between Yugoslav Army (VJ) and Serbian Police (MUP) with the so-called KLA. Finally, in March 1999 NATO launched military intervention against FR Yugoslavia that was motivated to prevent further conflicts in Kosovo. NATO intervention ended at the beginning of June 1999<sup>4/</sup> when UN Resolution 1244 got into the force and UN Interim Administration were arranged in Kosovo.

Precise data on number of people that went missing during armed conflicts in former Yugoslav republics are still not available. Figures about the number of missing are very much influenced by source of information, and probably by other factors, some of them having political background. At last, it seems that there are more than 30,000 persons missing in the former Yugoslavia because of the conflicts during the past decade<sup>5/</sup>.

Governments of Croatia, Bosnia and Herzegovina and FR Yugoslavia, and their commissions for missing persons, as well as UNMIK in Kosovo, did great efforts toward resolving the fate of the people not account for. International community has been providing assistance in the recovery and identification of mortal remains in Former Yugoslavia, since their early beginnings.

Now I will try to summarize and comment some of the already made efforts. It is essential to keep in mind that recovery of human mortal remains of those killed during the armed conflicts, and their subsequent forensic examination usually seeks to supply answers to the questions how that people died, and, of course, who they used to be. In fact, forensic examination can provide evidence for prosecution, even without identification of the individual victims. It seems that the fact and the practice widely applied to the victims of war in Former Yugoslavia to establish a cause and manner of death without identification of mortal remains, is not suitable enough. Some more recent examples may illustrate this practice. For instance, members of the Danish-Swedish team of forensic pathologists working for the ICTY in Kosovo stated that their main task was to establish cause of death, while the identification has the less importance<sup>6/</sup>. The process of identification is a much more time consuming process compared to the postmortem examination, aiming solely to give clues for cause and manner of death. It is hardly acceptable practice these two processes separately.

In situations, where recovered mortal remains are examined even without obvious attempts toward their identification the right of the families of the missing is violated since they would not be informed about the fate of their beloved that went missing. Medico-legal autopsies and all related measures must be carried out in a manner consistent with

## Human remains management

medical ethics and respecting the dignity of the deceased. Thus it has to be considered whether forensic pathologist, itself being a medical practitioner adhered to ethical principles, should participate in such kind of mortal remains examination where the first and the only one goal is to establish cause and manner of death, but not the victims' identity?

Another problem that seems to be present in the identification of the victims in Former Yugoslavia is in relation to different standards applied in postmortem examination of human remains. Technically speaking postmortem examination, or autopsy itself, does not differ too much, but the final output, the autopsy report and its content is very variable. Once again, having in mind huge number of missing, it is necessary to set up a database in order to be able to perform large-scale comparison of gathered postmortem data to available data on missing persons. Applying of different systems (e.g. PHR-USA database in Bosnia and Herzegovina, program developed by Croatian Commission in Croatia, PHR-USA database initially installed in Kosovo then replaced by the DVI – Interpol system) makes the access to available information less efficient, especially in terms of information cross matching from one country to another. Process of information “translation” from one system to another is relatively expensive, time-consuming and somehow linked to the possible errors that might further influence identification process. In the same way, collection of ante-mortem data from relatives and friends of missing persons were on several occasions performed by application of different systems and standards that lead to obstacles in the process.

There are several documents available on the standardisation of medico legal investigation in the cases of arbitrary killings<sup>7/</sup>. Generally, all forensic pathologists that are involved in the exhumation and identification, should use similar autopsy techniques as well as be adherent to the similar minimal standards or autopsy rules (e.g. when is necessary to perform X-ray, etc.). Recent experience, especially from Kosovo, tells that during the year 1999, there were forensic teams from more than 10 different countries; each of the teams involved tends to work on own way. Just for illustration, it is difficult even to translate autopsy report to and from at least five to six European languages.

During the past decade, DNA technology is moving very fast, and DNA methods are now widely used for identification. It is still unclear whether the DNA should be applied as an additional tool for identification in particular cases<sup>8/</sup>, or it should be performed mandatory with each and single identification, either for establishing of presumptive identification or as a proof for identification. Such inconsistent approach might have result that some families are waiting for bone samples and reference blood samples to be processed, genetic profiles extracted and matched, which might be time consuming. On the other hand, there are numerous families whose missing beloved ones were identified only on the bases of conventional forensic technique. For illustration, approximately 70 % of 2,108 bodies exhumed by the ICTY forensic teams in Kosovo during 1999 from 195 gravesites were identified on the basis of recognition by family members or presumptively identified on the basis of clothing and personal effects and where possible. Confirmations of these presumptive identifications were based on the anthropological data such as age, sex, height, and other ante-mortem data<sup>9/</sup>.

When local professionals performed identifications, in certain instances, it turns out a sad reality that positive, personal identifications are often not pragmatic or obtainable due to lack of technical resources and necessary funds. In addition, an important prerequisite for successful application of technologically most advanced methods, as well as a uniform approach in identification of human remains, lays down in legal regulations of each particular country. Currently, FR of Yugoslavia does not have any law that explicitly demands certain methodology in identification of human remains. In accordance to Criminal Procedure Act, corpses and mortal remains are subject of identification, but the procedure is not standardised, nor minimal standards exists. Apart from legal framework, neither professional associations (e.g. Yugoslav Association for Forensic Medicine) does not develop standard for identification that are available in some other national forensic associations (e.g. in Sweden<sup>10/</sup>).

Unfortunately, war conflicts affecting Balkan countries were frequent during the last century, including two World Wars. Certain situation related to extrajudicial killings and mass graves from the Second World War are still pending to be appropriate investigated. Political manipulation of the historical existence of mass graves results an extreme irony, and in another generation of such graves<sup>11/</sup>. We hope that this time all countries of Former Yugoslavia will be able to cope up with problem of missing person in relation to the recent arm conflicts. Support from the international community and organizations seems to be necessary for successful outcome of entire process of identification.

### CONCLUSION

In accordance to previous discussion there are some recommendations:

- Make all efforts to run parallel process of identification and estimation of cause and manner of death;
- Obtain preset standards for data collection and exchange to avoid application of several systems and unnecessary delay and other troubles related to switching from one system to another;
- If it is necessary to engage professionals from different countries in the process of recovery, examination and identification, tend to set strict rules for postmortem examination; make all efforts to diminish use of certain number of different languages for document preparation (autopsy reports) to avoid lexical troubles;
- Make clear standards regarding application DNA analysis in identification – i.e. define DNA application as a main or auxiliary method in identification.
- International community and organisations should make supportive projects for less developed countries to help them solving the problem of missing
- Each state has to make clear legal framework for identification of dead bodies that might be use for everyday cases, but also in the case of arm conflicts, natural disasters and other situations that are characterized by the large scale of missing.
- Establishing of certain international protocols regarding procedures in identification of the missing should be considered under further development of the International Humanitarian Law.
- National and international associations that are bringing together forensic practitioners should consider development and implementation of minimal requirements.

### References

- (1) Sivard R.L. World military and social expenditures, 1987-88. *Wld Priorities*, 28-31, 1987.
- (2) Haglund W. Recent mass graves, an introduction. In: *Advances in forensic taphonomy: method, theory, and archeological perspective*. Hugland W., Sorg M. (Eds.). CRC Press, Boca Raton, 2001. p.244-261.
- (3) Geiger H.J. Cook-Deegan M.J. The role of physicians in conflicts and humanitarian crises. *JAMA* 1993; 270:616-620.
- (4) White N.D. The legality of bombing in the name of humanity. *J. of Conflict and Security Law*. 2000 (5):27-43.
- (5) Huffine E, et al. Mass identification of persons missing from the break-up of the Former Yugoslavia: Structure, function, and role of the International Commission on Missing Persons. *Croatian Med. J.* 2001; 42(3):271-275.
- (6) Eriksson H., Lynnerup L, Knudsen PT, et al.: The Danish-Swedish forensic pathology team in Kosova. Experience from 1999. Abstract Book of the 18th Congress of the IALM, Santiago, September 2000, 40.
- (7) UN Manual on the effective prevention and investigation of extra-legal, arbitrary and summary executions - ST/CSDHA/12', UN, Geneva, New York, 1991 – available at <http://extranet.icrc.org/themissi.nsf/32db2800384e72adc12569dd00505ac6/44e391d94e68730fc1256b02005de6df?OpenDocument>
- (8) Lorente J, Entrala C, Alvarez C, et al. Identification of Missing Persons: The Spanish “Phoenix” Program. *Croatian Medical Journal*, 2001; 42(3):267-270.
- (9) Kosovo International Human Rights Conference, December 1999, Pristina. Conference Documents And Report, p. 52.
- (10) For details refer to <http://www.rmv.se>
- (11) Skinner M., York H., Connor M.: Postburial disturbance of graves in Bosnia-Herzegovina. In: *Advances in forensic taphonomy: method, theory, and archeological perspective*. Hugland W., Sorg M. (Eds.). CRC Press, Boca Raton

**3.1.2 By Luis Fondebrider <sup>1/</sup>, Argentine Forensic Anthropology Team - EAAF (Argentina)**

**Reflections on the Scientific Documentation of Human Rights Violations**

*Introduction*

The recovery, analysis and identification of the remains of people killed in natural disasters, man-made catastrophes and outbreaks of political violence, has become a key element of both humanitarian operations and judicial investigations in the last 30 years. Governmental and non-governmental bodies, domestic and international, have become actively involved in such procedures, through the participation of forensic doctors, police, lawyers, firemen, and other resources.

For the families of those who have disappeared, the uncertainty over whether a loved one is dead or alive is agonising. Such uncertainty is compounded when a disappearance is the result of political violence. After an earthquake or a plane crash, the state is usually a prime mover in the search for bodies. Families can normally turn to a state agency for information. They will be offered support and sometimes psychological counselling. As society mobilises on their behalf, the tragedies of individual families are transformed into a collective experience of loss. But where the state itself is responsible for a disappearance, then a family will suffer far greater uncertainty, isolation and anguish. They also face the prospect that the agents responsible for this kind of disappearance – usually the security forces - will hide the victim and may even attempt to eliminate all traces of the body after death.

This paper examines the particular challenges in searching for and identifying those victims whose disappearance and death is a direct result of domestic political violence.

*Politically-Motivated Disappearances and Deaths*

Although it was the wars in the former Yugoslavia which finally attracted global attention to these issues, politically-motivated kidnappings, torture, and extra-judicial executions have been widespread in third world countries for over 40 years. In a high proportion of cases the bodies of the disappeared are hidden, or attempts are made to destroy them. Cadavers left out in the open will usually be discovered soon after the time of death. But when an attempt has been made to conceal a body, usually through burial, discovery will tend to come about in one of the following ways:

1. The body has been buried in a very shallow grave and becomes exposed through the foraging of animals or other environmental processes.
2. The body is uncovered by accident: during road building for example, when a shovel or other equipment strikes bone.
3. Finally – often years after death, remains may be found by investigators who are actively looking for them, after a change of government or political climate has made such investigations permissible, even desirable.

In most countries said to be "dealing with the past", where investigations have been conducted following periods of political violence, the wishes of victims' families have often been overlooked by investigators. In particular, the desire to establish responsibility for the crime and see justice done in a broader sense, can be seen as taking second place to the more immediate task in hand.

Consideration of the psychological, judicial, political, economic and humanitarian consequences of exhuming - and maybe identifying - human remains, is a vital part of the beginning of any investigation. What appears as a clear-cut scientific and technical operation may involve complex and ambiguous boundaries, as well as unexpected ethical dilemmas.

*Legal Necessities, Humanitarian Necessities*

The mechanisms used to investigate human rights violations in the recent past have varied from one country to another. Broadly speaking, there have been two kinds of instruments: truth commissions, both national and international; and tribunals, both local and international. Truth commissions tend to pursue a historical line of enquiry, while tribunals have a more legal, juridical basis.

## Human remains management

Between 1984 and 1987, Argentina became one of the first countries to use these instruments to initiate large scale investigations, exhuming the remains of large numbers of disappeared people, establishing the cause and manner of death, then attempting to identify them and return them to their families. Subsequently, other countries in the region, first Chile, then later Guatemala and El Salvador, underwent similar processes. In the mid-90's Ethiopia, Rwanda, and South Africa followed suit, followed by the states of the former Yugoslavia: first Croatia, then Bosnia and Kosovo, where investigations are continuing today. Every human rights investigation of disappearances and executions now has a forensic component.

The use of forensic science in the documentation of human rights violations has raised questions and spawned social situations without precedent in most peoples' experience. These are not ordinary crimes, but extraordinary, massive violations, in which the state is often the main perpetrator. Forensic analyses carried out by local professionals may therefore be compromised, a risk explained in part by the fact that in many third world countries and fledgling democracies, political and executive powers can constrain the functioning of the judiciary, impeding the way that justice is administered.

Moreover, the families of victims tend not to trust functionaries of the same state which abducted their loved ones, even if a new regime is in power.

Another issue that should be considered before launching an investigation is what type of case is in hand.

The participation of the United Nations makes a huge difference in the course of an investigation. When the United Nations intervenes directly in an enquiry (as, for example, in the Truth Commissions in El Salvador and Guatemala, the ICTY and ICTR, and the UN Mission to East Timor) many political, financial, and logistical problems are resolved or circumvented. This, in turn, facilitates forensic investigation and analysis.

The drawback is that relations with the victims' families become distorted, because they are often left uninformed and excluded from the investigation process, in a way which would be unthinkable in the investigation of an "ordinary" domestic murder or disappearance. In our experience it is preferable to work with a local organisation which includes victims' families as much as possible. Families can be valuable sources of information and their rights should not be diminished because their loved ones were the victims of massive, not individual, crimes.

Another aspect to consider is whether a judicial case can be built, or whether it is preferable to simply retrieve the remains for humanitarian reasons. Here, it is worth reflecting on long-term implications. In many of the places where these investigations take place, there is a power vacuum. Far away from capital cities, the state's presence may be diffuse, and legislation on procedures for exhuming and analysing human remains may not exist. Who has custody over the gravesite? Where should the remains be stored? Who has authority to analyse them?

In many cases, assumptions regarded as normal in the United States and Europe cannot be made. For example, if the excavation of a grave will take more than a single day, the site should remain under police custody whenever investigators are not there. It can be very difficult to comply with this if the site is difficult to access, or too dangerous even for a police officer to stay overnight. Such dilemmas are common when the UN is not involved.

Most often there is a compromise, and some standards are met while others are not. If the investigation is meant to provide legal evidence, procedural errors - like gaps in the chain of custody - can make it harder to argue for the legal validity of the evidence.

It is also important to consider the different timeframes and objectives of truth commissions and tribunals. A judicial proceeding can be extended for many months, but a commission does not have this option.

### *Identification and Cause of Death*

Identity and cause of death for a cadaver or skeleton are the two most common issues that a judicial authority or forensic scientist seeks to resolve. But the answers cannot always be prompt or definitive. Doubtless, from the point of view of the family, the identification is crucial, since it allows them to end the period of uncertainty that began with the disappearance. But the identification process becomes more complicated the longer the body has decomposed.

Also significant in many cases is the fact is that the overwhelming majority of victims are very poor. Often peasants or indigenous people with cultural patterns different from those of the investigators, they may never have had access

## Human remains management

to medical or dental care. This means they simply won't possess any of the records often used to compare with skeletal remains. Therefore, the usual parameters for making identifications in urban contexts may not apply in these cases.

The use of DNA has brought enormous changes to forensics and criminology, and to the identification process. Contrary to popular belief, however, it is still very difficult to extract DNA from bony remains, because of contamination of the tissue which occurs during the years of burial. In addition, there are very few laboratories in the world available to process large numbers of these kinds of samples. Furthermore, judiciaries and families in most third world countries do not have the resources to afford their services. This has led to a common scenario in which exhumations are carried out, but then the unidentified remains are put into storage indefinitely at a legal-medical institution, without no further attempt to identify them.

Lack of access to certain scientific and technical processes can function to privilege the goal of establishing cause of death, over identification. Legal requirements thus take precedence over the humanitarian needs of the families. Before embarking on any case, from the exhumation of one or two bodies to a large-scale, internationally-sponsored investigation, careful thought should be given at the outset to this balance of interests and needs – with due consideration and priority given wherever necessary to the wishes of the families.

### *On the Families*

In a recent paper<sup>2/</sup>, Mercedes Doretti, another EAAF member, and I wrote the following about our experience with the relatives: "In the course of sixteen years of work in over twenty countries which have experienced periods of political violence, we've noticed that the impact of a disappearance on the family share similarities regardless of cultural, ideological or religious differences. The relatives of a detained-disappeared [person] first of all suffer the sudden kidnapping of a son, brother or spouse, whom they never see alive again. They have no news of the victim and are left in total ignorance of the fate of their loved ones, not knowing if they are dead or alive, precisely because the authorities responsible for the disappearance refuse to give them an answer. Moreover, the justice system does not investigate their cases and so for years they live suspended in a state of limbo. Even in countries where the relatives know that most likely their loved ones have been assassinated, they still cling to the hope they may return alive. So long as there are no corpses, or concrete information about their death, there can be no funeral rites and no final answers. Thus, affliction, fear and a deep fracture in the family life is found in almost every case, and with it a desperate need to recover the remains so they may properly bury them and close - if only partially - the circle of uncertainty.

During excavations, relatives often ask to be present throughout the entire process, and in some places - such as Iraqi Kurdistan and in Ethiopia - have even worked alongside us, because they say that it helps fulfill their need to do something more for their loved ones. So, while the archeologists are mindful of the methodological constraints, they also work within a much broader - if we may - human landscape, because in many cases they become emotionally involved with the relatives and their stories.

An environment of this kind [an open relationship with the families] has other side effects. Often the forensic work becomes more transparent and understandable for the relatives of the victims when they are able to observe the forensic team and ask us questions directly".

To summarise, we think that in every process involving scientific documentation of human rights violations, above and beyond the appropriate technical procedures, the needs and wishes of the victims' families ought to be soberly and respectfully considered and never regarded as afterthought.

### *Recommendations*

The habitual – and in our view, mistaken – procedure often followed is to open a grave first, and conduct the rest of the investigation afterwards. EAAF proposes the following general procedures for investigation, which has proved to be the most effective in our experience in over 20 countries.

## Human remains management

In cases that require exhumation, we recommend that the investigation be organised into three phases, each of which is intimately related to the others. These are preferably carried out in the following order:

- Prior to the exhumation, an investigation of written and oral sources, which allows the construction of the case history and the elaboration of a working hypothesis.
- Fieldwork, which includes the retrieval of the body and associated evidence, whether it is from the site of the discovery or from a regular grave.
- Laboratory work, in which the corresponding analysis of remains and other physical evidence should be carried out.

It may not always be possible or desirable to follow this order, and the phases may overlap with each other. In the case of bodies that are discovered accidentally, for example, the second phase has actually prompted the investigation, so the historical investigation can only follow. In human rights cases in particular, it is most important to consider the following issues:

- The case should be approached in a multi-disciplinary way. The three phases are intimately related, despite the fact that they may involve different areas of expertise and therefore specialists from different fields.
- The obstacles we see most often in our work are a) the assumption that the medical expert witness can cover the whole array of tasks, which may in fact exceed his experience; and b) a general lack of dialogue about the case as a whole among prosecutors, physicians, and criminologists - to mention the three commonest components of an investigation.

Here, too, it is important to mention that expert witnesses, regardless of specialisation, are technical assistants to the prosecutor, who orders the investigative measures that he thinks are necessary. If the prosecutor is unaware of what can be done, from a scientific point of view, with a cadaver or a blood stain at the site of discovery, it may be difficult to know whether the expert examination presented in court is complete.

### Note

- (1) Luis Fondebrider is a forensic anthropologist and member of the Argentine Forensic Anthropology Team (EAAF), a non-governmental organisation that has worked since 1984 in human rights investigation, exhumation of graves, and analysis of skeletal remains. Over the course of its existence, the EAAF has conducted and/or participated in forensic investigations of human rights violations in 27 countries
- (2) Doretti, M. and Fondebrider, L (2001): *Science and Human Rights - Truth, Justice, Reparation and Reconciliation: a long way in Third World countries* in Buchli, V. and Gavin, L. (Eds.): *Archaeologies of the contemporary past*. London: Routledge.

### 3.1.3 By Dr Vivienne Nathanson, Head, Professional Resources and Research Group, British Medical Association (United Kingdom of Great Britain and Northern Ireland (the))

#### National Medical Associations and Forensic Investigations.

Medical associations around the world are increasingly aware of the need for forensic investigation, particularly after civil wars, organized human rights violations by states and after allegations of atrocities. Most of those associations have had little previous experience of such investigations and are struggling to understand how they can assist in ensuring the highest standards of medical involvement.

In considering their own role associations must first consider the nature of a forensic investigation, its role and remit, and what it must and could achieve. They also need to put this into context – both in local and international terms. Finally they need to consider the key stakeholders – not only the investigators but also those affected by their findings.

An example of the investigation could be the examination of a mass grave in the former Yugoslavia. The investigators may be funded by the International Tribunal to investigate war crimes allegations. Their remit may well be the production of evidence for the prosecutors. They will be working in situations where there are continuing local tensions – and certainly danger in the early years of such investigations. Their findings may provoke further tensions. The key stakeholders will include local politicians who might use their findings for direct political ends, international politicians who might use the findings, again, for direct political point scoring, the tribunal itself, and the local population who want to know the fate of missing friends, neighbours and relatives. While the investigators may believe that their investigation is independent and scientific they will rarely consider these and other stakeholders before establishing their working practice. The manner in which investigations are carried out, the ethical principles underwriting the behaviour of the investigators, and decisions about the use of technology are also key factors underpinning the general ethical basis of the investigation.

While associations struggle to deal with the complex factors outlined above they also have to factor in their own experience. Predominantly this is domestic, and in the case of most developed countries forensic investigations are into cases of single or multiple homicide, or of a group of deaths from an accident or other incident. Again, using the UK as an example, forensic investigations are into single suspected homicides or into accidents such as the Hillsborough Stadium collapse, or into suspected serial homicides such as those perpetrated by Harold Shipman. All of these have their special features and difficulties, but are generally easily organized in that the national forensic system is designed to cope with them.

The ability of national medical associations to intervene is also limited by the nature of the expertise needed for such investigations. Expertise in forensic anthropology, dentistry, biology, environmental sciences and many other disciplines will sit alongside conventional medical disciplines such as forensic pathology. Investigative teams may not be led by medically qualified experts but by other scientists. In many countries putting such teams together the quality assurance of training for different team members may be spread amongst a number of institutions. The national medical association itself may have no role in such quality assurance.

Many forensic investigations will be carried out by teams from one country, or group of countries, but will be carried out in a foreign legislature. Questions will arise about the recognition of expertise and training and the legal responsibilities of those taking part in the investigation.

In some countries systems of quality assurance of forensic practitioners of all sorts is emerging as a combined interdisciplinary effort. For example in the UK there is a new body - the Council for the Registration of Forensic Practitioners – which aims to ensure that all forensic practitioners are registered, that their training and qualifications are appropriate for the job they do, and that anyone employing them can be assured of the quality of the service they will provide.

However this worthwhile endeavour is complicated by the fact that it remains a voluntary organization and that most of its members are also separately members of other professional associations. Most will also be separately subject to disciplinary arrangements either through their professional association or a separate licensing authority, as well as some form of monitoring through their usual employers. The question therefore is whether there are any advantages

## Human remains management

to the practitioner in registering with another agency or whether it simply increases the numbers of levels of legal jeopardy in which he finds himself. To the outside employer such bodies are only advantageous if they are able to require all practitioners to register and if they apply high validation and revalidation standards.

The answer to this series of conundrums is to establish a firm ethical principled basis for the investigation and to test what is to be done against that basis. Although there will still be many involved who are not medically qualified it is likely that at least some of the investigators will have medical qualifications. If the ethical principles are agreed it will be possible to achieve some consensus in such investigations. If this consensus is based upon well understood ethical principles it will be relatively non controversial amongst the medical investigators, and because of the wide understanding of medical ethical principles, has a high likelihood of achieving a broader consensus. However in establishing an ethical framework it is essential to recognize where conflicts, especially between traditional ethics and legal requirements, are likely to occur.

### 1. Establish the basis of the investigation.

Whether the investigation has been established to provide evidence based upon cause of death for war crimes or other international tribunals, or for some other reason, doctors taking part have other ethical responsibilities. These must include a responsibility to the deceased and through that a responsibility to the families of the deceased. It is quite clear from investigations in many countries that families are desperate to know the fate of their relatives; identification of remains is a clear priority for relatives of the missing.

In practice this means that the procedural rules of the investigation must be clear about; the nature of the evidence that will be sought, the way in which attempts will be made to establish the identity of human remains, the way in which relatives will be involved, and the resources set aside for storage of as yet unidentified remains. In those cases where there may be no remaining family or other community members available to arrange for the disposal of the remains the framework should set out a protocol agreed with local community leaders for the culturally appropriate disposal of the remains.

The establishing principles should detail the investigators involved, their qualifications and the terms of their employment. They should be independent or impartial – as set out in paragraph 2 of the WMA Resolution on Reported Violations of Health Related Human Rights in Kosova<sup>1/</sup>. This clause requires both impartiality and real expertise of the investigators as well as respect for those qualities and qualifications. Any agency establishing such an investigation must first assure itself of the qualifications of its experts.

The establishing principles should also be specific about the techniques and technology that will be used in the investigation. This is especially important, as the techniques must be sustainable for the whole investigation and for the support and resources available. As a key factor is identifying the remains, not merely producing sufficient evidence for a trial, the methods of identification should be specified in some detail.

In the same way that those providing medical care to a population are expected to provide care based upon sustainable technology, so to with identification of human remains. Much can be done using dental and other health records, photographs, identification of objects (watches, spectacles, clothing) and the lure of high technology such as DNA typing should be resisted other than as a last resort. In most countries where there are large numbers of missing DNA typing will be very slow to produce a result. For example in Rwanda there may be no existing family members to whom remains can be genetically linked. However identification is to be established, the ethical framework should be explicit about the storage of remains until they are identified. If the logistics call for reburial before identification it must be recognised that this is at best an undesirable option, should remain exceptional and must ensure that remains will be readily retrievable from that reburial.

The ethical framework should also set out the working methodology of the investigation. This should follow the principles set out in appropriate expert documents, including those drafted by the United Nations.

### 2. Ensure impartiality

Investigators are sent into the field with a purpose; predominantly this has been to produce evidence for an international court of some sort. There is a real danger that in these circumstances they may go into the field with inherent bias or prejudice. This is not only ethically unacceptable, but is also bad science and is unlikely to produce the package of results that are really needed. In particular it is likely to reinforce the civil and cultural divides rather

## Human remains management

than contribute to bridge building and healing. Investigators must recognize this possibility and build into their processes those checks and balances that will encourage real impartiality.

### 3. Establish a pre-agreed mission craft statement

Ownership of the data gathered during investigations is a frequent source of contention. Sponsoring authorities and investigators may have different views on the control of the use of such information. For example a sponsoring human rights organization might want to use data for campaigning purposes while those involved in gathering the data have a clearer understanding of their responsibilities to families, and indeed to justice. A mission craft statement agreed in advance should clarify where responsibility for control and release of data lies, including release of information for academic publications. All parties should agree and sign the statement before the mission begins. A model agreement is set out in the BMA publication "The Medical Profession and Human Rights: Handbook for a changing agenda".

### 4. Establish a review procedure

It is an established medical ethical principle that practitioners should open their practice to peer and stakeholder review. Forensic investigations are no different from other areas of practice, although the numbers of "peers" may be quite small. The establishment of review procedures must be based upon the concepts of transparency and openness.

All investigations should be regularly reviewed against their aims and objectives. Lead investigators should consider how to obtain objective views on whether their ethical framework is appropriate, and whether their implementation of this framework is proceeding properly. Those who have carried out similar investigations are a clear and obvious source of the necessary expertise. Investigators should also report on progress to the key stakeholders- including the relatives of the Missing. While such reviews should not compromise the requirements of and potential legal hearings the responsibility to local communities and individuals should not be ignored in the drive to obtain evidence.

### 5. Contribute to international standard setting

Those involved in establishing and running such investigations have an on-going responsibility to establish standards for this field of work. Much of the evidence will come from their experience in the field and from the review procedures they have established. As with all such scientific process the reviews must be sufficiently robust for the principle investigators to learn from them and to share what they have learned with others.

#### **What are the responsibilities of the National Medical Associations?**

NMAs must try to ensure that the ethical framework discussed above is followed and that those of its members who are involved in investigations ensure that they operate to the highest possible standards. They should be prepared to help agencies establishing such investigations to write appropriate plans, and to recruit properly trained and experienced personnel.

All of the above will depend to a great extent upon the authority the NMA has over its members, and its ability (often in terms of resources available) to work with agencies in this way. What is however a core ability of all NMAs is to work to ensure that all their members understand the ethical issues involved and refuse to be a party to unethical investigations.

Note:

- (1) WMA Resolution on reported Violations of Health Related Human Rights in Kosova "to insist that the authorities permit impartial forensic investigations, under the auspices of international forensic experts"

### 3.1.4 By Dr Alex Kirasi Olumbe, Head of Medico-legal Services & Chief Government Pathologist of Kenya (Kenya)

#### **MISSING PERSONS: Management, exhumation and identification of human remains – a third world perspective**

It is sadly ironical to note that the regions in the world that are worst hit by armed conflicts and internal violence is also the worst hit by poverty and human rights abuse. In these resource poor countries, the tragedy of missing persons\* resulting from such conflicts are often underestimated, untold or sometimes simply ignored as *fait accompli*, by respective governments, the military, national and international non-governmental organizations and even the general public. Despite some spirited efforts in various countries spearheaded by multinational teams and international organizations to resolve the issue of missing persons, many reports emerging from affected countries suggest that only little progress is being made, leaving much to be desired.

Spain was the first country to officially start a National Program to try and identify cadavers and human remains unidentifiable by traditional forensic approaches in the 'Phoenix Program'. The program started in 1999 and its first phase involving typing of all unidentifiable human remains is estimated to be completed in December 2003, whereas so far only few identifications have been successful (1). In Argentina where 10,000 people are thought to have been killed between 1976 and 1983, efforts in recovery and identification of the missing dead using traditional forensic techniques have been hampered by lack of official records on identity of victims and burial locations, as well as lack of ante-mortem physical information on many of the victims, and DNA typing techniques have been applied (2). In the former Yugoslavia, the staff of the International Commission on Missing Persons (ICMP) is attempting to undertake the largest human identification effort in history (3). The campaign has been making painfully slow progress despite being fairly well established and better supported compared to similar such campaigns needed in third world countries, especially in Africa where even basic traditional forensic approaches are lacking, such as is illustrated in an NGO report from Zimbabwe on the 1980s disturbances in Matabeleland and the Midlands (4). Despite the fact that the possibility of recovering and identifying many of the human remains was high, the inadequate structuring, co-ordination and financing of such an exercise has in effect meant very little has been done or could be done with the present situation to recover and identify the dead including missing persons in mass graves.

Additional protocol to the Geneva Conventions of 1949 relating to protection of victims of international armed conflicts address the specific issue of missing and dead persons (5). Accordingly, remains of persons who die in such conflicts are to be respected, maintained and marked; access by relatives of the deceased should be facilitated as well as the return of such remains to the next of kin upon their request. Unfortunately, the majority of cases of missing persons resulting from armed conflicts occur in circumstances where the parties involved hardly conform to United Nations charters.

It is also imperative to note that an overwhelming number of cases of missing persons are encountered in particular circumstances whereby human rights are seriously abused but there are no mechanisms to prevent, deter or rectify such abuses. This is remarkably so in third world countries where persons go missing in various incidents, some isolated others systematic that fail to get publicity or could not be directly labeled as armed conflict or internal violence. The tragedy that befalls the relatives of these missing persons in such circumstances are equal if not worse than those of war victims, as it takes a long time before any structured international effort is made to assist them, bearing in mind the lack of necessary structure and organization in their respective local region.

Any proper initiative at resolving the issue of missing persons *must be proactive* rather than reactive. As illustrated by the experience from different campaigns worldwide, reactive efforts to recover and identify remains of missing persons are usually difficult, unacceptably slow and often futile. This is truer in campaigns that are instituted much later than the actual time of the incident that resulted in persons missing. An apt proactive approach would involve establishing well structured, highly organized, adequately funded and properly equipped local, regional and international centers that are capable of handling the exercise of recovery and identification of missing persons. Such centers would be actively involved in programs targeted at past incidents including use of forensic archeological methods, as well as any newly occurring incidents. The centers would serve as Missing Persons Clearinghouses (MPC) in their respective regions with inter-regional and international links and networks.

## Human remains management

The MPC program in America was first established in some few states in the early eighties to provide liaison among citizens, private organizations and law enforcement agencies. MPC operates as a division of Criminal Justice Information Service and is utilized as a resource center and information exchange service, complementing federal computerized missing persons files, also serving to promote public awareness on the issue of missing persons. As soon as a person is reported missing, available pertinent information and individual identifying characteristics are entered into a database, which is expanded on a statewide basis and beyond, as the need exists. This is in addition to a General Police Incident Report, and serves as a standard database for collection and tracing of specific information regarding missing persons. Whenever more information is availed or acquired regarding unidentified persons living or deceased, the database is utilized to make file entries and update personal files. It is the responsibility of each agency to clear entries and update the database upon identifying the previously unidentified individual to close the case on that particular missing person. Law enforcement agencies, other interested parties and relatives of missing persons would contact the MPC via appropriate established channels for assistance as required.

Establishing well structured, highly organized, adequately funded and properly equipped local, regional centers worldwide and especially within developing countries where no proper setup exists, would be an apt proactive approach and the integral step towards resolving the issue of missing persons. These centers would be akin to the MPC, capable of handling the exercise of recovery and identification of missing persons, and aimed at resolving past and newly reported cases of missing persons irrespective of the circumstances in which the cases occurred. These centers should not only be focused in areas of the globe where publicized cases of missing persons have been reported e.g. from wars and violent atrocities, but rather they must be established in all regions of the globe. Thus each region would be enabled to undertake the task of investigation and resolution of missing person's cases including newly reported day-to-day ones.

Forensic science, as a group of interrelated disciplines, which utilize different scientific methods to analyze physical evidence related to legal cases, is recognised as the integral field necessary in the recovery and identification of human remains. Unfortunately forensic services, including examination of both dead and living persons, are outright meager or completely lacking in most developing countries (6). In these economically-challenged regions where food, security, health care and preventive medicine are in reality the primary and biggest concern, forensic services is neglected down the priority list with dire consequences to the provision of human rights.

Citing Kenya as an example, it is a fact that no reliable information is available regarding missing persons. Unknown number of people went missing during the first and second world wars, as well as during the fight for independence - the 1950s Mau Mau uprising. There was no properly constituted formal effort to recover and identify human remains; despite the fact that huge numbers of unidentified human skeletons were sporadically found. As a result, countless number of relatives of missing persons have given up ever finding out what happened to their loved ones or ever recovering the remains. Several cases of unidentified human remains of national historical significance are yet to be resolved. An example being that of Field Marshal Dedan Kimathi, one of Kenya's most celebrated freedom fighters from the Mau Mau uprising, whose burial site remains a mystery half-a-century since he was reportedly buried at a prison cemetery. But sadder still is the fact that even at present, the country lacks the capability to properly investigate and resolve cases of missing persons. There are no standard database of missing persons, in any case most often the reporting relatives do not have adequate antemortem records of the deceased such as medical and dental records. The department of medico-legal services is generally under funded, ill equipped and seriously understaffed therefore unable to carry out forensic analysis on human remains beyond the basic forensic autopsy. This has contributed to the apathy and lack of coordination among governmental departments, law enforcement agencies and non-governmental organizations concerned with the issue of missing persons. Consequently, the public does not have confidence that the system can assist them handle the issue, and most often they end up giving up on any hope of resolving their anguishes.

The Kenya Police estimates that 80 cases of missing persons occur every month country wide, while media reports suggest that every day someone in the country goes missing never to be identified (7) (8). It is a general speculation that some of the main reasons why people go missing include being held by police without relative's knowledge, death in custody, abduction of females and minors, mental and psychiatric problems as well as abandonment of responsibilities due to socioeconomic pressures with seeking of new identities. The author has a completely differing experience at the City mortuary, which is the main morgue serving the Country's capital Nairobi and its environs. Both figures are gross underestimates, because at the City Mortuary in Nairobi alone, the author has records indicating that an average of 350 bodies which are unclaimed by relatives or unidentified are disposed each year. In the year 2001, the remains of 759 males and 94 females were brought to the mortuary by police as 'unknown

## Human remains management

deceased'. Out of these, 409 males and 64 females were identified and their remains collected by relatives. The rest 350 males and 30 females were never collected by relatives mainly because they were unidentified. While in the year 2000, the remains of 717 males and 78 females were brought to the mortuary by police as 'unknown deceased'. Out of these, 383 males and 55 females were identified and their remains collected by relatives. The rest 334 males and 23 females were never collected by relatives mainly because they were unidentified. Meaning that in a period of 2 years, 737 persons were being searched for as missing by their relatives, with almost zero chances of ever being recovered or identified; yet their bodies had been examined and disposed by the authorities. Whereas in June 1992 about 100 people were reported died following "land/ethnic clashes" in Kenya's Rift Valley Province and some bodies were eaten by dogs while 16 unclaimed bodies from the Molo and Olenguruone ethnic clashes were buried by the local Municipal Council.

Furthermore, contrary to police statements aforementioned, most of these bodies examined show signs suggestive of death by homicide (9). These relatives are definitely unlikely to ever find out what happened to, and the system is unlikely to help them clarify the fate of their loved ones. The Kenyan law states that a person missing for a period of seven years is legally declared to be dead. Media reports recount the pain and tragedies of families unable to resolve issues such inheritance and cultural mourning rituals and unable to accept that their loved ones are dead. Obviously the above figures from normal peacetime are appalling and are comparable to cases of missing persons resulting from armed conflicts and internal violence. The problems are further compounded by lack of proper registration of citizens by the central bureau of registration (fingerprinting). The big question that therefore arises is: *Are third world countries such as Kenya capable of handling the problem of missing persons resulting from armed conflicts and internal violence?*

The 1998 US Nairobi Embassy terrorist bombing in which over 211 people died illustrated that a properly instituted and well equipped international network of forensic investigation teams and experts is imperative in assisting in areas of the globe where substantive resources are lacking (10). Such a network could be employed in establishing the MPC concept globally. Basically, the MPC should consist of a Data Management Division, a Forensic Investigation Unit, a Public Relations Office and a Team of Forensic Experts. The Data Management Division maintains antemortem and postmortem records of the missing persons and human remains as well as reconciling information whenever possible. The Forensic Investigation Unit consists of investigating officers and forensic detectives concerned with gathering of information from the public and collecting history and scenes surrounding the cases involved. The Public Relations Office would serve as a link between the MPC and other parties such as the public, relatives of missing persons, law enforcement officials and other agencies. The MPC center should also have a team of forensic scientists such as forensic pathologists, anthropologists, odontologists, ballistics, radiologists, archeologists, genetists and others at their disposal. Preferably a number of indispensable forensic team should be appointed full-time to handle the specific forensic work, with access to specialty assistance whenever the need arises. And when the workload exceeds the capabilities of local personnel, multidisciplinary teams have to be assembled from a wider area within the international network to be sent in to assist.

The process of identifying human remains of missing persons begins with the recovery of those remains from their specific location. An exhumation refers to the disinterment of a buried body from a designated burial site, cemetery or other place that may be unmarked (11). Exhumation serves several important purposes including the recovery of the remains for physical examination and analysis for identification purposes, release of remains to relatives facilitating funeral arrangements and emotional healing, documentation of injuries and other evidence for legal proceedings and uncovering human rights abuses, providing clues that may assist in historical reconstruction of events and revelations that would create awareness and acknowledgement that is necessary for healing and lessons for future for the community.

The entire process of exhumation is intricate and delicate requiring well-trained and highly skilled personnel with expertise in various disciplines of forensic science. Forensic pathologists are generally conversant with these disciplines and is able to work with a team of technicians specifically trained for specific disciplines. These include forensic archeology, which consists of application of standard archeological techniques modified to suite forensic crime scene processing where human remains are thought to be present. The archeological approach provides a rational way to recover and reconstruct events ensuring that evidence is not damaged, recovery is complete and documentation adequate. Also involved is forensic anthropology which consists of application of methods and techniques from physical anthropology and forensic medicine to legal cases where skeletal human remains are involved. A basic exhumation team would consist of diggers, a pathologist, an investigating officer, a photographer to serve in documentation, and a transport co-coordinator. Additional personnel would depend on the specifics of the case, availability of trained manpower and capacity of the local MPC center.

## Human remains management

The steps in exhumation include obtaining legal permission depending on the local jurisdiction, informing interested parties including relatives where possible, organizing the exhumation team, identifying the site, ensuring that protective health measures are carried out, excavation through manual or mechanical labor, proper identification-documentation-preliminary examination-removal-collection-transportation of the remains and other specimens, and finally sealing of the site for any future investigation and historical purposes bearing in mind local legislation and cultural sensitivities. The entire exercise must respect the will of the affected communities, judicial proceedings and professionalism.

The remains are transported to a mortuary or designated storage center for complete examination and analysis. Standard traditional scientific methods must be employed and proper documentation made of all findings throughout the process. Specialized techniques may be required in most cases with a long history. Correct procedure must be followed in handling the remains and obtaining samples for identification analysis. Acceptable methods of identification include: visual examination based on anthropometrics characteristics such as age, gender, height and unique identifying features, identification by radiological means, identification by dental records (forensic odontology) and identification by DNA. Most of the identification methods that are particularly useful in cases of missing persons e.g. DNA testing, are highly specialized requiring highly trained personnel as well as expensive equipment and facilities. These factors must be put into consideration when establishing local and regional MPC networks.

After examination and analysis, the remains that are positively identified must be released to affected relatives if they so wish. Those that fail to be identified must be 'protected' for any future re-examination and re-analysis, or release to relatives in cases of later positive identification matching being made. Preferably the remains should be stored unburied in above ground sepulchers to decrease organic effect of soil. If that is not culturally acceptable, or if economic or technical constraints exist these remains should be buried in the hardest possible inorganic container or underground storage concrete facility that would allow future retrieval. Throughout the entire process to the end, the remains must at all time be accurately labeled and catalogued, and information tracking their movements securely stored in the central database. Whenever more information is available or acquired regarding missing or unidentified persons, the database is utilized to make file entries and update personal files that may allow for positive identification matches to be made. Relatives of missing persons would be called upon to give DNA samples that would be used in DNA testing.

In conclusion, a network for identification of missing persons should be established in all regions in the globe. In essence, each MPC center would have the capability to investigate cases of missing persons and manage human remains. All reports of missing persons, those of past decades and present, would be forwarded to the MPC where the information would be entered in a database. Priority should generally be given to those cases that are likely to be easily resolved e.g. those where history surrounding the cases are known and the human remains are likely to be speedily recovered. Human remains that are incidentally found would be examined and analyzed, any information obtained would also be entered in the database to be matched against reports and records of missing persons and samples from relatives. The human remains that are identified should be released to relatives or interested parties, while those that are not should be appropriately stored and protected. All sites where human remains are recovered must be treated as forensic crime scenes, and those from which many persons are recovered should be respectfully treated in accordance with the local legislature and cultural sensitivities of the local communities. Well instituted, highly organized, adequately funded and properly equipped local, regional and international centers that are capably involved in handling the exercise of recovery and identification of missing persons, with retrospective and proactive approaches, are the key to human rights protection work, restoration of family links, management of human remains, exhumation, identification, collection and management of personal data that would ultimately resolve the issue of missing persons.

### Notes

- \* *The Missing Persons* in the context of the presentation in this paper refers in most cases to persons whose whereabouts are unknown by relatives consequently have been presumed dead, and those who are known to have died but whose remains have not been recovered or positively identified.
- (1) Lorente JA *et al.* Identification of missing persons: the Spanish "Phoenix" program. *Croat Med J* 2001;42:267-70
- (2) Corach D *et al.* Additional approaches to DNA typing of skeletal remains: the search for "missing" persons killed during the last dictatorship in Argentina. *Electrophoresis* 1997;18:1608-12

## Human remains management

- (3) Huffine E *et al.* Mass identification of persons missing from the break-up of the former Yugoslavia: structure, function, and role of the International Commission on Missing Persons. *Croat Med J* 2001;42:271-5
- (4) From: *Report on the 1980s disturbances in Matabeleland and the Midlands*. Compiled by the Catholic Commission for Justice and Peace in Zimbabwe, March 1997.
- (5) *Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the protection of Victims of International Armed Conflicts (Protocol I)*, 1125 U.N.T.S. 3. Entered into force Dec. 7, 1978.  
<http://www1.umn.edu>
- (6) *Human Rights and Forensic Science*. Commission of Human Rights (United Nations), Resolution 2000/32.
- (7) *Gone forever: they are lost without a trace*. Main series title in *The Big Issue*, covered by the East African Standard Kenyan Daily Newspaper: September 27, 1999 to October 11, 1999.
- (8) *Where are you?* Main series title of the *Wednesday magazine*, appearing in the Daily Nation Newspaper August 26, 1998.
- (9) Olumbe A.K. A report of medico-legal autopsy cases performed in Nairobi 1997-1999. *Paper presented to the 2001 INPALMS congress meeting in Melbourne Australia*.
- (10) Olumbe A.K. THE NAIROBI US EMBASSY BOMBING 1998: Interdisciplinary collaboration and cooperation in investigation of mass fatalities. *Paper presented to the 2001 INPALMS congress meeting in Melbourne Australia*.
- (11) Dada MA & McQuoid-Mason DJ. *Introduction to medico-legal practice*. Butterworths, Durban, 2001:341-343.

### 3.1.5 By Dr David Ratnavale, Office Chairman, President Office, Human Disaster Management (Sri Lanka)

#### What policies should be implemented for families of people unaccounted for in an exhumation and identification process?

##### INTRODUCTION

Missing persons are people who are unaccounted for by virtue of their disappearance under questionable circumstances. Missing persons therefore include individuals who are presumed to have been abducted, suspected fugitives evading justice, others who do not return for extended periods to their accustomed abodes and people – military personnel and civilians – who cannot be traced as a result of armed conflict and internal violence.

In the context of armed conflict and internal violence must be listed the “disappearance” of individuals and large groups, persons taken for interrogation but never return and others later discovered to have been killed and disposed of in mass graves or by other means.

A person “missing-in-action” implies someone who has not been accounted for in a military context and someone for whom there is no evidence of being killed-in action.

Missing persons leave behind families and loved ones missing them but not knowing with any certainty an explanation for their absence. Families in all such circumstances are therefore confronted with a mixture of emotions - uncertainty, hope, fear, anger and others - which stir their imagination in many directions.

Because the loss cannot be fully acknowledged, the pain and wondering never abates, fears continue and the delayed grief may be expressed through a variety of physical and behavioral manifestations.

The search may continue in some real or symbolic thought and activity that may be passed from one generation to the next. However much time has elapsed since the person has “gone missing” hope fanned by fantasy may last a long time. What might seem to be unreasonable expectations might not be so in the minds of the family. In such circumstances persons in authority must caution against expressing their speculations directly (how could you expect the person to be alive after so many years?), or through some other unconscious expression of doubt or annoyance.

It must be acknowledged at the outset that the families or individuals in the family might not necessarily be “loved ones” in the usual sense of the term. They could be reluctant participants in a process for which they do not feel entitled or fear the experience or possible repercussion. Besides, one cannot always be sure of the motivations and expectations of persons coming forward to participate in the identification procedures.

Uncompleted grief represents “unfinished business” that limits the bereaved from letting go of the dead and moving on. Caution must be exercised in the way we interpret the quality and “completeness” of grief, as cultural, social, emergency circumstance and even political factors may influence the process and the timing. We know for instance that combatants who lose their comrades in battle have complained that they had no choice but to put their grief “on hold.” Thus the postponed grief remains a task when the conflict is over.

The grieving process involves an individual (personal) response as well as a group or collective dimension. Hence the interaction between the individual and the collective to which he/she belongs must be understood as a constantly interactive process. This is of special significance when traditional rites and rituals in the bereavement process are involved.

Indeed when traditional rites and rituals cannot be performed the process may be perceived as incomplete leaving the bereaved angry, guilty or with mixed feelings. Interestingly, it has been observed that seemingly forgotten rites and rituals are often quite suddenly revived as communities strive to gain control over his loss especially when little solace is to be obtained from persons in authority or the existing legal system.

When a family agrees to be involved in an exhumation and identification process one could assume that they have (to some degree) acknowledged the death of their particular unaccounted-for-person. Hence they approach the

## Human remains management

situation with a mixture of “hope” in making a firm identification and bringing some closure to the process or the “hope” of not finding proof of death which thus prolongs the wish (or fantasy) that the missing person is still alive.

Families of persons unaccounted for describe the “waiting in uncertainty” period as awful. They await and fear certainty and as noted elsewhere the grieving process becomes delayed and complicated. Just knowing for certain that the unaccounted for person has actually been identified can actually be a source of great relief despite the normal grief. In a sense it allows the bereaved to move on, to let go of pre-occupation and thus to accept the reality.

Needless to state there will be situations where families will refuse to accept a loss and find all kinds of ways to postpone the realization. They may cause a lot of difficulties for the authorities, spread rumor, initiate law suits etc.

When we speak of the “families of people unaccounted for” the policies must involve clear guidelines as to who is next of kin, the legal configuration of the ‘family’ concerned, the ages and even mental state of member(s) who might be expected to witness an exhumation and make an identification.

### PREPARING THE FAMILIES AND TRAINING OF PROFESSIONALS

We must therefore be involved in an assessment of a families’ own internal preparedness to participate in the process of exhumation and identification and additional “preparative” assistance offered by the authorities administering and conducting the process. Chances are that the process is undertaken with dread.

In such circumstances one might have to weigh the pros and cons of a group-oriented session or an individual session conducted by an appropriately trained professional for such work. A group session has the advantage of exploring and airing different expectations and sharing with all persons present issues about which they might themselves be uninformed, avoiding or resisting. Establishing a policy in matters such as this will not be easy unless we have some clear criteria concerning the professionals responsible for managing the exhumation and identification and others who are “on-the-spot”.

On the other hand if it is a child or other vulnerable person who is faced with the identification process the policy must take into account the age, the personal circumstances, and persons available as “family” or for professional support.

Exhumations usually occur in the context of sites identified as a locus of individual or mass graves. ICRC remains constrained by the particular military and government policies in existence even if they are contrary to the Geneva conventions.

Exhumations frequently occur in the context of criminal liability of persons or agencies with responsibility for maiming, killing or unlawful burial. Hence the policy is tied up local politics, military procedures, attempts to deny, to conceal, to distort or to transfer of blame to some other source.

It is assumed that ICRC has well established (and tested) policies concerning the selection and training of persons involved in the actual exhumation work. Workers engaged in such work are known to experience considerable stress and burn out. The families of persons unaccounted for would expect then not only to be properly trained in “handling” the material exhumed not only for the strict purpose of scientific identification but also an expectation of “respect” for the deceased.

It is essential for us to establish policies regarding training requirements and certification of professional authorized to assist and intervene. One would assume that ICRC must already have a wealth of experience in the area of training and for example typical ways for explaining to families what they might expect to see, to expect and to feel.

Once a positive identification is made (including perhaps DNA confirmation) the families begin to make a variety of changes. Changes are made within themselves\* regarding their personal grief and plans that must be made regarding the traditional rites and rituals for funerals. A whole spectrum of emotional reactions could be expected and one must not be surprised if one is witness to anything from total collapse to total rage. Much will depend on the mental and physical status of the individual involved in the identification process and upon the available family and professional support network.

## Human remains management

Hence the need for personnel trained and experienced in handling contingencies and the special capacity to help “contain” distressing emotional reactions without meaning to obstruct catharsis or cast judgment. Crisis counselors should have some understanding of cultural norms of grieving behavior including traditional local rites and rituals.

### THE PSYCHOLOGICAL TASK

Very briefly, the family or individual involved in identifying a missing person – regardless of the condition of the remains is dealing with a complicated grieving process. It requires an adaptation to the dissonance (mismatch) between the remembered physical/mental image (mental representation) of the person and the objects that are found as remains. **To be explained further.** .

### RECONCILIATION

Reconciliation involves an internal personal psychological dimension as well as a collective or group dynamic.

The circumstances under which persons unaccounted for are identified and the condition of the remains when found will have personal, social, political and possibly economic implications. As noted above in “E and D in special or extenuating circumstances” the data that emerges from an exhumation could be charged with tense emotion.

The discovery of torture, mutilation and other signs of desecration could not only arouse immediate reactions that could trigger further vengeful violence, but, as history has amply demonstrated such incidents may be recalled (even generations later) and revived to create dissension and stir revenge.. Vamik Volkan refers to these “chosen traumas” as selected traumatic events in a communities’ past which are revived for the purpose sustaining hate and alienation as well as to magnify the “us” (good) versus “them” (bad) dichotomy.

The desecration of graveyards (which is not so uncommon in wars) is invariably experienced and interpreted as adding insult to injury which takes on a very ominous meaning for families, communities and nations. As noted this gives added valence to a chosen trauma.

The process of reconciliation may be facilitated by of public apology of wrong doing, together with adequate compensation and reparation. Policies must therefore be supportive of such “healing” interventions.

### THE POLICIES.

The policies to be implemented must supports total openness regarding all information that is available concerning the missing person(s) and is sensitive to the immediate and long term psychological consequences of the exhumation and identification process.

### SOME QUESTIONS WHICH REQUIRE CLARIFICATION

#### INTERNATIONAL LAWS - BROAD GENERAL POLICY

(a) Existing International laws governing the rights of the families of persons unaccounted for. (b) The rights of the families of persons unaccounted for in an exhumation and identification process.

#### ICRC RESPONSIBILITY UNDER INTERNATIONAL LAW

Under what circumstances is ICRC the responsible agency for E and I. What is the position when local laws supervene or come into force in wartime.

**HOW ARE FAMILIES NOTIFIED** – Whose responsibility is it to search for and identify next of kin. Is “next of kin” a legal definition?

### E AND D UNDER SPECIAL CIRCUMSTANCES

#### STAGE OF CONFLICT

- a. In the presence of armed conflict or internal violence
- b. During a cease fire
- c. Post-conflict phases after a peace accord
- d. When political and military constraints are encountered

#### EXHUMATION AT WHAT STAGE

- a. Recent burial or other form of disposal.
- b. After the passage of many years

## Human remains management

- c. From what sources – land, water, marsh
- d. When there is evidence of torture, desecration of graves etc\*
- e. Whose responsibility is it for preparation and handling of remains?
- f. Who bears the cost of the process

When is DNA testing indicated?

### **WHEN FOUL PLAY OR “TERRORISM” IS SUSPECTED.**

- a. In the case of an air crash other “detective” agencies might be involved. In investigations - Interpol, FBI, etc. In airline accidents it appears that national territorial boundaries determine the jurisdiction with local police taking charge.
- b. Families must not be compromised by “security” measures? .
- c. How are families kept informed of search efforts and investigations

### **RISKS FOR FAMILIES AND VULNERABLE GROUPS**

- a. In a continuing conflict situation or in its aftermath a family or an individual in the family who identifies and claims a body (or body parts) may be at risk if he/she is labeled (by association) as a member of and enemy group.

### **LEGAL ISSUES**

- a. Determination of “next of kin”
- b. Determination of the legitimate “owner” or person to whom the remains are delivered. It is assumed that this individual has the legal authority for disposal (burial) of remains.
- c. Issues concerning law suits, compensation and reparation by the families as well as professionals involved in exhumation.

### 3.1.6 By Dr. med. Markus A. Rothschild, Zentrum der Rechtsmedizin, Johann Wolfgang Goethe-Universität, Frankfurt am Main (Germany)

#### Preliminaries

When a large number of individuals has been killed e.g. during an armed conflict or massacre and if this „event“ happens to be officially investigated including examination of the victims, usually all examinations of the killed individuals take place under improvised conditions, often near the site where the bodies have been found. The way in which the autopsies have to be organised and conducted depends on what happened at the scene: when a natural disaster (e.g. earthquake) has resulted in a high number of victims, the autopsy can be reduced to the documentation of findings valuable for the identification of the dead person; but when large numbers of people have been killed during armed conflicts, by assaults, or when bodies have been discovered in a mass grave, an autopsy also has to be performed in order to document findings for the reconstruction of the event.

#### I. Identification

When a disaster with a high number of fatalities has occurred, the autopsies have to be performed with the main object being the identification of the bodies. On the one hand the relatives need to know whether their loved one is among the dead. On the other hand an event can only be reconstructed and fully understood if the dead have been identified (who is the victim, and why were they victimized?). Therefore sufficient cooperation and communication between the different investigating units (police, forensic pathologists, non-governmental organisations etc.) is essential.

##### *I.1. The Autopsy*

###### *I.1.1 Clothing, Jewellery*

Any existing pieces of clothing and/or jewellery have to be photographed while they are still on the body. They then must be removed from the body. All pockets must be checked for contents. Afterwards the pieces of clothing should be roughly cleaned and dried and then described and photographed again.

Jewellery and watches have to be photographed as well.

All belongings must be saved (for later identification purposes and for reasons of property claims made by the relatives of the deceased).

It should always be remembered that e.g. jewellery will be shown to relatives for identification. In case of a positive identification, the items will be handed over to the relatives. Therefore these items need to be cleaned especially of blood and body tissue!

###### *I.1.2 External findings on the bodies*

Under the condition that the body is not too decomposed, specific findings on the body's surface (e.g. scars, pigmented moles, tattoos) have to be documented exactly (photographed, described).

When a finding has to be photographed, it should always be remembered that the pictures might be shown to the relatives (e.g. for identification). Therefore the pictures have to be taken with care, e.g. the background should be clean and free of blood stains. Pictures that are taken particularly for identification purposes should avoid showing severe injuries.

###### *I.1.3 Internal findings*

Of special interest are findings concerning earlier surgical treatments (e.g. appendectomy, cholecystectomy) and implantations (e.g. pace maker, osteosynthesis material). All bodies and body parts have to be scanned by x-ray to detect implantation materials. Pathological organ changes often are not known by relatives and friends.

For the matter of identification, all important findings have to be photographed and stored (e.g. pace maker).

###### *I.1.4 Additional examinations (anthropology, DNA)*

Material for DNA from all the bodies should be kept:

Bodies and body parts in a well-preserved state: preferably a piece of muscle tissue, about 15 x 15 x 15 mm; in dry and cool storage. In addition a drop of blood should be dried on filter paper and kept as well.

## Human remains management

Bodies and body parts in the state of decomposition or skeletonized: a piece of the diaphysis of the femur or humerus (relatively thick compacta with a considerable amount of DNA), ca. 3 cm long. In addition one molar should be kept. Bone and tooth material should be kept in dry and cool storage in a paper-bag (also envelope) or carton. The analysis should be done by microsatellites (STR). This method is relatively time-saving, easy to do and cheap. Good working kits (e.g. Profiler Plus by Applied Sciences) are available. One analysis costs about 20,- to 25,- EUR.

### **I.2. Missing reports**

#### **I.2.1 General data from the relatives**

If a disaster with a large number of injuries and fatalities has occurred, a considerably larger number of people will be reported missing. The reported facts and details have to be compared with the findings which have been documented by the autopsy. It is always important to know who has given the information about the missing person (e.g. relative, friend, colleague?) in order to estimate how valid the information is.

- which relatives exist (in case DNA-analysis should be necessary)?
- age, gender, body length, ethnic background
- jewellery and pieces of clothing worn when the missing person was last seen alive
- tattoos and specific scars

#### **I.2.2 Medical findings**

- Dentist: dental formula
- General practitioner: medical history, especially surgical treatment

## **II. Reconstruction**

Apart from the identification of the individuals, the autopsy also has to be performed in order to reconstruct what happened.

Therefore all bodies and body parts have to be x-rayed before the autopsy itself is undertaken.

The front and back of each body have to be photographed (whole body pictures, overviews).

Localisation and distribution of injuries have to be photographed and should be entered in a diagram.

Foreign materials from the surface of the body or from inside the body (e.g. bullet, splinters, shrapnel etc.) must be photographed and kept as well.

## **III. The working teams**

### **III.1 Teams at the site**

The composition of the working teams depends on the kind of event that happened and on the time that has elapsed since the event took place. In general the bodies should be recovered/exhumed by scene-of-the-crime-officers (SOCOs), forensic pathologists and autopsy technicians.

If the bodies have to be recovered from mass graves, it is helpful to hand the organisation of the recovery over to an archaeologist with forensic experience. The localisation of the bodies within a mass grave has to be documented precisely (measured, photographed). The recovery of the bodies should be performed by SOCOs, forensic pathologists and technicians. The documentation of the recovery should be done by the SOCOs. The number of teams needed depends on the number of the bodies and their state of preservation.

### **III.2 Teams for performing the autopsies**

The composition of the autopsy teams depends on the kind of event that happened and on the time that has elapsed since the event took place. If the discovered bodies are still in a well-preserved („fresh“) state with gender ascertainable and age assessable, the bodies should be examined by forensic pathologists, autopsy technicians, and SOCOs. The higher the state of decomposition of the bodies, the more forensic anthropologists are needed in addition to the afore mentioned experts.

In general an autopsy team should consist of a forensic pathologist, an autopsy technician, and a SOCO. With every three teams there should be a forensically experienced dentist.

In addition a photographer (who alone is taking all pictures), as well as an x-ray technician (for scanning the bodies) are needed.

With every three to four teams, two extra autopsy technicians are needed for transporting the bodies between the units (autopsy room, x-ray-room, refrigerator-room etc.) and helping to clean the tables and instruments. They can also assist with the autopsies.

## Human remains management

In the background two SOCOs are needed for every four teams for packing and labeling the samples, as well as two secretaries (native English speakers) who type the handwritten autopsy reports.

### ***III.3 Teams working with the relatives***

If the comparison of the findings of the autopsies with the data of the reports on the missing leads to a possible positive identification, the relatives have to be contacted. They must be informed about clothing, jewellery and relevant autopsy findings important for identification. This contact should be guided by or performed by experienced police officers. A forensic pathologist should be on call for any questions (the officers or relatives might have) concerning the autopsy findings.

The mental and emotional care of the relatives has to be taken into consideration. According to my experience even non-religious people prefer the help of the clergy to that of non-clerical helpers (e.g. social workers etc.).

**3.1.7 By Prof Dr D. Strinovic, J. Skavic, D. Zecevic, M. Kubat, V. Petroveckii, H. Brkic, M. Slaus, S. Gusic, J. Cadez, Institute for Forensic Medicine and Criminology, University of Zagreb (Croatia)**

#### **EXPERIENCE-BASED IDENTIFICATION MODEL FOR MASS DISASTERS**

Natural disasters, massive traffic accidents (train, aircraft), and wars in particular, call for intensive testing for determining the identity of dead bodies. After the Homeland War, Croatia was confronted with the laborious and toilsome task of locating graves and identifying a huge number of war victims. At that point, locating of war victims buried in mass graves, and especially those buried in individual graves, was a major issue. In mass graves, bodies were commonly thrown one on another, usually without any identification papers and clothing, or with their clothes changed when the victims were still alive. Moreover, bodies from mass graves were often massacred and missing some parts. In addition, the time span of more than ten years between the victim's death and recovery of the body even more hampered the identification process.

Up to 3 March 2001, 3197 war victims remains were exhumed in Croatia and of these 2552 (79.8%) were identified. Among the identified war victims, there were 1793 men and 759 women.

The identification process may occasionally last a few years, depending on the case complexity. Up to January 1997, for instance, out of 200 mortal remains exhumed from the Ovèara Mass Grave in 1996, only 46 were positively identified (the identification was carried out by forensic experts of the Hague War Crimes Tribunal). In December 1997, the number of the identified bodies reached 98, and a majority of them was identified by use of the standard forensic methods. Thereupon, only forensic DNA testing was applied resulting in a total of 145 positive identifications in 1999. By 30 April 2001, 163 or 81% of the war victims from the Ovèara Mass Grave were identified.

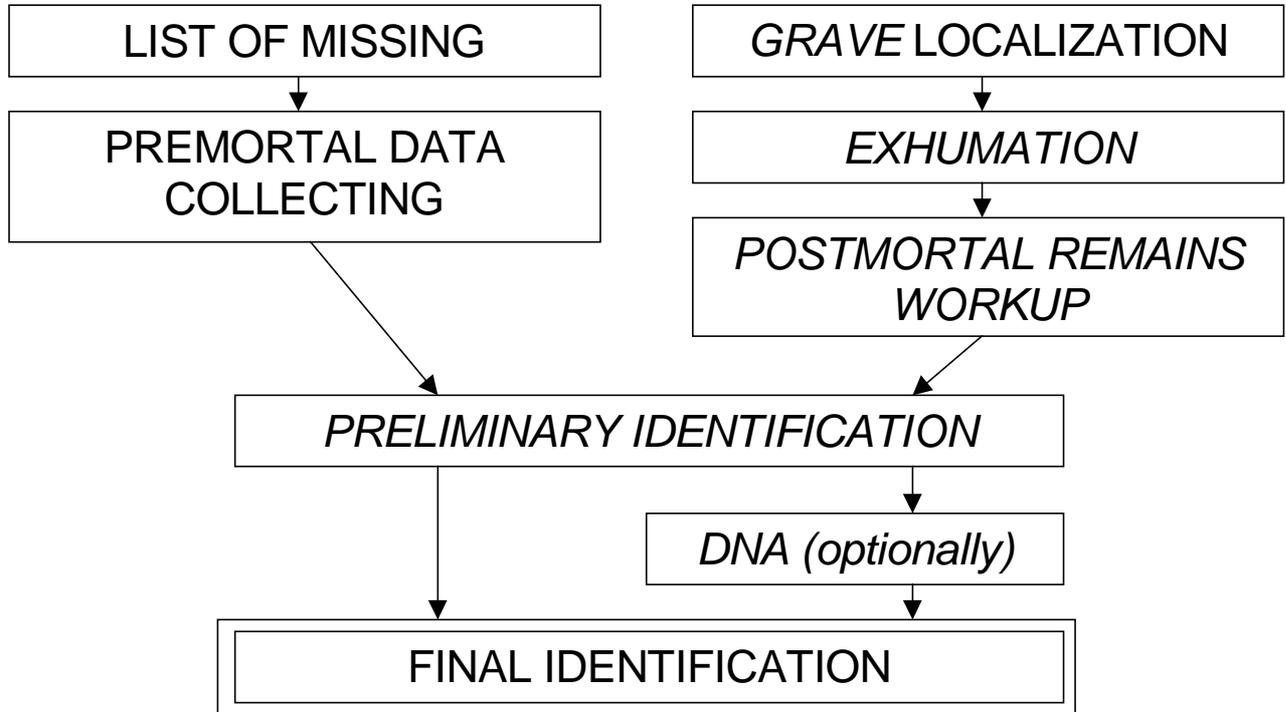
In view of the above complex circumstances, the identification results can be considered as exceptionally successful. To date, the rate of positive identification has reached about 80%. (By use of DNA typing the rate of positive identification is projected to be much higher).

Considering the vast practical experience in war victim identification gained over the last 10 years, we would recommend our identification model for mass disasters.

#### **List of missing persons**

It has turned out that in some cases of mass graves, the list of missing persons is crucial for their identification. To reduce the number of possible candidates for particular graves, our experience has confirmed that the list should be made as early as possible, actually at the moment when an individual or a group of individuals is reported missing. Such data were, for instance, obtained for the largest mass grave in Croatia – the Ovèara Mass Grave (200 bodies). The list of missing persons contained over 400 names, most of them the wounded from the Vukovar Hospital. In case no list of potential candidates for a particular grave is available, the identification process is regularly more complicated and time-consuming.

**Figure 2.**  
**RECOMMENDED IDENTIFICATION MODEL**



**Figure 3.**

**POSTMORTAL REMAINS WORKUP**

**TEAM**

- forensic pathologist
- anthropologist
- forensic dentist
- forensic radiologist
- autopsy technician

**TASKS**

- autopsy
- samples for DNA analysis
- bones examination
- dental examination
- preparing of the clothes and personal belongings
- photographs
- sets for “presentations”

### Antemortem records

Insufficient antemortem records are one of the biggest problems in the process of identification of war victims. Specifically, in spite of all efforts to collect as much as possible antemortem data from the victim's family, the obtained data were commonly scanty or irrelevant for establishing the identity of individuals who died 10 or more years ago. Victim's relatives often hardly remember clothes and personal effects in the victim's possession when last seen alive. The least relevant information collected were related to the victim's dental status. Identification was often based on a photograph of the missing person showing his teeth, the only available evidence of the victim's dental status.

It should be pointed out that the war in Croatia destroyed many hospitals, outpatient clinics and health centres, and, consequently, a large part of medical records and x-rays that would have considerably facilitated the identification process.

In some cases, physicians who treated or performed surgery on missing persons shortly before their disappearance were also consulted. However, the data they provided were frequently scanty and, therefore, only a small number of positive identifications was based on their reports.

### Location and discovery of graves

For a majority of graves it took a long time and patience to be located. Generally, the graves were dug without any order and by no rules, usually at the execution site and in a majority of cases with no witness present. In addition, in the course of 10 years soil has been covered with new vegetation and the landscape changed. During exhumation, another problem occurred: some of the located graves had already been excavated and the bodies displaced. The graves were found empty, either with hardly any skeletal remains and clothing or completely empty.

### Exhumation

Exhumation of post-mortem remains should always be professionally approached and carried out under the supervision of an expert – a medical expert who will manage recovery of the bodies and their preparation for shipment to the Forensic Department. This is especially important in cases of mass graves containing a large number of commingled bodies of which even the smallest part can contribute to positive identification.

First, the whole grave should be uncovered by digging as to expose all the bodies. After soil and other contaminants are removed, the bodies are taken out from the grave one by one.

When the bones of several individuals are commingled (i.e. in wells, at riverbanks), it is usually impossible to separate the bodies and remove them one by one. In such cases, all skeletal remains and personal items are to be taken out and subsequently arranged. As often as not, only severely damaged, scattered or completely burned skeletal parts with only little fragmental remains are recovered, which additionally hampers the identification.

### Post-mortem examination

Post-mortem examination of exhumed remains should be carried out as to disclose as much as possible single elements or parameters for identification. It has been shown that the best identification results are achieved by the multidisciplinary team consisting of forensic expert, anthropologist, stomatologist, x-ray specialist backed up with autopsy assistant, photograph, note-taker and other staff. Thus, general anthropological variables such as age, sex, height, stature as well as other traits characteristic to the individual, i.e. old injuries, various deformations, dental findings, tattoos are obtained. All clothing and personal effects are to be removed, washed up, dried, photographed, carefully described and then stored to be subsequently shown to the victim's relatives.

Closer inspection is then aimed at identifying signs of any fresh injuries, the cause of death in particular, that may often be hampered by either antemortem or post-mortem extensive damage of the remains.

### Provisional identification

Autopsy data containing elements for identification are compared with the lists of missing persons and their antemortem records.

First, the data are computer processed and compared in order to obtain the list of potential candidates for each particular case. Then, each particular case is analysed individually as to determine the most likely candidate for identification. As already noted, this identification stage is largely impeded by insufficient antemortem data on one hand, and frequent extensive damage of post-mortem remains, time span of a dozen of years, commingled bodies and their parts, lack of identification papers, jewellery and alike, on the other.

### Identity determination

In the end of each identification procedure, relatives are informed about the finding and identification elements established so far. At this stage, they are informed about all collected data relevant to the particular case.

## Human remains management

Thus, the relatives are informed about the location and time of exhumation, possible number and names of positively identified individuals recovered from the particular mass grave.

Then, they are presented data regarding age, sex, height and stature, followed by a detail description of the victim's dental status. The latter presentation of descriptions, photographs and even teeth preparations should be adjusted to the lay public.

Then follows the presentation of identification elements such as old injuries, fractures, deformations, prosthetic appliances and alike. If the skin is preserved, they are shown tattoos, scars or other skin marks, as well as hair colour and hairstyle. Moreover, they are given a detail description of clothing, personal effects, jewellery and all other items found on the victim's body with the presentation of a photograph and items themselves.

The procedure usually ends with a description of the cause of death or the way the individual died.

After the above procedure and presentation of all relevant facts for establishing the identity of an individual, relatives confirm the identification by their signature in case they consider the presented elements acceptable for positive identification.

Signing of positive identification papers is often met with emotional resistance, when the mother or wife simply cannot accept the fact that their loved one is dead and that these are the remains of the person they are looking for, in spite of a series of quite certain and clear elements for positive identification. In such cases, much more time should be taken talking to the family and explaining the facts, although sometimes even such approach will be without result.

In cases when the identity cannot be established for the above reasons or simply because there are not enough elements for positive identification, identification is to be performed by DNA typing. DNA identification process has been recently producing better and better results and thus considered a successful supplement to standard forensic .

## Human remains management

### 3.1.8 By Mr Ivan Szekely, Councillor, Open Society of Archives

#### Genetic proofs of relatedness to help recover the identity of refugees without documents and other proofs of identity

##### Principles and Recommendations

*DRAFT*

##### **Preambulum**

###### *The Open Society Archives*

- o Realizing the danger inherent in modern wars and civil wars that masses of people might leave their homes, losing their documents and other proofs of identity;
- o Ascertaining that techniques for genetic demonstration of relatedness are available for mass use at moderate costs;
- o Assuming that in case of lack of other proofs or non-approval of proofs it might be necessary to demonstrate genetic relationships as a means to recover identity;
- o Aware however, that the introduction of these techniques might arouse anxiety and that it is therefore desirable to give assurances as to their proper use;
- o Aware of the dangers of discrimination and social stigmatisation which may result from genetic data, and determined to fight such phenomena,
- o Aware also that abusing human rights comprises not only physical assaults but also infringements of information rights which can have a long-lasting impact on the individuals' future;
- o Convinced therefore that such tests could be carried out only when initiated by the persons concerned, in full respect of their personal rights and the internationally accepted norms of data protection;

###### *Recommends that*

- o The international community and democratic governments accept the following principles and promote their application;
- o Humanitarian and other civil organizations have due regard to these principles while carrying out their activities and ensure their wide circulation among the potential subjects;
- o Medical organizations suitable to carry out such tests follow these principles and be assured that their tests are used in a way which complies with these principles;
- o as well as
- o All these organizations cooperate, when necessary, to enforce these principles.

##### **Scope and Definitions**

These Principles and Recommendations apply to the collection of samples and use of DNA analysis for the purposes of demonstrating genetic relatedness in order to help recover the identity of refugees without documents and other proofs of identity.

“DNA analysis” or “genetic tests” refer to any procedure which may be employed in the analysis of deoxyribonucleic acid (DNA), the basic genetic material of life.

“Samples” refers to any substance of living origin which may be utilised for the purpose of DNA analysis.

“Genetic data” refers to any structured collection of the results of DNA analysis tests whether retained in material form, as manually held records, or on a computerised database.

##### **Informing the public**

The public should be informed about the possibilities of genetic demonstration of relatedness, in particular their availability, purpose and implications – legal, medical, social and ethical – as well as the centres where they are carried out.

##### **Equality of access - non-discrimination**

Among refugees who have no other proof of identity, or their proof of identity is not acceptable, there should be equality of access to genetic testing, without financial considerations and without preconditions concerning eventual personal choices.

No condition should be attached to the acceptance or the undergoing of genetic tests.

## Human remains management

### ***Self-determination***

The provision of genetic services to demonstrate relatedness should be based on respect for the principle of self-determination of the persons concerned. For this reason, any genetic testing, even when offered systematically, should be made only when initiated by the persons concerned and should be subject to their express, free and informed consent.

The testing of the following categories of persons should be subject to special safeguards:

- o minors;
- o persons suffering from mental disorders;
- o adults placed under limited guardianship.

Testing of these persons should be permitted only if the information is imperatively needed to prove genetic relatedness. The consent of the person to be tested is required in these cases too.

### ***Non-compulsory nature of tests***

Health service benefits, family allowances, marriage requirements or other similar formalities, as well as the admission to, or the continued exercise of, certain activities, especially employment, should not be made dependent on the undergoing of genetic tests.

The granting of citizenship, and issuing of identity documents may depend on the results of genetic demonstration of relatedness only if the person concerned expresses his free and informed consent to the use of these results as the basis of proving identity.

### ***Quality of genetic services***

Genetic tests may only be carried out under the supervision and responsibility of a duly qualified physician. It is desirable for centres where laboratory tests are performed to be approved by a competent national or international organization, and that they participate in an external quality assurance.

### ***Counselling and support***

Any genetic testing procedure should be accompanied by appropriate counselling, both before and after the procedure.

Such counselling must be non-directive. The information to be given should include the results of tests, pertinent medical facts, as well as the potential consequences and choices inherent in the results. It should explain the purpose and the nature of the tests and point out possible risks. It must be adapted to the specific local circumstances in which individuals and families receive genetic information.

Everything should be done to provide, where necessary, continuing support for the tested persons.

### ***Data protection***

The collection and storage of samples, and the processing of information derived therefrom, must be in conformity with the Council of Europe's basic principles of data protection and data security laid down in the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data, European Treaty Series No. 108 of 28 January 1981 and in line with the relevant Recommendations of the Committee of Ministers in this field.

Nominative genetic data or associated personal data may be collected, processed and stored only for the purposes of demonstrating relatedness when so requested by the persons concerned.

Genetic data, as all medical data, should as a general rule be kept separate from other personal records.

### ***Professional secrecy***

Persons handling genetic information should be bound by professional rules of conduct and by the rules laid down by national legislation which are aimed at preventing the misuse of such information and, in particular, by the duty to observe strict confidentiality. Personal information obtained by genetic testing is protected on the same basis as other medical data by the rules of medical data protection.

However, in the case of a demonstration of genetic relatedness, and the finding of a severe genetic risk or illness for the person tested or other family members, consideration should be made whether family members or those affected should be informed about matters relevant to their health or the health of their future children in accordance with national legislation and professional rules of conduct.

Such findings may be communicated to the person tested only if they are of direct clinical importance to the person or the family. Communication of such findings to family members of the person tested should only be authorised by national law if the person tested refuses expressly to inform them even though their lives are in danger.

## Human remains management

### ***Handling of samples and data***

Samples taken from individuals for DNA analysis should be destroyed after the rendering of the final decision in the case for which they were used, unless it is necessary for purposes directly linked to those for which they were collected.

Measures should be taken to ensure that the results of DNA analysis and the information so derived is destroyed when it is no longer necessary to keep it for the purposes for which it was used.

Samples, or the information derived from them, may be stored for longer periods:

- o when the person concerned so requests; or
- o if needed for population and similar research and statistical purposes, provided that all personal data with which the individual concerned can be identified are irreversibly removed prior to use of the samples or data for such purposes.

The same applies to the publishing of such data.

### **Explanatory Memorandum**

One of the tragic lessons of the conflict in Kosovo is that in modern wars it has become possible to expel masses of people while systematically stripping them of all proof of their identity, thus making it difficult or impossible for them to return. Similarly, centralized and computerized population registers, real estate registers and other databases concerning masses of citizens provide the technical possibilities of deleting or manipulating citizens' identity/personal data.

Without documents or other proofs of identity it becomes almost impossible to gain access to the most basic and essential services of modern society, especially those associated with the rights of citizenship.

At the end of any war it is essential to ensure the safe return of refugees. In most cases this requires international cooperation. One of the basic conditions of refugee return is proof of the identity of refugees, and if no such proof exists, the formal restoration of refugees' identity.

As we learned from events in the Kosovo conflict, organizations dealing with refugees register people as they arrive to camps, and generally record data and issue temporary identification cards on the basis of the refugees' own testimony. Apart from the questionable reliability of data recorded in this way (the memory of shocked, elderly people can be at fault, while others may even intentionally report false data), the data so collected may not be identical to information in central registries, or may be unacceptable as proof of identity to the authorities.

In such cases, as a last resort, it might be necessary to establish the genetic relationship among family members as a means of recovering identity. The technologies required for such tests are generally well established, in some cases routinely applied, and their reliability has been scientifically proven.

A special-purpose, mass application of these technologies has been necessitated by the Bosnian war, where genetic identification is used by the organization Physicians for Human Rights to identify victims buried in mass graves, and to prove their relationship with surviving family members. This organization has worked out the technology of these tests, and has developed a so-called antemortem database to help identify missing persons.

The task with the living is partly different: a single given sample need not be matched against many, but against one or a few. In such tests nuclear DNA, which is cheaper and easier to look at than the mitochondrial DNA used in forensic samples, can be used in tests with the living. The technology applied is readily available, its mass use feasible, and the costs of such tests moderate. These facts ensure the feasibility of the use of this method of testing to help restore the identity of refugees deprived of their documents.

However, the use of genetic information relating to identifiable individuals requires special safeguards. History has shown that centralized lists of personal data can be used to great harm as well as benefit. Genetic data, such as data on racial or ethnic origin, might provide the basis for discrimination and social stigmatisation, as well as the resources for a new series of deportations or genocide if history were to take an unfortunate turn.

Therefore, a generally accepted recommendation, and a set of basic principles to be followed by all who participate in recovering peoples' identity are needed to serve as a guideline for such procedures if adopted.

## **Human remains management**

As a regional archives in Central and Eastern Europe which holds documents relating to communism, the Cold War, and grave violations of human rights, the Open Society Archives (OSA) participates in the international project of identity restoration of Kosovo refugees by collecting secondary sources such as telephone books, census data etc. In addition, OSA has significant expertise in dealing with openness and secrecy, informational rights and data protection.

OSA has therefore worked out a draft of Principles and Recommendations based on existing international documents in order to help recover the identity of present and future refugees by applying modern technology with necessary safeguards to avoid causing harm, and ensuring full respect of the informational rights of the people concerned.

## Human remains management

### 3.2 Experts' contributions to workshop *Human remains: Management of human remains & information on the dead*

#### 3.2.1 By Argentine Forensic Anthropology Team (EAAF) - Burial Sites

##### EAAF - QUESTIONNAIRE FOR BURIAL SITES

*\* Use one form for each grave*

**Date:**

**Place:**

Name of the person who take the information:

Name of the Witness:

Address of the Witness:

**Important questions to address before filling the form:**

**Did the witness participate in the burial ?**

**Did the witness see the moment in which the body was buried ?**

**Did the witness see the grave after the body was buried ?**

**Did someone tell to the witness that there was a person buried in the grave ?**

1. Name of the city/village and state in which the burial site is located - Date of the inhumation:
2. Location of the burial site (i.e. at the local cemetery, or at a factory, or on a barren land, or close to a military base, etc.):
3. Do we have the exact or approximated location of the burial site ? Please describe the location as precise as possible and draw a map or sketch of the burial site. Put GPS position if is possible. Try to identify "reference objects" (an old tree, a wall, etc.)
4. Do we eyewitness/s of the burial of the bodies ? If yes, describe in detail how it was done: who brought the bodies; how was the grave dug; did the eyewitnesses participated in the burial; are the witnesses related with the victims: If yes in what way (relatives, neighbors, friends, members of the same political party, union, church, etc.):
5. Type of grave: Individual or Multiple (more than one):
6. Dimensions of the burial site (approx.):
7. Depth of the grave (approx.):
8. Were the victims killed at the same place or close to the burial site or in a different place and their bodies were later dumped into the grave
9. Features of the terrain: dry, wet, cover with water, grass, bushes, trees, rain season, etc.:
10. Information about the victims
  - a) Number of victims (specify if it is the exact or an approximated number)
  - b) List of the names of the victims: please, specify if:

## Human remains management

- You are sure of the names
- or if there is a suspicion of the names of the victims
- or if you don't know the names but you know they belonged to a particular political, social, religious, etc. organization.

c) Are the relatives of the victims available ? Please, indicate the names of the relatives of the victims that can be contact to ask them pre-mortem information

11. Alleged cause of death:

12. Reason why this burial site was selected to be exhumed (legal purposes, quality of the information, etc.):

Observations:

### **Notes**

- (1) Argentine Forensic Anthropology Team (EAAF) is a non-governmental organization that has worked since 1984 in human rights investigation, exhumation of graves, and analysis of skeletal remains. Over the course of its career, the EAAF has conducted and/or participated in forensic investigations of human rights violations in 27 countries



## Human remains management

### Physical Information of the Victim

Physical Complexion (size of clothing):

Torax: broad          regular          narrow

Stature: exact          approx.          Weight

Laterality (Handeness):

Beard and Mustache (color and shape):

Glasses: YES NO    Smoker: YES NO    Cigarettes Pipe Cigars How

Much ?:

Identificatory traits in the skin (p.e. tattos, scars, birth marks, spots, others.). Explain dimensions and characteristics.

Hair (Color, Type, Amount)

Skull

Shape and characteristics of the head: (dolicocephalo/braqui- cephalo, supraorbital archs, others):

Shape of the nose

Vertical: straight          eaglelike (curve)

Horizontal: narrow          broad

Shape of the chin:

Pre-Mortem Lesions and Pathologies

Congenital Deformations: (biphyd spine, extra ribs or vertebrae, others):

Fractures:

- o Type and circumstance in which the fracture occurred (accident, fall, beating, gun shot wounds, knife).
- o Date of the fracture.
- o Did a doctor see it ?
- o If YES, name of the doctor and hospital and what was the diagnosis and treatment.
- o Are there X-rays of the fracture ?
- o Plastered ?
- o Consequences
- o If the victim did not receive any medical attention or the denouncer does not remember the diagnosis, please indicate the location of the fracture and treatment as precise as possible.

Professional or Acquired deformations: (i.e. pain in the lumbar area, disk hernia, others. Follow the same questions from the previous paragraphs).

Lesions in joints: (twist, dislocations, others. Follow the same questions from the previous paragraphs).

Serious Diseases with consequences on bones: (TBC, Starvation, Poliomyelitis, Rickets, Sinusitis, decalcification, others):

External elements in the body: (plastic or metal prosthesis, IUD, non organic heart valve, others):

If the victim is a woman, indicate number of pregnancies and birth:

## Human remains management

Indicate any doctor/hospital/clinic where it would be possible to recover any physical information of the victim

### Dentition

He/She had a complete dentition ? YES NO Doesn't Know

If the victim had lost dental pieces, indicate which ones. If the denouncer does not remember the exact location and name of the missing teeth/tooth, indicate upper or lower, right or left side, anterior or posterior area.

Indicate the situation of each of the four molars (i.e. erupted):

Fractured dental pieces ? YES NO Doesn't Know

Indicate position of the teeth/tooth:

Description of size and shape of the central and lateral upper and lower incisors:

Color of the teeth: Indicate if the victim had stains in his/her dentition. Stains can be the result of smoking, of certain pharmacos (i.e. Tetracycline during the calcification), potable water with excess of flour, others.

Bruxism (noise with the teeth while sleeping): YES NO

Rotation of dental pieces: Giroversion, Mesialization, etc.:

Congenital Abnormalities: Supernumerary teeth, Agenesis (the lack of tooth formation at a given position), Hypoplasia (disturbance of enamel formation, manifests in transverse lines or pits in the tooth), others:

Interincissial Diastema: YES NO Description:

Buccal hygiene: bad regular good

Restorations: Filling, Jacket (metal, golden, porcelain, acrylic), Root canal, Partial or Complete Prosthesis, others:

Indicate name of dentist, hospital or clinic where dental information about the victim might be available.

Clothes and Personal Effects of the Victim

Genealogical Tree of the Victim (for DNA purposes)

Observations

### **Notes**

- (1) Argentine Forensic Anthropology Team (EAAF) is a non-governmental organization that has worked since 1984 in human rights investigation, exhumation of graves, and analysis of skeletal remains. Over the course of its career, the EAAF has conducted and/or participated in forensic investigations of human rights violations in 27 countries

### 3.2.3 By IOM Guatemala

#### Follow-up on the Recommendations of the Truth Commission (CEH), Anthropological and Forensic Investigations in Guatemala

##### Context:

The Truth Commission –CEH-, created under the peace process in Guatemala (Oslo Agreement); in its Report “Memory of Silence” shows the historical evidence of disappearances and crimes that took place during the internal armed conflict. In this context, the mentioned report presents a series of new opportunities for the implementation of democratization, reconciliation and compensation projects, for the victims of the internal armed conflict.

The recommendations contained in the report, specifically those concerning social remedial measures, consider that the exhumation of the remains of the victims as well as locating the clandestine and hidden cemeteries is an act of justice, since it is part of the Law to learn the truth and it contributes to know where those who disappeared actually are; it is also an act of compensation in itself, because it enables the dignifying the victims and the right of his (her) relatives to bury their remains and perform burial rites according to their culture.

From these premises, the CEH recommended that the Government prepare and develop an active policy for exhumations, establishing expeditious procedures, taking into account three general considerations:

1. That the exhumation processes be carried out with full respect for the cultural values and the dignity of the victims and their family, understanding exhumation, not only as a technical and juridical procedure, but as a measure of individual and collective compensation.
2. That the bodies and remains of the victims be given to their relatives in order to perform a burial according to their own culture.
3. Promote and support the work of non-governmental organizations specialized in forensic anthropology and the investigation and identification of human remains. Such organizations must work in close contact with the Ombudsman, whose office must be a depository of the corresponding data bank.

##### General Description of the Project:

The project, as a whole was aimed at compensating the victims of violations of human rights during the internal armed conflict, and its target population are the inhabitants of communities where massacres took place, giving priority to the attention of relatives of the victims, particularly widows and orphans.

For its implementation, the project had funding from the Royal Embassy of the Netherlands, in an amount of US \$488,754.64 and supplementary resources provided by the Agency for International Development of the United States of America in US \$488,744.63. The executing entity was IOM, who for that purpose signed an Interinstitutional Agreement with the “Fundación de Antropología Forense de Guatemala” –F.A.F.G- (Foundation of Forensic Anthropology of Guatemala) to carry out the activities of exhumation and mental health over the period from November, 1999 to December 2000. The project covered a geographical area of nine departments (Baja Verapaz, Petén, El Quiché, Chimaltenango, Quetzaltenango, Alta Verapaz, Suchitepéquez, Sololá and Huehuetenango) in the case of massive forensic anthropological investigations, reaching 428 direct beneficiaries (relatives) and 1,686 indirect beneficiaries (communities), mostly belonging to the Quiché, Ixil, Cackchiquel and Rabinal Achí ethnic groups, making a total of 56 communities. In addition, 15 cases of non political violence (individual cases) were covered and mental health assistance was provided for 50 communities who found a place and a space to express their traumatic experiences, lived during the time of violence, their “daily concerns”, their dreams and future projects, having conformed support groups to overcome the feelings that the exhumation process elicited. A total of 71 massive and individual exhumations were carried out, and in 14 cases, the remains were returned to their place of origin.

##### General Objectives:

1. Follow up on the recommendations of the CEH, especially regarding an active policy for exhumations.
2. Learn the truth through scientific, objective and unbiased methods.

## Human remains management

3. Contribute to strengthen the peace-making, democratization and reconciliation processes, through Forensic Anthropological investigations.
4. Provide spaces for a psycho-social compensation, where persons in this level, affected by the internal armed conflict, begin a process of individual and collective mourning.

### **Main Components and Activities Carried Out:**

Exhumations Component: It consisted basically in carrying out the Anthropological and Forensic investigations, and the later implementation of the process of exhumation of the remains found, in coordination with members of the community, public authorities and various local organizations.

Component of Mental Health: It was oriented to create psycho-social compensation spaces for the beneficiaries, during the Pre-exhumation, Exhumation and Post-Exhumation stages, in the forensic anthropological processes carried out. For its implementation, 5 organizations specialized in mental health were hired, who provided a service of accompaniment and psychosocial compensation to the communities. The mental health component was developed through visits made to the relatives of the victims by specialized technicians and through support activities as well as community integration.

The main activities and methodologies applied for the execution of the Project may be sequenced as follows:

1. The relatives of the victims, gathered in popular organizations, the Ombudsman's Office, etc. filed denouncements on the existence of clandestine cemeteries with the Public Ministry (Prosecutor), this entity, in charge of initiating a legal investigation, with the assistance of experts on the subject made the forensic anthropological investigation of the case.
2. Several organizations such as: the Public Ministry, Justice of the Peace, National Civilian Police, Popular Organizations, Human Rights Organizations, persons from the community and experts from the F.A.F.G. took part in the execution of the juridical and legal proceeding.
3. Upon conclusion of the forensic anthropological investigations, new expectations about justice opened-up, hoping that the processes will continue in order to punish those responsible for the massacres and collective murders, on the basis of evidence gathered. New denouncements were also files, thus showing confidence in the State institutions.
4. Every case investigated went through the following process:
  - o Judicial process: Denouncement and other proceedings with the Public Ministry to begin the investigations.
  - o Forensic-Anthropological investigation and history: Digging and analysis of bones and evidence for a historical reconstruction of events.
  - o Stage of preparation and gathering data: Exploratory investigation with testimonies and accounts from the members of the community and relatives of the victims.
  - o Stage of Forensic Archaeology: Investigation on the scene.
  - o Stage of Laboratory Analysis: Analysis of the bones and evidence by specialized forensic anthropologists.
  - o Stage of Analysis: Analysis of the information obtained, drafting of a report to the Public Ministry and handing-over the remains for their burial.
  - o Training: The personnel in charge of the Forensic Anthropological investigations on human osteology, forensic anthropology, methodology, protocol and reports.
  - o Psycho-Social Compensation: Mental health activities with the community during the stages of pre-exhumation, exhumation and post-exhumation.
  - o Internal Monitoring of activities: Follow-up on the activities of the F.A.F.G. personnel.
  - o External Monitoring of activities: Follow-up on the processes with other public institutions and with the community.
5. Activities performed at each exhumation:
  - o Obtention of information from the community where the work will take place.
  - o Coordination meetings with F.A.F.G. prior to each exhumation.
  - o Training promoters on the techniques of psychosocial approach.
  - o Workshops to facilitate the expression of feelings and emotions associated with the exhumation process, approaching the issues of the process of exhumation, reconstruction and social recognition of events.

## Human remains management

- o Support and accompaniment in religious and cultural ceremonies of the community, performed during the period of psychosocial compensation work.
- o Meetings with local organizations that may give support to the exhumation process.
- o Coordination with organizations working on the legal side of exhumations.
- o Meetings to give back the work performed in the communities, through a popular report.
- o Radio programs where contents regarding the psychosocial compensation program are broadcast, in the context of exhumations.
- o Home visits to the relatives of those affected by violence.

### Lessons Learned:

- The effects of war on the victims require continuous rehabilitation.
- It is necessary to take into account the culture, customs, beliefs and religion of the population in order to work on exhumations and the process of psychosocial recovery.
- The work must be carried out in coordination with other institutions working on productive, educational, infrastructure and physical health projects, so that the work will be better accepted, considering the impact on the community.
- It is necessary to place more emphasis in developing the self-help capabilities of the community, so that the responsibility and contribution of the efforts made, be shared and does not only fall on the executing organizations, since it is not convenient to create dependency links and paternalism in the population.
- Community intervention and organization processes take time. Thus, the pace of the work and development of the families must be respected in order not to give immediate expectations, but rather consolidate communication processes and democratic exercises within the local organization.

**3.2.4 By Ms Gill Kitley, Human Rights Officer, UNMEE, Office of the Under-Secretary-General for Peacekeeping, United Nations General Secretariat**

**Strategies for raising concern on the war dead with governments, the United Nations and non-governmental organizations: Some experiences from United Nations peacekeeping operations.**

“We can truly say that the whole circuit of the earth is girdled with the graves of our dead... and, in the course of my pilgrimage, I have many times asked myself whether there can be more potent advocates of peace upon earth through the years to come, than this massed multitude of silent witnesses to the desolation of war”

King George V, Flanders, 1922

The scenes encountered on some of the former battlefields along the disputed border between Ethiopia and Eritrea, following the two-year war between the two countries, provided a vivid illustration of the “silent witnesses to the desolation of war” cited by King George V. When the United Nations Mission to Ethiopia and Eritrea (UNMEE) arrived in October 2000 following the signing of the Cessation of Hostilities Agreement, human remains of combatants still lay in several areas where some of the most ferocious battles had taken place. There had been little attempt by the belligerent parties to identify or remove them from the warfront, notify their families, or accord a dignified burial to the dead fighters. In some cases the local population burnt or buried the bodies, or covered them with a layer of sand in an attempt to get rid of the smell. Now, two years after the end of the war, the skeletal remains of these fallen soldiers can still be seen on some of the contested land.

Under international humanitarian law, the serious issue of the management of human remains post-conflict is dealt with principally by the Geneva Conventions. The First Geneva Convention (dealing with the amelioration of the condition of the wounded and sick in armed forces in the field) stipulates in Article 15 that parties to the conflict “shall, without delay, take all possible measures to search for and collect the wounded and sick.....*and to search for the dead and prevent their being despoiled*”. Article 17 of the same Geneva Convention elaborates the legal obligation imposed upon contracting States:

*“Parties to the conflict shall ensure that burial or cremation of the dead, carried out individually as far as circumstances permit, is preceded by a careful examination, if possible by a medical examination, of the bodies, with a view to confirming death, establishing identity and enabling a report to be made”*

The Article further provides:

*“They (states) shall further ensure that the dead are honorably interred, if possible according to the rites of the religion to which they belonged, that their graves are respected, grouped if possible according to the nationality of the deceased, properly maintained and marked so that they may always be found”.*

Whilst it is clear that the primary responsibility for the management of human remains lies with the belligerent parties to a conflict, the United Nations has on occasion provided direct support and assistance to the parties. The UN Mission in Kosovo (UNMIK), for example, established the Victim Recovery and Identification Commission, pursuant to its Security Council mandate. The Commission was charged, amongst others, with the following tasks:

- o the recovery, identification and disposition of mortal remains;
- o the collection and maintenance of data relating to the above;
- o the provision of assistance to competent judicial authorities in addressing missing persons issues.

UNMEE was not mandated to establish such a commission. Neither had an institution been set up when the war started, as stipulated in the Geneva Conventions, to address the issue of the missing and war dead. The precise number of soldiers who died in this war has never been revealed, nor their families notified.

In November 2000, when UNMEE’s Force Commander arrived in the mission area, the two warring parties were still entrenched in their final combat positions. An initial assessment of the front lines revealed the principle locations of unburied war dead. One lay close to the township of Adi Quala in southern central Eritrea, where thousands of soldiers are believed to have died when Ethiopian troops attempted to take Eritrean positions on

## Human remains management

top of a steep hill. Another was located in the Eastern strip of Eritrea that runs parallel to the Red Sea coast, where the warring parties faced each other for several months, separated only by a 150m stretch of no-man's land. The fighting at this point is said to have resembled World War I trench warfare, and when UNMEE arrived the no-man's land was still littered with human remains, unexploded ordinance and war debris. In December 2000 NMEE was obliged to remove 23 bodies from the road through the no-man's land and these were handed over to military authorities.

The Force Commander raised the issue of these human remains with the military authorities, and the Ethiopian army collected the remains of some 274 combatants when they withdrew from the former frontline in Sector East. However a subsequent air patrol counted some 300-400 bodies still lying in no-man's land.

Following the establishment on the ground of the Temporary Security Zone in April 2001 (a buffer zone of 25km separating the two military forces), UNMEE made fresh attempts to address the issue of the war dead. These attempts were spearheaded through the Military Coordination Commission (MCC), which was established under the auspices of the Algiers Peace Agreements and chaired by UNMEE's Force Commander. The MCC brings together the military leaders of Ethiopia and Eritrea and is charged with the responsibility of discussing military issues arising in the aftermath of the conflict. Several discussions were held on the issue of the war dead, during which the Force Commander encouraged the parties to recognize their moral and legal obligations, and the parties agreed on certain procedures regarding the recovery and identification of mortal remains and the establishment of a joint commission to oversee recovery operations. The text outlining these procedures was finally agreed at the ninth MCC in October 2001. The parties committed themselves to the principles laid down in the Law of Armed Conflict, and agreed to set up Sectoral Units with responsibilities which included:

- o the collection of all mortal remains and personal effects pertaining to them, located above the ground in the TSZ;
- o initial identification of mortal remains (assisted by UNMEE and OAU);
- o moving, holding and safeguarding of the mortal remains identified as belonging to the other party as well as the mortal remains identified as of unknown origin
- o preparing the mortal remains for repatriation, as decided by the relevant sector Joint Identification Team.

However, the agreement of the parties on the above did not result in action on the ground. UNMEE continued to raise the issue at MCCs, and to urge the two governments to recover the mortal remains of their soldiers. As recently as March 2002, UNMEE's head of mission, exasperated by the failure by the parties to collect their dead, issued an urgent plea for the parties to carry out operations necessary for the removal of these remains, saying that he did not understand why it was so difficult for them to do so.

While UNMEE's efforts were focused on trying to motivate and assist the responsible parties with recover and identification of mortal remains, families on both sides were still desperately waiting for information on the fate of their loved ones. Ethiopia has not yet released the official number of casualties, and although the military authorities notified some relatives of the deceased, the process was not completed. The Eritrean President announced on Martyr's Day, 19 June 2001, that 19,000 Eritrean soldiers were killed, although other sources within the country believe the figure to be substantially higher. Families have not been notified. .

### Problems faced by UNMEE and recommendations

***Reluctance of the respective governments to confront the issue:*** Management of human remains and the provision of information on the war dead can become sensitive political issues, issues that some governments are unable or unwilling to confront. This is especially true where the objectives of a conflict were in any way unclear, or where the belligerent parties have not been transparent in communicating to their populations the human cost. This seems to have been the case in Ethiopia and Eritrea. While not excusable, this might explain one reason why the task of returning to battlefields and removing, identifying and burying bodies of dead soldiers might not have been undertaken.

Where no provisions have been set in place at the start of a conflict, *pressure should be brought to bear upon the governments to face the issue of mortal remains immediately after the war*, whether or not the issue evokes political passions within a given context. The UN family and other actors within the international community should make it clear to the governments concerned that local political apprehensions should not override their responsibilities to their people or their obligations under international humanitarian law.

## Human remains management

**Lack of a questioning population:** Where governments involved in armed hostilities are reluctant or unwilling to provide information on the war dead for political reasons, pressure often comes from the population itself, anxious about the fate of their loved ones. There was no such response in the UNMEE mission area. There is a strong tradition of unity, and loyalty to the government in Eritrea. Pressure groups of private citizens are rare and the word of the government not openly questioned; the lack of public demand for accountability has allowed the governments to ignore their international legal obligations.

**Lack of a pro-active civil society:** The presence of an organized and active civil society can provide a suitable forum through which to channel citizens' grievances and demands. A plethora of interest groups will often emerge after a conflict, in response to a variety of post-conflict needs and demands. These could include a data-gathering group to provide information on the missing, or a group of widows or relatives of missing soldiers who come together for solidarity purposes or to provide counseling services to victim families. This did not happen in Ethiopia and Eritrea. There was no concerted effort to have the issue of the missing addressed, even when reports appeared in the media that the remains of soldiers were still visible in some areas.

This underscores *the need for international actors to provide technical assistance to strengthen the capacity of civil society in post-conflict environments*, especially those concerned with the protection and promotion of human rights and international humanitarian law.

**Restrictions of UNMEE's mandate:** Had the subject of human remains management been included in UNMEE's mandate as it was in UNMIK's, the mission would have been in position to do more than offer assistance and hope that the parties would take the initiative. UNMEE could have engaged experts willing to undertake some of the specialized tasks specific to this particular post-conflict situation, such as the identification of human remains which have been exposed to the elements for long periods, the recovery of human remains from areas which are heavily mined, and the collection and maintenance of data on the war dead.

**Late engagement with governments and other actors:** Raising the issue of the management of human remains and information on the war dead should be an integral part of conflict resolution efforts undertaken by the UN family and other members of the international community. More often than not, peace initiatives focus exclusively on ceasefires and ignore some of the human consequences of warfare. For example, although the Geneva Conventions call for the creation of specialized commissions to provide information on the missing and the dead, parties to conflicts routinely ignore this provision and the international community only succeeds in raising the issue after hostilities have subsided.

### Conclusion

- ❑ The collaboration of the parties to a conflict is crucial for the success of any post-conflict initiative. What becomes clear from UNMEE's experience in Ethiopia and Eritrea is that there are many reasons why parties to a conflict may not face up to their obligations under human rights and humanitarian law.
- ❑ The issue of human remains management must be tackled at the start of the conflict. Governments must be encouraged to set up an institution to manage information on the war dead, as recommended in the Geneva Conventions. Technical assistance should be offered to help them do this.
- ❑ The question of management of human remains and information on the war dead should be raised with the belligerent parties as soon as the international community becomes involved in ceasefire/cessation of hostilities/conflict resolution negotiations, to ensure that the issue is highlighted, and included in peace agreements.
- ❑ Technical and human resource assistance should be offered to the affected nations in order to strengthen the capacity of their own institutions to recover and identify human remains of the war dead, and maintain data records.
- ❑ Technical assistance should also be offered to advise and strengthen the capacity of civil society institutions, and encourage/empower citizens to play an active role.
- ❑ The UN Security Council should be encouraged to include clauses relating to the management of human remains and information on the war dead, as appropriate, within the mandates of peacekeeping operations.

## Human remains management

- ❑ Where there is no direct UN involvement, other concerned agencies, such as the ICRC, should be encouraged take the lead.

All in all, the analysis of issues raised by this and other conflicts must lead to a pooling of initiatives, expertise and resources between all concerned parties, in order to come up with appropriate and timely strategies to confront the issue of human remains management and the provision of information on the war dead.

### 3.2.5 By Ms Shari Eppel, Director, Matabeleland, AMANI TRUST (Zimbabwe)

#### HEALING THE DEAD TO TRANSFORM THE LIVING: EXHUMATION AND REBURIAL IN ZIMBABWE

**You know Zimbabwe was liberated by an armed struggle. Well, the people buried in the wrong places have also had to struggle - they also struggle from down there where they lie until they are liberated. So today Edwell is brought to be witnessed by others, like all people who die. We are all very thankful for this. It was a pity to see a human being hidden underneath a rock where his relatives could not see him. [Acting Chief Madlela, reburial ceremony, Matabeleland 1999]**

#### 1. Introduction and Overview

AMANI Trust, Matabeleland, is a small, non governmental organisation that is concerned with the rehabilitation of survivors of torture and organised violence (TOV) in the western half of Zimbabwe. We have come to the realisation that exhumations are a vital aspect of human rights work via a very different route to that of most others at this conference. We are not lawyers, forensic anthropologists, academics or people who work for legal or justice oriented foundations. Our team of eight field officers consists of *mental health workers* - a clinical psychologist, a psychotherapist, and primary health care workers with systemic counselling training. The remote, rural communities in which we work have been our greatest guides in the work that we do - they have defined for us the impact of torture on their lives, and have indicated what needs to be done if healing is to take place, in accordance with their own value systems and understanding of the world. They have shared with us the ways in which the massacres of the past continue to have tragic and very real consequences for individuals, families and communities as a whole. We came to communities expecting to offer counselling services in keeping with the western expectation that Post Traumatic Stress Disorder, or mixed anxiety/depression would be the most important and prevalent disorders in tortured communities. While symptoms representing these "conditions" could undoubtedly be found if sought AMANI Trust conducted an epidemiological survey of 21 primary health care out patient departments in one rural district in 1998; approximately 49% of all attending clients on any day screened positively for mixed anxiety/depression symptoms to a level that in a western setting would be assumed to indicate a need for intervention; 20% of all attending clients had considered suicide within the last two weeks. Furthermore, none of these clients were in the clinics with the hope of receiving psychological help, but were there for somatic disorders such as sleeplessness, aches and pains, etc. There is little understanding of the somatisation of psychological distress in the Zimbabwean health setting, and primary health care workers mostly do not have the skills to counsel., **we realised very quickly that survivors themselves do not define the worst consequences of violence in terms that coincide with standard psychological diagnostic tools.**

We have realized that the impact of the subversion of community values as a result of violence, is felt differently in cultures where individuals see themselves primarily as members of communities, rather than as discreet individuals in the western sense. The corruption of community values and ways of being is what most offends and disturbs our survivors, and it is this loss that is still being mourned years later. Destroying the cohesive functioning of communities has been a deliberate, strategic policy by the governments of many African countries, including Zimbabwe - a weak community is a politically compliant one. The legacy of this destruction is still felt today, as there has been no systematic and multifaceted attempt to rebuild in a holistic way, that which was deliberately destroyed. Apathy, depression and an unwillingness to assume leadership roles are not untypical in our communities. The chances of promoting democratic participation and of people standing up for their human rights in the future are seriously diminished in such communities. The task of speaking out is made harder for survivors when impunity exists. In Zimbabwe, perpetrators of violence are still in powerful positions, and survivors remain silenced and afraid. The overwhelming residues of unprocessed pain, anger, suspicion, and grief remain in the community forum as a negative, silent weight, a dark, even humiliating secret that undermines shared community activities, causing finger pointing and division.

At the same time, patterns of resilience and support need to be recognized and facilitated, and the incredible courage and power of victims to carry on and to find the impulse to try to rebuild, even in settings of total loss, is a central part of the perceptive healer's resource base. It is also of primary importance to work on the problems that the survivors themselves identify, as this is where existing resilience and energy will be most likely to become apparent.

**This brings me, then, to another major difference between our exhumation programme and most other programmes that aim at identifying the dead - we exhume with the primary intention of facilitating community healing processes. In fact, this is the only palpable reason we have for exhuming in a country that currently offers impunity to perpetrators: at the moment there is no forensic potential for evidence from exhumations.**

In our region, most fundamental is the problem of aggrieved spirits and the presence of the murdered dead in unacceptable graves: the primary request to AMANI was for an intervention in this regard. The significance of ancestral spirits in Ndebele belief systems is of central importance: it is the spirits of the dead that play essential roles in the lives of every family, guiding and nurturing them. In order for an ancestral spirit to fulfill its true task in protecting the family, it needs an honourable funeral, and even more importantly, another traditional ritual known as "umbuyiso". A spirit that has not been honoured becomes an angry and restless spirit, bringing bad luck to the family and the community at large. AMANI has been told of a wide variety of current problems that are linked to spirits of the dead, including bad behaviour in children, failure to marry, illness, drought, floods, crop failure, failure of development initiatives.

To give one example - a family whose daughter was massacred, was left to raise her two very small male children. These two sons, who in 1998 were aged nineteen and twenty, were said to be delinquent, and one was in jail at that time. The family observes that:

since they were tiny, the two children have been subject to dreaming about their mother. Even as young boys, they refused to do household chores, but would go and sit on the hillside and cry, looking for their mother's spirit. When she possesses them she is angry and makes them behave abnormally, to remind us she is wandering and not at peace. Our daughter needs to be brought home safely, but we do not own the grave, and have no say over how this should happen. ... she is not resting - she is in the wilderness. She is wandering and was never properly brought home to watch over her children and to play a role in keeping them safe as they grew up."

The son of another murder victim had the following comment to make about his father's remains lying unmourned in a mass grave: " Luck eludes our family in an unbelievable way so that girls and boys lose marriages or even fail to get married..."

**It was in the pursuit of a solution to the problem of the restless dead that AMANI became involved in exhumations, as a necessary step to decent funerals and appropriate cultural rituals. Our work is not about the exhumation of hundreds or thousands of skeletons in a short space of time. We are more concerned in exhuming fewer graves and working closely with the same families and communities over several years, in order to gain a more thorough understanding of how the process of exhumations and reburials can transform the lives of families and help to restore the social fabric that has been devastated by two consecutive civil wars in our region.** We have been working with the same communities in five adjacent villages for four years now, trying to gain through consecutive qualitative community, family and individual meetings, a more complete sense of the community's perception of the need to exhume, and the consequences of reburial, from cultural, psychological, individual and group perspectives.

**We believe very strongly, on the basis of the work we have done to date, that emotional support to families is an essential component when exhumations are in progress, as is the need for extensive consultation with families to ensure all is done in a way that heals rather than creating further harm. Any more widespread programme we develop in the future will certainly continue to advocate as essential, the profound emotional and cultural significance of reburial, and will have to allow for community support in this regard.**

## 2. The Graves of Matabeleland: Gukurahundi

We can still be eliminated at any time.... This wound is huge and deep... The liberation war was painful, but it had a purpose, it was planned, face-to-face. The war that followed was much worse. It was fearful, unforgettable and unacknowledged.

In 1980, Zimbabwe attained its Independence after 90 years of colonial rule under Britain. This Independence was hard won, and resulted from a war of liberation that lasted throughout the 1960s and 1970s. There was great suffering in rural communities during these times. In Matabeleland, which is home to the Ndebele-speakers who

## Human remains management

make up 20% of Zimbabwe's population, peace was short-lived. Traditionally, this region was the strong-hold of ZAPU, the smaller of the two parties that fought for Independence. By mid 1982, there was what was called a "dissident problem" in Matabeleland. Prime Minister Mugabe unleashed the specially trained 5 Brigade on Matabeleland, in order to destroy support for ZAPU. He called this brigade "**Gukurahundi**", which **means the storm that washes away the rubbish left over from the last harvest, before the spring rains**. In the space of a few weeks, thousands of innocent civilians had been massacred, their bodies dumped in mass graves or down mine shafts or left to rot in the sun and be scavenged by animals. Thousands of others had been tortured and had their entire homesteads destroyed. The killings continued off and on until 1987. The families of those who suffered such a fate are still deeply pained by the memories. Their murdered dead are not at peace and continue to cause problems for the living.

### 3. The need for "Umbuyiso"

At times some things do not work well. When we try and find out, it is said my father's spirit is angry over the way he died and the fact that his spirit has remained in the wilderness for so long.

Apart from the inappropriately disposed of dead, a further enormous problem in Matabeleland is that of disappearances. A recent survey in Matabeleland reveals that as many as one in four survivors has a disappeared person in the family, the majority of these relating to the 1980s. In any culture, the lack of a body to mourn causes serious psychological distress to relatives. As one Argentinean commentator describes it, the disappeared are denied a place among the living and also denied a place among the dead. All are left to languish in a kind of limbo, and relatives are left with many heart breaking questions in their minds - is the person really dead? If so, at what point did s/he die? Did s/he suffer a great deal first? Where is the body now? Most of all, people are unclear as to what to do next. How does one mourn when there is no body to weep over?

Approximately one year after the initial funeral, a second extremely important ritual takes place in Ndebele culture, known as "umbuyiso", during which the spirit of the dead is officially brought home and inaugurated as an ancestor. All adults have to have "umbuyiso" performed, and the ceremony has to take place during late winter, before the first buds are on the trees. Only the most important family elders take part in this ritual. At nightfall, the spirit of the deceased is conveyed via a goat back to the homestead. At the threshold of the deceased's homestead, the spirit goes through a ritual of being reintroduced to the living, and of being welcomed as an ancestor. This process brings the person's soul out of the wilderness and into the home to rest, and to watch over the living. If this ceremony does not take place, the person does not really become an ancestor, and it *cannot* take place if the prior funeral has not been conducted in the right way. Sadly, it is almost invariably the case that proper funeral rites were not conducted for the dead, particularly during the 1980s violence, and also at times during the 1970s violence.

### 4. Lack of closure - and the need for public witnessing to ensure this

It is clear that my father's spirit was hovering angrily. He had never been laid to rest, but now he has finally been laid to rest. Thus he is now happy and has immediately showered me with blessings.

It is no coincidence that politically motivated massacres all too often involve deliberate desecration of cultural needs surrounding death, making the honourable public recognition of these deaths almost impossible. 5 Brigade made a point of forbidding mourning, and on occasions forced people to take part in grossly disrespectful behaviour, such as dancing and singing on the shallow graves of the newly murdered. **It is our experience that even where the burial sites of the murdered are known, the lack of culturally appropriate funerals has left people in a similar state of suspended mourning as in the case of disappearances.** While people have certainty about their dead, such certainty at times offers small consolation, tied up as it is with shameful memories of how survivors may have been forced to take part in degrading practices at the time of murder. In the quote following, the grandchild of a murder victim speaks at his grandfather's reburial ceremony and contrasts the terrible experience of his grandfather's first burial, twenty years previously, with his reburial in 1999.

I am also personally grateful [for the exhumation] because I participated in the first burial of my grandfather Ben Khumalo. At that time I was a child doing grade six. I was among those forced by the Rhodesian soldiers to remove my grandfather from the dip tank and bury him, still in handcuffs, in that other shallow grave. This was a very painful experience for a young child.... I have always wondered what would be the end result of this, but now this reburial has come as a great relief to me. I can tell you this has been truly healing, it has helped to heal my wounds, which I have had since a young boy. Thank you.

## Human remains management

In almost any cultural setting it is easy to understand how such atrocious graves allow no peace to the families of the deceased, nor to the spirits of the murdered. For the entire community, the past cannot become the past - the presence of graves in school grounds, on pathways, in fields where crops are supposed to be growing, are continual reminders of atrocities which have not been redressed.

In our communities, the essential collection of pre-mortem data takes place over many months, and provides the catalyst for informal family "testimony therapy" sessions. The process of sensitively asking about the complete history and habits of the deceased, over consecutive sessions and from many members of the family, is perceived by AMANI to provide the opening for a transformational experience, of giving voice to the unspoken and reclaiming the past and the dead as an honourable person - simultaneously empowering and healing. Families are encouraged to recall in every detail the lives and events involving the deceased, and may never have had the opportunity to do this since the death. The actual circumstances of the killings are very important, as the positioning of people in the grave or who was shot where, may be accurately remembered by eye-witnesses, if only they are encouraged to speak up.

### **Pitfalls of exhumation - the need for support**

Graves will reveal the truth - and the truth may not always be what we wish it to be, or believe with certainty that it will be. Any tool that can do great good - like exhumation - can also potentially harm: this must be acknowledged. In one instance, a grave revealed *burnt bones* and took away the expectation, built over many months, that individual bodies would be returned for separate reburials. Other unexpected outcomes when exhuming can be:

*An empty grave* the deceased becomes in an instant no longer just dead, but disappeared, with all the contingent pain for the family.

*Fewer or more individuals than expected* – one mass grave revealed one more than we had known of, which created the need to inquire more, and then search for relatives; we did in fact identify the extra person. If there are fewer individuals, this creates for one family at least, the problem of accepting a disappearance, as in the empty grave case.

*Pregnant remains* - the loss now becomes at short notice, not just of a daughter, but of a grandchild too, with all the horror at the thought of possible rape followed by murder. Skeletal evidence can reveal that a woman known to have been -or not been - pregnant at time of detention, has given birth prior to death.

*Skeletal evidence of great suffering prior to death* - multiple fractures and dislocations can give painful proof of events before death, including half healed fractures which indicate suffering over weeks or months.

Witnessing the bones forces families to accept the reality of death - they may think they are prepared for this, but discover they are not.

**None of the above possibilities means that exhumations should not be done, but that they should be done with due caution and substantial emotional support for survivor families. The potential good resulting from knowing the truth, breaking the silence, being able to mourn publicly, carry out traditional rituals to appease the dead, and at least begin a process towards closure, remain of paramount significance and benefit to the vast majority of families. But families should be forewarned nonetheless of the uncertainties, and should have the continuous presence and counselling support of people properly trained to help the bereaved, throughout the exhumation process. AMANI would argue that to exhume in the absence of emotional support for families is irresponsible.**

### 3.2.6 By Prof Jehuda Hiss MD, Director, The National Center of Forensic Medicine Ministry of Health (Israel)

#### The medicolegal investigation of suicidal terrorism

The "El Aqsah" Intifada began in Jerusalem in October 2000, where clashes between Israeli security forces and Palestinian demonstrators in the Temple Mount developed into a full blown riot. Since then, and up to May 2002, A total of 319 victims and perpetrators from 144 attacks (229 victims and 90 perpetrators) have been examined at the National Centre of Forensic Medicine (The Centre). Some victims were not submitted to the Center due to religious reasons. In Israel, this is the only forensic institution in charge of tanatological investigations, located in Tel Aviv, which carries out all medicolegal examinations and identifications of sudden unexpected deaths.

The purpose of the forensic investigation of mass casualty incidents is manifold; establishing the minimal number of individuals involved, rapid identification of the victims and perpetrators, recovering bullets and shrapnel, and elucidating the "modus operandi". This undertaking is accomplished by the medicolegal inspection of victims and perpetrators, together with data collected at the scene of the event, and examined in the various "Division of Identification and Forensic Science" laboratories of the Israel Police (MAZAP).

Close collaboration with medical centers attending the wounded victims of the attack is fundamental. The National Centre of Forensic Medicine not only helps identifying the victims and establishing the true number of casualties but, provides samples of body fluids and tissue from the perpetrators, to be examined as possible sources of contagion to the wounded victims.

The present review describes the mass disaster management procedures and investigation at the Centre where forensic pathologists and biologists from the Ministry of Health together with various agencies' experts (Police, Israel Defense Forces, and Intelligence) collaborate in the identification endeavor.

The mass casualty established procedure commences with the opening of an Information Center (IC) in a governmental working area adjacent to the Centre in order to facilitate the centralization and flow of information. The IC is activated by a special unit of the Division of Identification and Forensic Science of the Israel Police and is manned by local police investigators, social workers and psychologists. The main task of the IC is to obtain and catalogue ante-mortem data from individuals searching for missing persons and to exchange the information with the forensic teams that examine the cadavers. The relevant information regarding physiognomic characteristics, medical data, clothing and other identifying features of the missing person are recorded in an "ante-mortem" form while the same information regarding the cadavers is noted in a "post-mortem" form. During data processing the bereaved are provided with psychological assistance by municipality health services.

The tanatological examination includes external description of the bodies as well as evaluation of various injuries sustained and of individualizing characteristics, photography of the clothing and personal belongings, and sampling of tissues. Furthermore, radiography, dental examination and a ten-print card of each cadaver are recorded. All surgical intervention signs, any other acquired or congenital pathology, cutaneous nevi, tattoos and body piercing, especially relevant to identification are documented. When possible, the facial tissues are restored in order to spare the families' feelings during the viewing of the cadaver.

After all complete and partially complete bodies have been processed, the forensic teams address dozens and sometimes hundreds of body parts. The forensic pathologists and anthropologist classify all present parts, describe, and photograph them and finally take tissue samples from relevant body fragments for DNA analysis. Anatomical reconstruction of the shattered bodies is accomplished through physical matching of the torn parts. Those segments that can't be approximated by gross anatomical morphology are analyzed at the tissue level.

The communication with the various trauma centers that are treating the wounded from the same attack is of paramount importance. All admitted amputees have to be reported to the Information Centre in order to avoid overestimation of fatalities based on body fragments.

## Human remains management

In cases of suicidal bombings where tissue fragments from the perpetrator are blown in a centrifugal fashion towards the wounded, blood (when available) or muscle samples of the bomber are taken for hepatitis B, C and HIV testing.

The comparison of ante-mortem and post-mortem data for positive identification is performed by the relevant experts and ratified by a senior forensic pathologist, following a rabbinical assent. Positive identification is established through at least one of the commonly recognized techniques, i.e. fingerprints, dental, radiographic, medical or genetical methods, or by visual recognition of relatively well preserved facial morphology.

The ten-print card of each victim and the prints of disassociated digits are submitted to a fingerprint comparison expert from the "Automatic Fingerprint Identification System" (AFIS) laboratory for identification. The police computerized system contains the fingerprints of all individuals with a criminal record, and of police and security personnel. In addition since the year 2000, the Israeli "AFIS" has begun storing palm prints along the ten-prints augmenting the database matching possibilities. The Israel Defense Force (IDF) also has a large data bank of fingerprints of enrolled personnel since 1973. Latent fingerprints can also be obtained from personal effects of individuals presumed to be dead.

Ante-mortem dental information can be obtained from the data bank of the IDF which contains panoramic radiographs, dental records and in some instances "Polaroid" photographs of the dentition of all enrolled personnel. Dental clinics all over the country collaborate readily providing data from their patients. Radiographs of presumed victims are obtained either from medical centres or from the individual's relatives. By law, medical records have to be stored in medical facilities for seven years at least.

Muscle samples from the cadavers and body parts, and blood or buccal cells from next of kin of the missing persons are collected for DNA profile comparison. In cases when no adequate family members can be located, personal belongings (comb, hairbrush, shaving razor, etc.) may provide the ante-mortem source for the DNA of the missing person. Moreover, dry bloodstains can be obtained from the IDF data bank in cases of military personnel casualties. DNA is extracted using a modified short method.

In forensic sciences, recognition of the deceased by family members or friends falls within the realm of presumptive identification. Under Jewish traditional Law (the Halacha) visual identification in itself is acceptable provided that the face or a unique external body feature is completely or partially preserved in such a way as to comply with Halacha laws.

In multi-victim situations, such as the ones reported here, visual recognition shouldn't play an important role in the resolution of the identification process, nevertheless 44.7% of the cadavers of the Palestinian riots were visually identified. Based on information collected at the scene, such as documents and personal effects, and post-mortem data recorded at the Centre contrasted to details from ante-mortem records, the visual recognition process is often the confirmation of the probable identity of the victim by the next of kin.

The advances in molecular biology in the last years have resulted in developing a faster and more accurate DNA technology. Nowadays more cases are resolved by DNA profile comparison of the victim's next of kin than in the past.

In suicidal bombings, the close proximity of the bomber or the victims to the epicentre of the explosion renders the cadaver extremely fragmented. The great majority of victims examined perished as a result of explosive injuries from bombings. These attacks were carried out either by suicidal bombers carrying the device strapped to their bodies, or by bombs left in public places. The detonations were not always controlled directly by the bomber, in some instances the mechanism was triggered through a cellular phone distant from the scene of the bombing. Remnants of the explosive device are blown in centrifugal fashion and sometimes un-detonated parts of the contrivance are found within the body cavities of the victims.

A less common modality, which resulted in fewer victims, consists of automatic gunshot fire on passing vehicles, either while the shooters drive by, or by ambush. In some cases, the shooting took place in a crowded area by either a single or two gunmen on foot. Finally, vehicular terrorism took the lives of seven pedestrians, when a Palestinian bus driver run over a group of soldiers in a main road.

## Human remains management

Body fluids (when available) and tissue samples are taken routinely from all perpetrators. Toxicology tests conducted have shown negative results for opiates, cannabinoids, alkaloids (cocaine), barbiturates, amphetamines and alcohol. Tests (serology and molecular biology) for viral infectious agents of the samples examined resulted in some positive hepatitis B cases, although these results require further validation since the tests were conducted in most cases on muscle samples and post mortem blood and not on as required in the routine.

### 3.2.7 By Dr Fernando Iregui Camelo, Technical Secretary, Comisión de Búsqueda de Personas Desaparecidas, Defensoría del Pueblo (Colombia)

#### PROCESS AND PROCEDURES TO IDENTIFY HUMAN REMAINS AND TO SOLVE MISSING PEOPLE CASES IN COLOMBIA

The people's defender doesn't participate in a direct way in the investigations, but as a control organism in charge of promoting the respect of the human rights in Colombia. As consequence of this, it doesn't have specialists neither their functions contemplate procedures related with forensic sciences for the search or identification of human remains.

The information contained in this note corresponds to a basic ( indirect ) knowledge of the procedures the entities in charge of searching and identifying human remains are using in Colombia (1).

In our country there are two entities that should fulfill this mission: The Technical Body of Investigation of the General Fiscally (CTI) and The Institute of Legal Medicine. The CTI has a national section of identification which is the competent one to assist the accusations about people's disappearance.

The CTI has six specialized laboratories in the identification of human remains and they it plows located in the cities of Medellin, Cali, Barranquilla, Bucaramanga and Pereira, and in each one of those an interdisciplinary team of doctors, anthropologists, odontologists and morphologists that develop exhumation activities and identification of these remains.

It is necessary to keep in mind that the context of the project "The missing" is exactly the problem of the missing persons as consequence of our armed internal conflict and the internal violence that suffers our country. Unfortunately in Colombia these circumstances are manifested in a sharp way and they hinder vastly, the works that should develop the mentioned entities.

In many cases although exists information or evidence about the place where the human remains are, it is not possible to arrive until there because of the presence of illegal armed groups, guerrillas or paramilitaries that represent a threat for the technicians of the CTI.

For the above-mentioned in necessary to request support and protection to our military forces, so that for their intermission it is possible to assure the work area, the detailed revision of the remains and of the area in which will develop the diligence, this for the possibility of existence of mined fields.

It is also necessary to evaluate variables that impact in the work of the group of technicians, such as the climate, the geographical location and the land type among others. The general process is developed in three basic stages:

#### 1. PRELIMINARY INVESTIGATION

In this stage of preliminary investigation it is looked for to determine the facts that have surrounded the person's disappearance. The sources of information come mainly from the relatives with who is filled a complete survey in writing that contains information on the social registration ( Victim's personality, friends, social activities), biological register (physical Characteristics, morphological and particular signs) and also information on the particular conditions in the moment of the disappearance.

It is appealed to this investigation stage when gathering information coming from other Sources like the social security office, clinical batch and dental registrations among others. Besides the above-mentioned, dates it plows picked up about necropsies protocols, rising records and disappearance formats to carry out an discards procedures, which is to say to confrontation process against cases that exist already and are also known by the institute of legal medicine.

#### 2. WORK OF FIELD

This is the second stage of the identification process. Eleven the technical team arrives to the place where the human remains plows supposed to be, the area to dig is defined, the digging is it donates slowly in layers of 5 centimeters, pedestals plows elaborated around the bodies, then, as the remains go appearing, they are cleaned using a brush, for not to alter or to erase the evidences. Then it is taken a registration in this place that can be of three classes:

- Written registrations: they Consist on making a Field diary where the activities of the team of technicians are registered as well as the discoveries that go taking place.

## Human remains management

- Topographical registrations: it Consists on the rising of plans of the place where the diligence is carried out, the location of the remains, etc.
- Topographical and Filmic registration: pictures of the place where they were the remains are taken, their location, orientation and a filmic registration is also left.

After this work that dog take days, take place the rising of the found remains and the transport from the same ones to laboratories where the studies of the marries it plows carried out. It is necessary to keep in mind that in some events it is not possible to carry out this process in a rigorous way because the circumstances of security.

### 3. WORK OF LABORATORY

In the laboratory is carried out the reconstruction of the “bone biography” that has two components: One general that it is the one conformed by the analysis denominated “basic four” that is an analysis of determination of the age, sex, race and size from the person to which the found remains belong. Then it goes to the individual reconstruction, whose objective is to determines the morphological features, cause, way and mechanism of the death, facial and dentistry analysis, facial and plastic reconstruction.

The second stage of the work in laboratory is the comparison consistent in the genetic analysis (D.N.A) and finally, a report is elaborated. It contains and it gathers the carried out activities as well as the conclusions about the identification or the causes of the death.

The division of criminology of the CTI also has a program called “EVIDENTIX” that consists in a database that contains the missing persons information and of the dead bodies without identifying (N.N.'s: No Names). Basically this program carries out in an automatic way a confrontation and discard processes between the information of people reported as missing and the information about the N.N.'s. This program throws information on the N.N.'s that can correspond to people denounced as missing.

Inside this process a special treatment is given to the stage of the interview that is carried out with the relatives of the one that they have reported as disappeared. In the first place it is necessary to offer security and trust to the relative to encourage him to gives all the possible information about the missing person. In Colombia a high level of accented distrust exists toward certain institutions and the relatives of the missing people many times prefer to hide some data that could commit the tranquility or security of them or the victims ones. It can be seen when the victim is a reinserted one, that is to say, the person who at some time belonged to the guerrilla and him/her has been welcomed to the programs of the government to come back to the civil regular life. This point can be of special importance in the investigation but many times the person that makes the accusation prefers to omit this fact. For that reason it is important to offer security to the informer.

Another entity that participates in the investigations about missing people is the Institute of Legal Medicine which has within the Net for the identification of dead bodies and missing people's search; It takes charge of carrying out the forensic scientific procedures of identification. The institute has several procedures to develop the investigations among which the following three stand out:

1. Instructive to guide the recovery of remains and to make the study of cadavers, limbs of the body and bony remains buried or uncovered in a not legal way. This instructive this directed to forensic doctors specifically.

For the forensic study of these dead bodies, body limbs or remains bony humans it is necessary to make in first instance the analysis of the available information with the following points related:

- a. Process type
- b. Concept requested by the authority
- c. Circumstances of the death
- d. Victim's supposed identity
- e. Location and state of the body or of the remains
- f. Precise forensic studies

In some cases the discovery and is carried out by particular people, and because of that, the judicial inspection is carried out after the recovery of the body or its remains. The place of the burial is known as the one of the “scene” and it requires an appropriate technical handling to gathering of the whole evidence that can be useful for the investigation. Just as it was already said, the conditions of the public order impede in many cases the necessary technical unfolding for an appropriate handling of the “scene”, and it is a motivate for which some important evidences that could lead to the solution of the case get lost.

## Human remains management

In the burial diligences the support of specialists in diverse areas is required: Anthropology, dentistry, dactyloscopy, biology, genetic and entomology. The problem in Colombia is the existence of a great quantity of cases and not enough qualified personal in those areas, which should participate in the investigation.

There are procedures in the place of the inspection which follow some of the recommendations of the manual of investigations and prevent the exercise of extra legal practices, arbitrary and summaries: Handling of bony remains, for United Nations, 1995; To this effect to report should be elaborated with the description of the procedures carried out during the diligence, to lift a general drawing of the place of the scene, to define the area, to take pictures, to classify the tomb, etc. If it is an individual tomb or a reduced place, then a single person will be in charge of the excavation and removal of the body or the remains.

If it is a wide space then, the work will be done for more than one, according to the requirement. During the earth removal it should be strained to recover objects or small fragments that can constitute evidence. The study of the bodies or human remains correspond to the forensic who is the one that defines the procedures have to be followed, and integrates the information coming form the technicians of the different areas that participate in the diligence. The forensic surgeon makes the analysis, takes charge of looking after the handling and the preservation of the physical evidence and determines the form and the cause of the death.

The procedures vary according to the state of the bodies, if these are in state of rot (decomposition), mummified, roasted or if these remains are just human skeletons. The concepts about causes and forms of death are competition of the forensic surgeon. In all the cases it is recommended to take samples for a later genetic analysis, procedure that includes the pursuit of instructions for the cleaning and preparation of those bony remains, which dog vary if the remains plows just the skeleton that there is been found in the surface of the land, or they plows remains in precarious conservation or buried to great depth or bodies with big masses of flesh.

Another aspect of the procedure is the taking of bony samples to determine the victim`s gender and age. For this task it is recommended at least to have the skull and the pelvis, with some other specific measures of the width of the femur.

In Colombia many comparative studies don't exist about the how to calculate the age in forensic contexts, however it has been appealed to the bony analysis to estimate the age. Aspects like the dental calcification, the develop, union and ossification of the vertebras and pelvis, are other approaches to determine the victim`s age.

2. Instructive for Oral autopsy. This is an analysis carried out by forensic experts in which all the information is consigned about hard and soft fabrics that conform the dental system and also the traumas that have suffered, as well as its morphology, aesthetics and operation. This instructive contains procedures to examine and to value the state of the dental system, the form of making the gathering of samples, opening of the oral cavity, cleaning of these dental structures, elaboration of reports and care of the evidence. This instructive also contains a glossary of useful concepts for the realization of oral exams, dental model and how to develop the report.
3. Instructive to fulfill the fingerprints reports. In accordance with the institute of legal medicine is through the fingerprints that the biggest percentage of identification of cadavers N.N is achieved. This document contains the correct procedure to make the taking of digital impressions, as it is a stiff cadaver, or one with wrinkles in the skin, or one in rot or burnt state.

This document doesn`t have the pretension to be strict, neither exhaust all information about procedures to investigate missing people cases and identification of human remains. Is a general approximation to them only, from the perspective of a person doesn`t work in this field.

Thank you.

### Note

- (1) in consequence it is a general information that could have been modified or improved by such entities.

**3.2.8 By Mr Phil ya Nangoloh Sr, Executive Director, National Society for Human Rights (Namibia)**

**NAMIBIA:**

**PROCESS OF REFLECTION ON THE TRAGEDY OF MISSING PERSONS AS A RESULT OF ARMED CONFLICT OR INTERNAL VIOLENCE**

**I. Introduction**

NSHR is a private human rights monitoring and advocacy organization founded on December 1, 1989, to campaign against human rights violations and for the observance of the fundamental rights and freedoms as are enunciated in international human rights and humanitarian instruments adopted by the United Nations and similar international organizations and as ratified or acceded to by Namibia, and as are enshrined in the Namibian Constitution.

NSHR has the vision and mission of a world free of human rights violations and stopping human rights abuses in Namibia and the rest of the world, respectively.

The objectives of NSHR are: to secure due recognition and observance of all human rights and fundamental freedoms, especially those enshrined in the Independence Namibian Constitution and enumerated in numerous international human rights and humanitarian treaties and declarations adopted by the United Nations, its specialized agencies and similar international bodies; to promote respect for the rule of law and independence of the judiciary; to promote tolerance of, and respect for, cultural, political and social diversity of all; to promote accountability, accessibility and transparency of public administration; and to promote decentralized political power based on active public participation in governance.

The Organization's objectives are realized by means of the following activities: civic education programs, research, training, advocacy and lobbying, proactive monitoring, defense of victims of human rights abuses, reporting, para-legal services and humanitarian assistance.

NSHR is lawfully registered in terms of the Companies Act of 1973, as an association incorporated not for gain. The Organization maintains observer status in the African Commission on Human and Peoples' Rights of the Organization of African Unity and is in special consultative status with the Economic and Social Council of the United Nations.

**II. Competence of NSHR**

NSHR is active in monitoring compliance with international human rights and humanitarian instruments preventing gross violations of human rights, including arbitrary arrests and detention, enforced disappearance, summary executions, torture and prolonged detention without trial.

Because Namibia was involved before and after independence in armed conflict as defined in the Geneva Convention and the two Protocols additional thereto, NSHR gained considerable practical experience in the field of human rights advocacy and monitoring. These operations are both curative and preventive in nature.

Preventive actions include campaigning against human rights violations by speaking out and by implementing human rights advocacy and civic education programs. Whereas curative activities are characterized, *inter alia*, by rendering moral, legal and humanitarian assistance to victims of grave abuses of human rights, compiling periodic and special reports on the human rights, humanitarian and human security situation in the country. Curative actions also entail tracing and compiling lists of victims of summary executions, enforced disappearance, torture, and prolonged arbitrary detention.

Between 1989 and 1993 NSHR actively collaborated with the International Committee of the Red Cross (ICRC) on the yet unresolved issues of Namibia's scandalous detainee and 'missing' persons<sup>1/</sup>. Whereas from 1994 to 2002 NSHR has been seized with proactive implementation of monitoring and advocacy operations in the northwestern, northern and northeastern region of the country. These activities concentrated on a 'name and shame' campaign against human rights violations in the volatile Ohangwena, Kavango and Caprivi Regions of the country affected by a low-intensity armed conflict<sup>2/</sup>.

There are between 2 000<sup>3/</sup> and 4 000<sup>4/</sup> persons who have gone missing and are unaccounted for as a result of both armed conflict and internal political disturbances prior to, and after, Namibian independence.

### III. Recommendations

One of the biggest obstacles in the field of prevention and cure of the scourge of enforced disappearance constitutes ignorance about the essence of human rights on the part of direct and indirect victims of human rights abuses.

Therefore, conscientization and other civic education programs could go a long way in addressing the tragedy of people unaccounted for as a result of armed conflict or internal violence.

Experience has shown that a preventive and curative mechanism that can effectively be used to curb the scourge of enforced disappearances is a proactive monitoring and advocacy strategy, characterized by early warning relating to the general human rights, humanitarian and human security situation and the identification of both the potential victims and perpetrators of enforced disappearance as well as by an equally proactive post-conflict monitoring and advocacy strategy, characterized tracing of missing persons, reunification of families, seeking redress or reparations for victims and punishment of perpetrators.

Apart from appropriate funding, effective implementation of the proposed preventive and curative mechanism requires close bi-directional cooperation-- albeit on a strictly confidential basis---between the ICRC and civil society actors (CSAs) competent in the field. Nevertheless, the principle of strict neutrality on the part of the ICRC should be preserved at all costs as this gives the ICRC leverage and a degree of access to places of detention of potential victims of enforced disappearance.

Furthermore, there is an impression created that ICRC's operations are often than not shrouded in secrecy and or diplomacy. Since perpetrators often react only when they are exposed, then this secretive nature of ICRC operations may be counterproductive. It might be necessary to revisit this strategy.

#### **Windhoek, Namibia, June 27, 2002**

#### Notes

- (1) "NSHR, Media & Issue of 'Missing' Persons, *Press Clippings 1990-1998, National Society for Human Rights (NSHR)*, Windhoek, Namibia; "Critical Analysis: SWAPO's 'Book of the Dead'", National Society for Human Rights (NSHR), Windhoek, Namibia, September 17, 1996 and "Namibia Country Report: Victims of War, Torture and Organized Political Violence, *National Society for Human Rights (NSHR)*, Windhoek, Namibia, June 23, 2002
- (2) "Facing a Genocidal Double-Edged Sword", National Society for Human Rights (NSHR), Windhoek, Namibia, October 3, 1994; "The Program': A Conspiracy of Angolan & Namibian Intelligence Agencies?" National Society for Human Rights (NSHR), Windhoek, Namibia, May 9, 1995; "Namibia: A Silent War Along the Northeastern Frontier", National Society for Human Rights (NSHR), Windhoek, July 8, 1997; "Provisional Statistics As From December 1999, National Society for Human Rights (NSHR), Windhoek, Namibia, May 2000; "Special Report: War Crimes and Other Atrocities, Cuando Cubango Province of Angola", National Society for Human Rights (NSHR), Windhoek, Namibia, May 15, 2001; "Namibia: Landmine Monitor Reports 1999-2002, National Society for Human Rights (NSHR), Windhoek, Namibia and "Report on Third Human Rights Fact Finding Mission to Eenhana Areas", National Society for Human Rights (NSHR), Windhoek, Namibia, January 27, 2002
- (3) "Missing Namibians": ICRC Final Report, International Committee of the Red Cross, 1993
- (4) "Contradictions", *Critical Analysis: SWAPO's 'Book of the Dead'*, National Society for Human Rights (NSHR), Windhoek, Namibia, September 17, 1996, p.8

### 3.2.9 By Mr Cristian Orrego, Senior Adviser, Human Rights Center, University of California, State of California Department of Justice DNA Laboratory (United States of America (the))

#### Forensic DNA Analysis of Human Remains, The Learning Process and Expectations on Productivity

##### *Introduction*

I will describe the conditions, time frames and possible new avenues for forensic DNA typing as it applies to the search for the missing. It takes into consideration the fragile infrastructure for science and technology that exists in many countries that are attempting to document a recent past of forced disappearances with the tools of science. As such, it offers an incremental and modular approach for entry into forensic DNA analysis, which takes into account marginal funding resources, personnel training and the demands of validation and accreditation protocols for DNA typing.

##### *Forensic DNA Analysis: The Learning and Implementation Process*

The implementation of a DNA Lab for forensic analysis demands a series of steps prior to attempting the first analysis of samples of forensic importance (see for example, DNA Advisory Board Quality Assurance Standards for Forensic DNA Testing Laboratories, <http://www.cstl.nist.gov/biotech/strbase/dabqas.htm>; Crouse, 2001). These steps include,

- o Adequate laboratory design to prevent cross contamination of samples prior to and during analysis.
- o Purchase of equipment.
- o Bringing together a team with undergraduate degrees in biochemistry or genetics
- o Training of the team.
- o Validation of equipment and methods, on aspects such as sensitivity, accuracy, precision and reproducibility.
- o Establishment of a quality assurance program
- o Establishing competency exams and internal as well as external proficiency exams.
- o Establishing second (independent) reviewers for cases analyzed.
- o Implementation of procedures for chain of custody and secured storage of samples.
- o Initiating a program to obtain external accreditation of the laboratory.
- o Training in the presentation of physical evidence to the courts.

These are practical and necessary requirements. However, these requirements are usually unfamiliar and indeed largely unnecessary to scientists working in academia. Therefore, academic personnel crossing over from educational institutions to forensic laboratories need to train and become acquainted with matters such as prior validation, competency and proficiency exams of laboratory personnel, quality assurance methods, documentation, medical/legal protocols and chain of custody.

The time frame to implement the above for a new forensic DNA laboratory is approximately 2 years. That is, it would take a new lab 2 years before it could attempt to perform the first analysis of samples of forensic or humanitarian significance.

##### *Training of a DNA Analyst: 6 to 12 months*

Training of a forensic DNA Analyst to become a SWGDAM (Scientific Working Group in DNA Analysis Methods) qualified DNA analyst in the United States takes at least six to eight months, depending on the methodology employed and the nature of the samples to be analyzed. For the reasons indicated above such training would likely be incomplete if it were to occur in an academic setting. It would be best that it take place in a laboratory already accredited and active in forensic DNA analysis.

## Human remains management

### *Expected Productivity, 2 cases per month per Analyst for Mitochondrial DNA Typing of Human Remains*

The rates of analysis for a qualified DNA Analyst conducting DNA typing of human remains is decidedly slow. With currently validated procedures of DNA extraction, DNA amplification and sequencing, 2 cases per month per analyst for mitochondrial DNA typing of human remains is possible (Melton and Nelson, 2001). The frequency of success for typing of bones or teeth with up to 30 years of exposure to the environment is above 80% (Melton and Nelson, 2001; Sinha, 2002).

### *Enhancing Productivity of Mitochondrial DNA Typing by New Screening Methods*

A procedure that is called Reversed Slot Hybridization (also called Immobilized Sequence-specific Oligonucleotide Probe Analysis), which queries informative sites in the mitochondrial chromosome has been validated extensively in the last 10 years and promises to provide a way to considerably increase productivity of mitochondrial DNA typing (Gabriel et al, 2001). Once a match is obtained between reference sample(s) and human remains these can then be typed by the more elaborate and time consuming, yet more definitive method of DNA sequencing. Laboratories in Europe are already using this screening procedure, which offers a less costly and quicker way to build a database from references obtained from relatives of victims. It is likely that a quality-assured kit will soon be made commercially available to undertake this form of typing.

### *The Advent of Bone Typing with Nuclear STR (Short Tandem Repeat) DNA Markers*

Until recently, typing of bones with nuclear DNA markers resulted, depending on the exposure time of the remains, in considerably lower success rates than typing via the mitochondrial chromosome. However, this is changing dramatically as recent experience demonstrates in the labs of the International Commission of Missing Persons, ICMP in Bosnia-Herzegovina (Huffine, 2001) where higher than 95% success rate is now routine with bones and teeth (Huffine, 2002). Admittedly, these are remains that have been exposed to the environment for at most 10 years. The productivity of DNA typing obtained by the ICMP group is most encouraging at 20 cases per analyst per month. A case requires on the average, typing of 1 bone and 2.5 blood samples. All human remains are typed twice and on different days in order to assure the authenticity of the results.

### *Alternative Models of Implementation of Forensic DNA Capacity: The Distributed Approach*

The following discussion is inspired by the distributed responsibilities among different laboratories in the typing (nuclear and mitochondrial markers) of human remains recovered following the attack on the World Trade Center towers. This program coordinated by the New York Medical Examiners Office was in place in less than two months following the initial tragedy. Four different laboratories located in different states carry out distinct phases of the process from sample collection to DNA extraction/quantification, DNA amplification, fragment sequencing or sizing, software-mediated interpretation and final report. Likewise, distribution of tasks also takes place within the labs, some in different cities, of the ICMP network.

The above suggests various modular and incremental approaches that could be followed within a country or region at least during the initial stages of capacity building for forensic DNA analysis. This kind of thinking would also result in shared networks of skills similar to what has worked so well in the applications of pathology, archeology, anthropology and odontology in countries where these specialties, i.e. the forensic application of these disciplines, did not exist or were not readily in place, for human rights investigations, only 18 years ago.

For example, a new forensic DNA lab could be operational with validated procedures and appropriately trained personnel in a shorter time if it only implemented DNA extraction and quantitation. Conceivably, the extracted DNA would then be typed in another lab that is validated for example, for the Reversed Slot Hybridization protocol for mitochondrial DNA and yet in another lab for STR typing. Collaborating labs could be located in the same country or abroad provided of course, adequate chain of custody arrangements have been established. Other schemes for the distributed approach come to mind. The incremental approach in forensic DNA analysis appears to be possible and even desirable given the requirements of validation and accreditation. Also, training of personnel abroad, when that is needed, could be distributed among several labs throughout the world, making this initial phase more efficient and supportable for forensic labs interested in contributing to the development of new capacity in forensic DNA analysis in the search of the missing.

## Human remains management

### *Collection of Pre-mortem Biological Evidence and Sample Retention from Remains*

A first step in establishing a capacity toward forensic DNA typing in the service of the missing and their families would be in the collection and rigorous preservation of relevant biological evidence. Samples of buccal (interior cheek) cells from family members would be obtained, along with drops of blood and teeth, from remains identified by visual means (non-skeletal remains). The visual mode of identification may be the only pragmatic option and the first to be attempted when there are fresh bodies. However, this method can be susceptible to misidentification. Retention of recovered samples for long-term storage maintains the option for a more reliable DNA-based test, should the earlier identification pose a problem at a future date. Small items from the victim such as a razor blade, toothbrush, a comb/hair brush, could also be part of the collection of biological evidence provided that they are obtained by means that assure correct authenticity and prevent trivial contamination of the item with shed cells from another member of the family (Hiss, 2002). Similar arguments for sample retention apply to non-DNA identified bodies in skeletal form.

Retained items can be stored for decades without refrigeration at room temperature provided that dry conditions are maintained. Informed consent procedures for collection of samples from the family and the victim's remains, bar coding of each collected item, appropriate and secure computer databases, the use of suitable vaults for permanent storage, assurance of chain of custody, duplicate back-up collections with storage at a different site, all become part of a financially manageable first step in a forensic genetics program for the missing. Such first steps would honor the dead and their families and provide an opportunity for future generations to reexamine the past, should the need arise.

### *Conclusions*

Entry into forensic DNA analysis is possible in incremental stages. The first and quickest step that a country can take is to inventory and assure safe storage of biological samples from relatives and from remains as they are identified by classical means. Sound arguments exist to retain samples (they can be minute in size), even from remains identified by methods other than DNA, as the need may arise in the future to confirm earlier identifications. A clear and present need is to design and implement training programs of qualified DNA Analysts in line with the modular approach described here.

### *Literature Cited and References*

Note: On line accession to CMJ, Croatian Medical Journal is possible at, <http://www.cmj.hr/index.htm>

Crouse, C.A.

Implementation of Forensic DNA Analysis on Casework Evidence at the Palm Beach County Sheriff's Office Crime Laboratory: Historical Perspective  
CMJ 2001; 42: 247-251

DNA Advisory Board Quality Assurance Standards for Forensic DNA Testing Laboratories,  
<http://www.cstl.nist.gov/biotech/strbase/dabqas.htm>

Gabriel, M. N., C. D. Calloway, R. L. Reynolds, Š. Anđelinoviæ and D. Primorac  
Population Variation of Human Mitochondrial DNA Hypervariable Regions I and II in 105 Croatian Individuals Demonstrated by Immobilized Sequence-specific Oligonucleotide Probe Analysis.  
CMJ 2001; 42: 328-335

Hiss, J. 2002. The National Center of Forensic Medicine, Ministry of Health, Israel. Personal communication

Huffine, E., J. Crews, B. Kennedy, K. Bomberger and A. Zinbo. 2001. Mass Identification of Persons Missing from the Break-up of the Former Yugoslavia: Structure, Function, and Role of the International Commission on Missing Persons. Croatian Medical Journal 42: 271-275.

Huffine, E. 2002. Director of Forensic Sciences Program, International Commission on Missing Persons. Bosnia Herzegovina. Personal communication.

## Human remains management

Sinha, S.K.

Multidisciplinary Identification of Panamian Victims: Mitochondrial DNA Analysis.

99th Semi-annual California Association of Criminalists meeting, San Francisco, CA, May 7-11, 2002.

Melton, T and K. Nelson

Forensic Mitochondrial DNA Analysis: Two Years of Commercial Casework Experience in the United States. CMJ

2001; 42: 298-303

**3.2.10 By Prof. Dr. Markus A. Rothschild, German Society of Legal Medicine, Medico-Legal Centre, Goethe-University, Frankfurt/Main (Germany)**

**Standard autopsy protocol and standardised collection of post mortem data and material**

**Introduction**

In many countries throughout the world, extra-legal, arbitrary and summary executions take place. These executions and death cases include political assassinations, deaths resulting from torture or ill-treatment in prison or detention, executions without due process, acts of genocide and many others more. The failure to detect and disclose these executions to the international community is a major obstacle to the rendering of justice for past executions and the prevention of future executions. Suspected extra-legal executions can be investigated under established national or local laws and can of course lead to criminal proceedings.

Therefore the forensic medical teams have to collect information that will establish the identity of the deceased, the time and place of death, the cause of death and the manner or mode of death (homicide, suicide, accidental or natural). The approach of the forensic teams differs, however, because of the nature of the material to be examined. The degree of decomposition of the body will dictate the type of investigation and, therefore, the protocol to be followed.

It is clear, that a model protocol cannot be exhaustive as the variety of legal and political arrangements escapes its application. But a standard protocol helps to systematically document all important data and gives a uniform structure that supports fast comparisons with other protocols, especially ante-mortem protocols.

The contents of such protocols should follow the purposes of an inquiry:

- o Identification of the victim. Without identification it is often impossible to investigate what has happened and why has it happened.
- o Reconstruction of the event, which means to determine the cause, manner/mode, location and time of death, as well as any pattern or practise that may have brought about the death.
- o To recover and preserve evidentiary material related to the death to aid in any potential prosecution of those responsible.

**Standard autopsy protocol**

A standard autopsy protocol should be designed for listing all obtainable data about a dead body that may assist in its identification in order to compare that data with the information obtained at the place of residence of the possible victim or missing person and recorded on the ante-mortem form. It also should collect and contain data for reconstruction of what has happened. It should be clear, precise and SIMPLE!

There should be a front page with general data such as location, starting and finishing times of the autopsy, names of all participants and examiners, the individual examination number. It also should have some kind of check list which will help to structure and organise the work.

Independent of the state of the body there should be a strict general order in which the bodies have to be examined, even if it is not possible anymore to follow some certain steps in between:

- o Photographic documentation of the body first (all photographs should be in colour and with a scale).
- o X-ray of the entire body (e.g. with a fluoroscope). Skeletons: radiography of all skeletal elements before any further cleaning (dental x-rays, entire skeleton with special attention directed to fractures, developmental anomalies, and the effects of surgical procedures). Frontal sinus films should be included for identification purposes.
- o Removal of any clothing and jewellery from the body. Listing and photography of clothing and shoes, personal effects, jewellery.
- o Physical description of the dead body externally (state of the body, build, race etc.).
- o Record and detailed photography of any distinguishing marks (tattoos, scars, birth marks etc.).
- o Taking of fingerprints.
- o Internal autopsy with listing of all data obtained that may assist in identification and reconstruction.
- o Dental examination by a forensically trained dentist. Forms are designed for listing all dental information collected during the dental examination of an unknown dead body (or remains thereof).

There should be clear and simple sketch forms (body, skeleton, dental). These forms should be frequently used.

## Human remains management

All photographs should be in colour and have to present the individual examination number. Where necessary the photographs should present a scale.

The following steps should be taken in the preparation of a final report:

- o Preparation of a full report of all procedures and results.
- o Conclusions: What evidence is there, that the death was premeditated and intentional, rather than accidental? Is there evidence of torture? What weapons or means was used and in what manner? The reasons for each conclusion (e.g. gunshot entry wound to the forehead because of the bevelling to the inside of the skull in this region) should be recorded.
- o A short summary of the conclusions.

### Standardised collection of post mortem data

For the purpose of identification the collection of autopsy data should be in a form, which will allow to compare the post-mortem data with the ante-mortem data in a fast way. Therefore and wherever appropriate, boxes that can simply be marked with a cross are provided. This kind of documentation should be used as often as possible. This will facilitate electronic processing of the information.

There should be one single form for the autopsy, regardless of the state of the body or its completeness. The pages of the autopsy form, which are useless for a certain case should be omitted/ignored.

All data that can be obtained should be recorded, since it is impossible to know what information will be supplied at the victim's place of residence for comparison purposes. On the other hand with a large number of bodies and body parts it will be impossible to perform a forensic autopsy in the standard way. And: The more data are collected, the longer it will take to get results for identification. This process is very much depending on the circumstances, especially on the number of autopsies to be performed and the state of the bodies (fresh, severely decomposed, skeletonised etc.).

The main findings for reconstruction and identification purposes have to be photographed (colour). Especially the clothing/shoes and other personal effects need to be photographed to be able to present them to the relatives, if possible.

Besides standard protocol forms and photographs also sketches are a useful tool for documentation and collecting data. Standard sketch forms (e.g. full body sketches front/rear, skeleton, body parts, clothing etc.) should be part of the overall standard autopsy form. Here the sketches from the DVI form are helpful.

### Standardised collection of post mortem material

For the purposes of identification of the dead and/or reconstruction of the event it will be useful to collect certain materials from the body itself and from the immediate surrounding (e.g. clothing).

- o All evidence must be properly collected, handled, packaged, labelled and placed in safekeeping to prevent contamination and loss of evidence (chain of custody):
- o All photographs and x-rays, all sketches;
- o Clothing, shoes, personal effects, jewellery etc.
- o Any relevant paper, records or documents should be saved for evidentiary use and handwriting analysis.
- o Body material for DNA (dry, dark & cool).
- o All foreign bodies which could be evidence (bullets, blind folds, ligatures, gags etc.)

The question which body material should be kept for later DNA analysis is very much depending on the state of the body. If the body is relatively fresh, e.g. blood, muscle, and kidney samples should be kept. If the body is in a state of more or less early decomposition muscle tissue as well as a mid-shaft cross section either from femur or humerus (each 2 cm or more in height) should be kept. If the body is skeletonised, a mid-shaft cross section from either femur or humerus as well as a molar teeth should be kept.

**4. Relevant outcome from other workshops**

**4.1 The legal protection of personal data & human remains - Electronic Workshop - 02.04.2002 - 06.05.2002**

The following principles have been defined through the electronic workshop "*The Legal protection of personal data and human remains*" which took place from 02.04 to 06.05.2002. For further details and explanations, please refer to its *Final report and outcome* (Ref: ICRC/TheMissing/07.2002/EN/1).

**4.1.1 The legal protection of personal data & human remains - Protection of personal data: commonly accepted principles**

Principle 1	"Personal data" means any information relating to an identified or identifiable individual.
Principle 2	Personal data shall be collected and processed fairly and lawfully.
Principle 3	The consent of the individual is required for the collection and use of personal data, except where inappropriate.
Principle 4	The collection and processing of personal data shall be limited to that which is necessary for the purpose identified at the time of collection, or beforehand.
Principle 5	Sensitive data should only be collected and processed with appropriate safeguards.
Principle 6	Personal data should be accurate, complete and updated as is necessary for the purpose for which they are used.
Principle 7	Personal data should be protected by security safeguards appropriate to the sensitivity of the information.
Principle 8	Personal data may not be used, disclosed or transferred for purposes other than those for which they were collected without the consent of the person concerned, except if required by a substantial public interest or for the protection of the vital interests of the person concerned or of others.
Principle 9	Personal data may only be transferred to third parties respecting personal data protection principles.
Principle 10	Personal data should be deleted as soon as the purpose of their collection has been fulfilled, or when no longer necessary. They may, however, be retained for a definite period if required for the benefit of the individual to whom they relate or if essential for the performance of the humanitarian tasks of the organization which collected the data.
Principle 11	Access to personal data should be granted to the individual to whom the data relate. Provision should also be made for the right to challenge the accuracy and completeness of the data and to have them amended as appropriate.

**4.1.2 The legal protection of personal data & human remains - Identification of human remains: commonly accepted principles**

Principle 1	The identity of human remains, and the cause of death, should be established by the competent public authority with due diligence.
Principle 2	During an investigation or an inquest, including in the decision to perform a post mortem examination, the known religious beliefs and opinions of the deceased and his relatives should be taken into consideration.
Principle 3	When determining the cause and circumstances of death, in particular during an investigation or an inquest, the dignity, honor, reputation and privacy of the deceased should be respected. All corpses in the custody and possession of an investigating authority should be treated with dignity and respect.
Principle 4	Exhumations must be authorized by the competent authority.
Principle 5	The decision to carry out an exhumation should take account of the interests of the next-of-kin.
Principle 6	Exhumations must be carried out in accordance with recognized standards, including health protection standards.
Principle 7	Families should be kept informed of the decisions taken in relation to post mortem examinations, as well as of the results of any such examination.
Principle 8	The remains should be released to family members at the earliest time possible.
Principle 9	The body of the deceased should be restored before being returned to the next-of-kin. Families should be notified if body parts are retained.

## Human remains management

### 4.1.3 The legal protection of personal data & human remains - Protection of genetic information: commonly accepted principles

Principle 1	The collection, use and disclosure of DNA profiles are subject to the rules relative to the protection of personal data.
Principle 2	Identification of human remains through DNA typing should only be undertaken when other investigative techniques of identification are not adequate.
Principle 3	DNA samples may only be taken and analysed with the informed consent of the individual, except where an overriding public interest dictates otherwise.
Principle 4	Forensic procedures must be carried out by an appropriately qualified person.
Principle 5	DNA information collected for the identification of missing persons or human remains may only be used and disclosed for that specific purpose.
Principle 6	DNA samples and profiles should be destroyed/deleted when the missing persons have been identified, unless they are required for related purposes.
Principle 7	DNA analysis should only be performed by certified or accredited laboratories.
Principle 8	DNA samples, profiles and records should be adequately protected from unauthorized access and use.
Principle 9	DNA profiles or samples should only be disclosed, transferred or compared in the context of international cooperation for the purpose of identification, and only with the consent of the persons concerned, except in determined cases. DNA samples should not be transferred except where the analysis is to be performed abroad.

### 4.2 Member of armed forces and armed groups: identification, family news, killed in action, prevention - Workshop - 06-07.05.2002 - Management of human remains: Some military considerations

#### 4.2.1 General recommendations

1. In armed conflicts or other situations of violence, those who have been killed in action, other dead persons and graves must be dealt with in compliance with the *Rules of international law and recommendations applicable in armed conflicts and/or situations of violence* set forth in 2.2.2 below (see 2.2.5 for *References*).
2. Every military body is responsible for drawing up Standard Operation Procedures (SOPs) for commanders and for establishing training modules for their members which incorporate the *Rules and recommendations drawn up on the basis of international law* and the practical checklists set forth in 2.2.3 below.
3. Military bodies must recognize that non-specialists, i.e. soldiers, may be involved in the exhumation, transportation, storage and repatriation of remains and need appropriate guidelines based on the *Rules of international law and recommendations applicable in armed conflicts and/or situations of violence* and the practical checklists contained in 2.2.4 below. These guidelines should be translated into SOPs by every military body.
4. Specific training should correspond to needs. While the checklists below do not constitute information that every soldier should know, every soldier should be trained in the importance of correct procedures for emergency burials.
5. When a party cannot comply with the legal requirements for an official grave registration service or the establishment of an information bureau as set out under 2.2.2 below, it can turn for assistance to an international entity, but it is not thereby relieved of its legal obligations.
6. For any question relating to the management, exhumation, transportation, storage and repatriation of remains it is important to inform and liaise with the appropriate authorities.

### **4.2.2 People killed as a result of violence and the management of graves: rules of international law and recommendations applicable in armed conflicts and/or other situations of violence (see references under 4.2.5)**

1. All appropriate measures must be taken to prevent persons from being unaccounted for as a result of armed conflict or internal violence and to account for persons reported missing as a result of such a situation.
2. Whenever circumstances permit, all possible measures must be taken without delay to search for, collect and evacuate the wounded, without adverse distinction.
3. Whenever circumstances permit, all possible measures must be taken to search for and collect the dead, without adverse distinction.
4. Human remains must be treated with respect and dignity and measures must be taken to prevent them from being pillaged or despoiled.
5. Measures must be taken to identify the human remains before they are disposed of.
6. The dead must be disposed of in a respectful manner and their graves must be respected.
7. Burial should be in individual graves; collective graves must be the exception. All graves must be marked.
8. All possible measures must be taken to provide information to the appropriate authorities or to the family of the deceased regarding the identity, location and cause of death of deceased persons.
9. When the death occurs in armed conflict, half of the identity disc must remain with the body, the other half must be collected and transmitted to the Information Bureau with:
  - A. the date and place of (capture and) death,
  - B. particulars concerning wounds / illness or cause of death,
  - C. all other personal effects,
  - D. the date and place of burial and particulars to identify the grave.
10. Parties to the armed conflict must endeavour to facilitate the return of the deceased's remains and of any personal effects to the home country or the appropriate authorities upon their request or the request of the next-of-kin.
11. Each party to the armed conflict must establish an official Graves Registration Service to see to the dead and record particulars of graves and burials.
12. Each party to the armed conflict must establish an Information Bureau to centralize all information on the wounded, sick and shipwrecked, on persons deprived of their liberty and on the dead, without adverse distinction, and provide this information to the appropriate authorities or to the family via a neutral intermediary and to the ICRC Central Tracing Agency.

### **4.2.3 Deaths on the battlefield: checklists for the management of human remains**

#### **1. Background information**

- A. The uncollected bodies of both combatants and civilians killed in armed conflict may be lying on the ground or may be more or less extensively covered.
- B. If the remains have not been buried, their collection and identification are rendered increasingly difficult as time passes. It is important to remember that:
  - a. remains decompose rapidly when they are exposed to a warm climate, humidity, rain, etc.;
  - b. animals may remove and scatter the remains;
  - c. bones may be removed;
  - d. decomposition, loss of bones and scattering increase with time;
  - e. heavy clothing will slow down the process of disarticulation;
  - f. climate and seasonal changes are important determinants of the ease with which surface remains are found.
- C. The bodies of people killed as a result of violence (as opposed to those who die of disease) do not constitute a direct health hazard to other soldiers.

## Human remains management

- D. When a soldier finds a body, he has a responsibility to report it to his commanding officers.

### 2. Checklists

- A. The following checklists should be incorporated into SOPs for military units that are party to a conflict or involved as a third party (e.g., peace-keeping troops).

#### B. Recovering human remains

- a. Recovering remains from the front lines or after an attack is the responsibility of the authorities.

#### C. In all situations:

- a. ensure that the bodies are neither situated in a mine field nor booby-trapped;
- b. record the date, the kind of incident that led to death and the location of the remains;
- c. note any indication of whether the remains are those of combatants or civilians;
- d. note the number of bodies and their general state;
- e. attach a number to each body;
- f. if the deaths are recent, and depending on the context, consider ascertaining the total number of wounded by visiting hospitals or first aid posts;
- g. think about informing the families and the "host" community;
- h. treat body parts and whole bodies with equal respect.

#### D. For each body, if time permits:

- a. if permitted or allowed, photograph the body before moving it;
- b. on a piece of paper bearing the body number, make a note of:
  - I. the likely cause of death, if obvious (e.g., head wounds);
  - II. any signs of blood or recent active bleeding;
  - III. whether the body is warm / cold / rigid;
  - IV. anything else such as missing limbs, hands tied or obvious signs of ill-treatment or mutilation;
  - V. any clothing and shoes;
  - VI. any personal effects (e.g., watches, jewellery, etc.);
  - VII. any other distinctive features that might aid identification (e.g., tattoos, visible gold teeth);
- c. check for identity documents or identity tags;
- d. collect, group and number personal effects according to the individual number of the body *and store them separately in bags* labelled with the corresponding body number;
- e. ensure half of any identification disc is included with the belongings;
- f. if body bags or coffins are not available, wrap the remains in a blanket or sheet.

#### E. When the human remains have been recovered, they have to be moved to a place of temporary storage:

- a. place the remains in the vehicle with great care;
- b. ensure bodies and the corresponding personal belongings are transported in the same vehicle;
- c. keep a copy of all records and notes;
- d. ensure one record goes to the appropriate authorities.

#### F. Temporary storage of human remains if they are not to be buried immediately: Ideally, the remains should be stored:

- a. in an area that is secure from entry at all times;
- b. in an area hidden from public view;
- c. at a temperature of 8°C;
- d. in a dry atmosphere;
- e. in an adequately lit area that is large enough to permit the remains to be worked on and moved;
- f. in an area where the remains can be viewed by the family in as much dignity as possible;
- g. somewhere where they can be easily loaded from and to vehicles;
- h. somewhere with easy access to the place where any later forensic work can be conducted;
- i. in a place with a smooth washable floor;
- j. if many old remains are being identified, it may be necessary to have a separate area with a hose and cleaning / drying facilities for clothes and other personal effects.

## Human remains management

- G. **Emergency or temporary burial of remains:** If the above conditions for temporary storage are not available, the only option may be emergency burial.
- a. The site should be selected according to the following criteria:
    - I. as near as possible to the location of death, bearing in mind nevertheless that:
      - i. the soil should be of a kind in which it is possible to bury remains;
      - ii. it should be well drained;
      - iii. the site should be near to vehicle access;
      - iv. it should not be in an area of strategic or tactical importance.
  - b. Each body should:
    - I. be placed in an individual grave if possible;
    - II. be left clothed;
    - III. be protected from water.
  - c. Each grave should:
    - I. be as deep as practicable or covered in a manner appropriate to the terrain, e.g., piling of stones;
    - II. be clearly marked, to ensure it can be found later, with an appropriate religious or cultural marker that is:
      - i. high enough to be seen;
      - ii. made of the most durable material possible;
    - III. be clearly marked on a map which, along with any other appropriate information, is handed to a commanding officer or to the authorities;
    - IV. contain one half of the individual identity disc, if found, the other half being handed to a commanding officer or to the authorities;
    - V. be treated with respect and in keeping with any known religious or cultural beliefs;
    - VI. be marked in the most permanent manner possible with the date of burial and the information on the identity disc(s) or similar information found in wallets, papers or personnel effects (alternatively, this information can be recorded on a piece of paper that is sealed in a bottle or some other waterproof container and left in the ground above the body).
  - d. A military chaplain or cleric can preside over the emergency burial of any remains whatever the religion or culture of the dead person. If none is present, this function should be undertaken by an appropriate senior officer. Whatever ceremony is used, it must be dignified.
  - e. The following information should be recorded for each grave and passed on to a commanding officer or to the authorities:
    - I. all information that is marked on the emergency grave;
    - II. any information pertaining to the person's identity;
    - III. the exact location of the grave, which should be marked on a map or precise reference grid;
    - IV. the appearance and nature of the material with which the grave is marked;
    - V. the total number of graves in the same location;
    - VI. whether the grave contains only body parts.
  - f. Graves should be grouped according to nationality or religion.
  - g. Specifically for group graves:
    - I. the bodies should be laid out in a recognizable sequence, preferably side by side;
    - II. a marker must be present to indicate the beginning of the sequence;
    - III. two lists should be prepared with the sequence of the bodies, one to be left beneath the marker, the other to be given to a commanding officer or to the authorities;
    - IV. the number of bodies should be recorded;
    - V. the names of known but unidentifiable bodies should be recorded.
  - h. For unidentified remains, the grave should be marked with "Unknown" or a similar term. The additional information to be recorded, as it may be useful for subsequent identification, includes:
    - I. sex;
    - II. approximate age;
    - III. height;
    - IV. build (stocky, medium, fat, thin);
    - V. hair colour and style;
    - VI. facial hair (beard, moustache);
    - VII. eye colour;
    - VIII. ethnic appearance;
    - IX. tattoos, marks and scars;

## Human remains management

- X. teeth (gold, false, missing);
- XI. clothing or uniform plus any numbers, insignia or signs of rank;
- XII. jewellery (watches, rings, etc.);
- XIII. if appropriate, details of aircraft or vehicle;
- XIV. the names of any other identified bodies buried in the same location.

### 4.2.4 Recovering buried or hidden remains when forensic expertise is not available: checklists

#### 1. Background information

- A. The management, exhumation, transportation, storage and repatriation of remains may, under certain circumstances, fall to other players such as soldiers deployed on a United Nations mission, usually in the case of a post-conflict situation.
- B. Those activities can be highly sensitive, and any mishandling of the remains can make a difficult situation worse.

#### 2. Locating graves

- A. Finding graves is an obvious part of ascertaining the fate of those killed in action and missing. Those doing the searching must bear in mind:
  - a. that the bodies may be in marked graves in cemeteries, at memorials or in field graves dug during hostilities;
  - b. that witnesses or the local population are likely to have useful information;
  - c. that the authorities may know more than anyone else about the location of graves and have a responsibility to disclose that information;
  - d. that unidentified bodies may be found in existing and marked grave sites, e.g., cemeteries, war graves, etc.;
  - e. that for unmarked graves, it may be necessary to employ forensic archaeologists who have experience with visual signs, probing techniques and soil sampling;
  - f. the likely number of bodies that may be in the grave;
  - g. that seasonal changes may make it more difficult to find graves (snow, differential growth rate of grass, etc.);
  - h. that the number of bodies in a grave is frequently exaggerated.
- B. Signs of a grave's existence are:
  - a. a change in vegetation;
  - b. protruding clothing or bones;
  - c. a visual difference in consistency or surface of the soil due to digging;
  - d. odour, if the grave is shallow;
  - e. the changes in soil structure detected by metal probes, whose tips may also give off a telltale odour of decomposition;
  - f. bullets found using a metal detector in or around the grave;
  - g. traces found by trained dogs.
  - h. In addition, vehicle tracks may indicate a large mass grave.
- C. More sophisticated methods for locating graves include:
  - a. aerial or satellite photographs (although their use has serious political implications);
  - b. ground penetrating radar;
  - c. magnetometers (which work through snow and water).

#### 3. Checklists

- A. **Prerequisites for the recovery of buried or hidden human remains**
  - a. In the context of a third party mission (e.g., a UN peace-keeping mission), make sure that:
    - I. it is impossible for the authorities to carry out this task;
    - II. all the authorities concerned know of the mission's involvement in the recovery of human remains;
    - III. the mission is authorized and has adequate security guarantees to go where the remains are located;

## Human remains management

- IV. the eventual destination of the remains is known beforehand, i.e. hospital, morgue, authorities, families;
  - V. the mission has permission and the necessary documents to transport the remains (this is especially important when crossing borders or front lines).
  - b. Qualified and, if possible, experienced forensic specialists, irrespective of nationality, should be present, although this may not always be possible. Before starting to look for the graves and before recovering or exhuming any remains, the mission must make sure it has:
    - I. a clear legal mandate to start looking for and exhuming remains;
    - II. security guarantees from any local armed forces or militia;
    - III. a clear understanding of the context within which the search and exhumation will take place (with respect to, for example, families or judicial proceedings);
    - IV. the cooperation of the local authorities, commanders and the community concerned;
    - V. a strategy for informing the families and the community;
    - VI. logistical backup (human remains found in places such as latrines, caves, collapsed structures or bodies of water require special expertise, equipment and safety measures);
    - VII. adequate infrastructure (buildings, tents, generators, equipment, etc.);
    - VIII. knowledge of:
      - i. the events leading to the deaths and burials,
      - ii. the likely location of the graves,
      - iii. the likely number of bodies in each grave,
      - iv. the likely time of death, and
      - v. the likely location of affected or potentially affected families;
    - IX. the means of ensuring the site's security;
    - X. autopsy facilities if forensic specialists are available;
    - XI. a secure storage area if a mortuary is not available.
- B. Recovering buried or hidden human remains**
- a. Under certain circumstances, it may be necessary for somebody without forensic training to be involved in the recovery of remains. This should happen only if:
    - I. safety is assured, meaning that the bodies are not in a minefield and have not been booby-trapped;
    - II. the remains are going to be recovered anyway by families, the local authorities, soldiers, etc., in an unskilful and undignified manner;
    - III. appropriate expert (forensic) help is not available in the context for reasons of security, logistics or time;
    - IV. the location of the grave is known;
    - V. there are no legal constraints in the context;
    - VI. the family is present to ensure appropriate burial / cremation;  
*or*
    - VII. appropriate storage facilities are available.
  - b. The following checklist may be useful:
    - I. ensure the site is safe, for example from landmines;
    - II. establish a fence or secure perimeter around the site;
    - III. make sure the site is guarded at all times;
    - IV. note if the ground has been disturbed since the burial by vehicles or in the course of other attempts at recovery;
    - V. photograph and document the surface soil or location of the remains;
    - VI. remove the surface soil by horizontal layers using hands or a metal instrument (do not dig directly down into the grave);
    - VII. as soon as contact is made with any remains, remove all soil by horizontal scraping until the remains are completely exposed;
    - VIII. note the number of bodies and their general state;
    - IX. map and, if permitted, photograph any remains in situ;
    - X. attach a number to each body.

## Human remains management

- c. For each body:
  - I. if permitted, photograph the body before moving it;
  - II. on a piece of paper bearing the body number, make a note of:
    - i. the likely cause of death if obvious (e.g., head wounds);
    - ii. anything else such as missing limbs, hands tied or obvious signs of ill-treatment or mutilation;
    - iii. any clothing and shoes;
    - iv. any personal effects (e.g., watches, jewellery etc.);
    - v. any other distinctive features that might aid identification (e.g., tattoos, visible gold teeth);
  - III. check for any identity documents or identity discs;
  - IV. collect, group and number personal effects according to the individual number of the body *and store them separately in bags* labelled with the corresponding body number;
  - V. ensure half of any identification disc is included with the belongings;
  - VI. remove the remains carefully;
  - VII. if body bags or coffins are not available, wrap the remains in a blanket or sheet;
  - VIII. if permitted, photograph the site once the remains have been removed;
  - IX. consider refilling the grave if necessary;
  - X. consider the emotional impact on those exhuming or working on the bodies, as they will not be familiar with this kind of work.

### 4.2.5 References:

GC I: Arts. 3, 12, 15 - 17

GC II: Arts. 3, 12, 18 - 20

GC III: Arts. 3, 120 - 123

GC IV: Arts. 3, 16, 129 - 131, 136 - 141

AP I: Arts. 10, 32 - 34

AP II: Arts. 7, 8

HC IV (R): Arts. 14, 16, 19

International Covenant on Civil and Political Rights (1966)

American Convention on Human Rights (1969)

European Convention for the Protection of Human Rights and Fundamental Freedoms (1950)

UN GA resolution 3220 (XXIX) of 1974 - Assistance and cooperation in accounting for persons who are missing or dead in armed conflicts

Resolution XXIII of the 20th International Conference of the Red Cross and Red Crescent (Vienna, 1965) - Tracing of Burial Places

Resolution V of the 22nd International Conference of the Red Cross and Red Crescent (Teheran, 1973) - The missing and the dead in armed conflicts

Resolution I of the 24th International Conference of the Red Cross and Red Crescent (Manila, 1981) - Wearing of identity discs

Resolution II of the 24th International Conference of the Red Cross and Red Crescent (Manila, 1981) - Forced or involuntary disappearances

Resolution XIII of the 25th International Conference of the Red Cross and Red Crescent (Geneva, 1986) - Obtaining and transmitting personal data as a means of protection and preventing disappearances

Resolution 2 of the 26th International Conference of the Red Cross and Red Crescent (Geneva, 1996) - Protection of the civilian population in period of armed conflict

Plan of Action for the years 2000-2003, adopted by the 27th International Conference of the Red Cross and Red Crescent (Geneva, 1999)

**5. ICRC Preparatory documents**

**5.1 ICRC Preparatory documents - General**

**5.1.1 The family's right to know the fate of relatives: rules of international law and recommendations applicable in armed conflicts and/or other situations of violence**

1. Everyone has the right to respect for their family life, which includes the right to information about the fate of their loved ones.
2. Enforced disappearance is prohibited.
3. All appropriate measures must be taken to prevent persons from being unaccounted for as a result of armed conflict or internal violence and to account for persons reported missing as a result of such a situation.
4. All persons must be treated humanely, respected and protected by virtue of their inherent dignity as human beings.
5. All persons, even when displaced (as internally displaced persons or refugees), detained or living in occupied territories, have the right to correspond with their families.
6. Persons deprived of their liberty should be allowed to receive visitors.
7. A record must be kept of the particulars of persons deprived of their liberty.
8. All possible measures must be taken to provide information to the appropriate authorities or to the family of the captured or deceased regarding the identity, date and place of capture and any particulars concerning wounds / illness and location and cause of death.
9. Each party to the armed conflict must establish an official Graves Registration Service to see to the dead and to record the particulars of graves and burials.
10. Each party to the conflict must establish an Information Bureau to centralize all information on the wounded, sick and shipwrecked, on persons deprived of their liberty and on the dead, without adverse distinction, and provide this information to the appropriate authorities or to the family via a neutral intermediary and to the ICRC Central Tracing Agency.

**References:**

GC I: Arts. 3, 16, 17

GC II: Arts. 3, 19, 20

GC III: Arts. 3, 69 - 71, 120, 122, 123

GC IV: Arts. 3, 25, 26, 105 - 107, 116, 129, 130, 136, 137, 140

AP I: Arts. 32 - 34, 75

AP II: Arts. 4, 5

HC IV (R): Arts. 14, 16

Universal Declaration of Human Rights (1948)

International Covenant on Civil and Political Rights (1966)

American Convention on Human Rights (1969)

European Convention for the Protection of Human Rights and Fundamental Freedoms (1950)

Inter-American Convention on Enforced Disappearances (1994)

Inter-American Commission: Report No. 136/99, 22 December 1999, *Case of Ignacio Ellacuría et al*, Case No. 10.488, par. 221 & 224.

*Lucio Parada Cea et al*, Report 1/99, 27 January 1999, Case No. 10.480, par. 151.

Inter-American Court: *Velasquez Rodriguez Case* (Honduras), Judgment 29 July 1988, Series C: Decisions and Judgments, No.4, par. 181, 166 & 174.

*Godinez Cruz Case*, Judgment 20 January 1989, Series C: Decisions and Judgments, No.5, par.191.

*Castillo Paéz case*, Judgment 3 November 1997, par.90.

*Blake case*, Judgment 24 January 1998, par. 97: art.8.1 & p.116

## Human remains management

- European Court of Human Rights: Judgment of 25 May 1998, *Matter of Kurt c. Turkey*, Case No.15/1997/799/1002, par. 134  
Judgment of 10 May 2001, *Cyprius c. Turkey*, Case No. 25781/94
- Human Rights Committee: *María del Carmen Almeida de Quintero and Elena Quintero de Almeida case* (Uruguay), decision of 21 July 1983, Communication No. 107/1981, par. 14.
- UN GA resolution 3220 (XXIX) of 1974 - Assistance and cooperation in accounting for persons who are missing or dead in armed conflicts
- UN GA resolution 47/133 of 1992 - Declaration on the Protection of all Persons from Enforced Disappearance  
HRC E/CN.4/1435, UN Report of the Working Group on Enforced Disappearances (22 January 1981)
- Resolution V of the 22nd International Conference of the Red Cross and Red Crescent (Teheran, 1973) - The missing and dead in armed conflicts
- Resolution II of the 24th International Conference of the Red Cross and Red Crescent (Manila, 1981) - Forced or involuntary disappearances
- Resolution XIII of the 25th International Conference of the Red Cross and Red Crescent (Geneva, 1986) - Obtaining and transmitting personal data as a means of protection and preventing disappearances
- Resolution 2 of the 26th International Conference of the Red Cross and Red Crescent (Geneva, 1996) - Protection of the civilian population in period of armed conflict
- Plan of Action for the years 2000-2003, adopted by the 27th International Conference of the Red Cross and Red Crescent (Geneva, 1999)

### 5.1.2 People killed as a result of violence and the management of graves: rules of international law and recommendations applicable in armed conflicts and/or other situations of violence

1. All appropriate measures must be taken to prevent persons from being unaccounted for as a result of armed conflict or internal violence and to account for persons reported missing as a result of such a situation.
2. Whenever circumstances permit, all possible measures must be taken without delay to search for, collect and evacuate the wounded, without adverse distinction.
3. Whenever circumstances permit, all possible measures must be taken to search for and collect the dead, without adverse distinction.
4. Human remains must be treated with respect and dignity and measures must be taken to prevent them from being pillaged or despoiled.
5. Measures must be taken to identify the human remains before they are disposed of.
6. The dead must be disposed of in a respectful manner and their graves must be respected.
7. Burial should be in individual graves; collective graves must be the exception. All graves must be marked.
8. All possible measures must be taken to provide information to the appropriate authorities or to the family of the deceased regarding the identity, location and cause of death of deceased persons.
9. When the death occurs in armed conflict, half of the identity disc must remain with the body, the other half must be collected and transmitted to the Information Bureau with:
  - A. the date and place of (capture and) death,
  - B. particulars concerning wounds / illness or cause of death,
  - C. all other personal effects,
  - D. the date and place of burial and particulars to identify the grave.
10. Parties to the armed conflict must endeavour to facilitate the return of the deceased's remains and of any personal effects to the home country or the appropriate authorities upon their request or the request of the next-of-kin.
11. Each party to the armed conflict must establish an official Graves Registration Service to see to the dead and record particulars of graves and burials.

## Human remains management

12. Each party to the armed conflict must establish an Information Bureau to centralize all information on the wounded, sick and shipwrecked, on persons deprived of their liberty and on the dead, without adverse distinction, and provide this information to the appropriate authorities or to the family via a neutral intermediary and to the ICRC Central Tracing Agency.

### References:

GC I: Arts. 3, 12, 15 - 17

GC II: Arts. 3, 12, 18 - 20

GC III: Arts. 3, 120 - 123

GC IV: Arts. 3, 16, 129 - 131, 136 - 141

AP I: Arts. 10, 32 - 34

AP II: Arts. 7, 8

HC IV (R): Arts. 14, 16, 19

International Covenant on Civil and Political Rights (1966)

American Convention on Human Rights (1969)

European Convention for the Protection of Human Rights and Fundamental Freedoms (1950)

UN GA resolution 3220 (XXIX) of 1974 - Assistance and cooperation in accounting for persons who are missing or dead in armed conflicts

Resolution XXIII of the 20th International Conference of the Red Cross and Red Crescent (Vienna, 1965) - Tracing of Burial Places

Resolution V of the 22nd International Conference of the Red Cross and Red Crescent (Teheran, 1973) - The missing and the dead in armed conflicts

Resolution I of the 24th International Conference of the Red Cross and Red Crescent (Manila, 1981) - Wearing of identity discs

Resolution II of the 24th International Conference of the Red Cross and Red Crescent (Manila, 1981) - Forced or involuntary disappearances

Resolution XIII of the 25th International Conference of the Red Cross and Red Crescent (Geneva, 1986) - Obtaining and transmitting personal data as a means of protection and preventing disappearances

Resolution 2 of the 26th International Conference of the Red Cross and Red Crescent (Geneva, 1996) - Protection of the civilian population in period of armed conflict

Plan of Action for the years 2000-2003, adopted by the 27th International Conference of the Red Cross and Red Crescent (Geneva, 1999)

### 5.2 ICRC Preparatory documents to workshop *Human remains: Law, Politics & Ethics*

#### 5.2.1 The forensic specialist: does working in a context involving missing persons challenge existing practice?

The role forensic specialists play in the domestic context cannot be automatically extrapolated to the part they have in contexts involving missing people; there are some important differences. In the domestic context, forensic specialists work as an extension of the domestic legal process. Identification of remains is an integral part of criminal investigation and goes hand-in-hand with ascertaining the cause of death. However, in a context involving missing people, especially when the investigation involves the exhumation of mass graves, the cause of death may already be known or be obvious, and identification may be the most difficult and resource-intensive task.

An important consideration is that in the case of a mass murder perpetrated in an armed conflict, exhumation can provide evidence for prosecution even if the individual victims are not identified. The two activities may proceed on separate time scales and with separate resource requirements. This can lead to the unfortunate situation whereby remains are exhumed and the cause of death established but, because the process of identification is much more time-consuming, the bodies re-interred. The ICRC believes that this situation is unacceptable as it does not allow the families concerned to be informed of the fate of missing loved ones or to receive the remains. The ICRC holds that identification for the purposes of informing the family and returning remains is just as important as providing evidence and constitutes due recognition of the rights of families.

In brief, while forensic specialists may feel comfortable from an ethical perspective working to uphold human rights and investigating violations of human rights and IHL, it is proposed here that this is a selective approach and that equal consideration should be given to the rights of the family. It is clear therefore that a review of the ethical involvement of forensic specialists is necessary to ensure that justice is done *and* that the best is done for the families. It is pertinent that the World Medical Association's 1998 Resolution on Reported Violations of Health Related Human Rights in Kosova refers to *impartial* identification.

The following is an excerpt on this issue: *Section: "Identification of Victims" from: Haglund, W.D, "Recent Mass Graves, An Introduction", in Advances in Forensic Taphonomy, edited by William Haglund and Marcella Sorg, CPR Press, New York, 2001, pp. 243-262.*

Quote:

Although personal identification is the traditional goal of the recovery of human remains, the "identification" process is carried out at several levels. Most elemental is to distinguish human from non-human remains. Identification of an individual's biological characteristics (i.e., sex, age, stature, and race) provides the groundwork for personal identification and constitutes the next level of identification. When multiple individuals are involved, their minimum number must be established. If body parts, individual bones or bone fragments are involved, efforts must be made to attribute them to the appropriate individual. Another level of "identification" is the assignment of an individual to a particular population segment such as a religious, cultural, or social affiliation. For example, associated artefacts or circumstances can aid in determination of individuals military versus civilian status, whether they were hospital patients, membership of a particular religious group, or whether they were rendered helpless at the time they were killed. Individualizing traits, such as dental characteristics, tattoos, osteological evidence of past injuries or life stresses may lead to a more specific level of identification and offer the greatest hope of unique personal identification. Geberth (1990) points out that in traditional homicide investigations:

"The identification of the victim is critical because in order to prove a charge of homicide, it must be established that a named or described person is in fact dead (...) furthermore, from an investigative point of view, identification provides a starting point and direction for the inquiry."

In part, the rationale for this dictum is that most homicide victims are killed by someone they know. A personal motive is involved in the killing. In upwards of 75% of solved homicides, the victims are murdered by someone they knew. Hence, much investigative effort is expended to confirm personal identification of the victim. Fortunately, the potential to achieve personal identification is high in developed countries with infrastructures that allow sophisticated tracking of citizens, a level of health care that documents identifying features and, as a

## Human remains management

last resort, recourse to DNA technology. Stranger-on-stranger killings are most problematic for homicide investigators to solve.

By contrast, in the investigations of genocide and crimes against humanity involving mass graves there may be less emphasis placed on identifying the individuals who actually did the killing. Rather the prosecutorial focus may be to identify those individuals in positions of authority who gave the commands to the killers. Actual killing may be carried out by anonymous persons remote from the chain of command. So with regard to mass graves and prosecutions involving war crimes, genocide, and crimes against humanity, personal identification of the victim(s) may not be a necessary as a "starting point" to the investigation. Particular persons became victims because of how they were perceived by the culture. For instance they may have been singled out because of their religion or ethnicity. This "categorization" of the victim by the killers has consequences for the level of identification sought by investigators. It may be sufficient to be able to attribute "categorical" identification to the victims (such as ethnicity, religion, or political viewpoint) and to be able to show that victims were killed because of attributes perceived by their killers. This is particularly true when indictments for killings are based on genocide: the deliberate intention to exterminate a national, ethnic, or religious group. For investigators other categorical levels of identification could rest on whether or not the victims can be identified as civilians, women, children, or combatants. If military or civilians, for example, were they bound, blindfolded, or tortured? The foregoing does not imply that "personal individual identifications" would not lend a deeper level of support to indictments or to the tribunal's investigations, only that pursuit of positive personal identification of victims may not be a primary issue to the prosecution. Hence there may be no resources allocated for that purpose. This of course does not satisfy the needs or desires of survivors to have their individual dead returned. In the context of present ad hoc tribunals, personal identification of the victims often falls upon the shoulders of entities other than tribunal investigators.

A sad reality is that positive, personal identifications are often not pragmatic or obtainable in poor nations and areas suffering from recent conflicts, where the infrastructure has been severely compromised or is non-existent. Out of nearly five hundred individuals examined from exhumations at Kibuye, Rwanda, leads to identification could be established for only seventeen persons. Six carried identifying documents and eleven more had clothing or personal effects recognizable to acquaintances. None had hospital x-rays or dental records. For only two of these victims could surviving blood relatives be located (Haglund and Kirshner 1997). In Bosnia-Herzegovina, there are currently body bags estimated to contain well over 4,700 unidentified remains that are being stored awaiting identification (Rhode 2000). Notably, the ICTY-investigated Croatian grave at Ovcara, with 200 remains, currently has approximately 150 individuals identified, the majority confirmed via DNA. This relatively high success rate of identification can be attributed to a concerted government effort to identify these victims, combined with the fact that the war had left the country's infrastructure relatively unscathed and that there was a quality forensic community left to follow-up on identifications subsequent to tribunal examinations. Prior to the exhumations, four years were devoted to collection of ante mortem data and there was local access to DNA technology.

Unquote

### **5.2.2 Identification of remains: what are the forensic specialist's specific responsibilities in contexts involving missing persons?**

In contexts involving missing persons, forensic specialists must address certain basic issues before exhuming or identifying remains, namely:

- o how to inform and return remains to the family;
- o how to inform and return remains to the authorities;
- o the working of criminal justice in an international context in which violations of international humanitarian law / human rights law are being investigated;
- o how their work will affect the political process.

Forensic specialists must ensure that a mechanism is in place whereby the remains will be returned to the family either by the authorities or by a competent agency. Thought must be given to the whole process before the forensic specialist becomes involved; it cannot be assumed that the entire chain of responsibility that usually exists in a domestic context is in place.

## Human remains management

When conducting autopsies, forensic specialists should recognize the distinction between establishing cause of death and identification, even though the two may overlap considerably. Identification of bodies of soldiers who have been killed in action may involve no criminal consideration; by contrast, the exhumation of a mass grave might provide all necessary evidence for a tribunal but identification of the remains may not be necessary for this purpose.

The authorities have well-defined legal obligations, especially in international armed conflicts. Forensic specialists should be familiar with those obligations, as they help to identify where and in what way the results of any forensic work may be manipulated.

### 5.2.3 Human rights instruments relating to forensic science - Summary

1. The United Nations has been dealing with forensic science for more than ten years. United Nations initiatives on human rights and forensic science focus on the necessity of investigating mass violations of human rights in order to prosecute the perpetrators. Indeed, the United Nations has understood that forensic science can be used effectively to investigate suspicious deaths.
2. The United Nations, mainly through the Commission on Human Rights, has drafted guidelines on forensic work and established mechanisms such as standing teams of forensic experts and a cooperation service agreement. In its 2002 report, the United Nations Office of the High Commissioner for Human Rights announced the availability of 487 experts whose coordinates it had on file.
3. The main documents prepared by the United Nations are described below.
  - A. The *Manual for the Prevention and Detection of Extra-Legal, Arbitrary and Summary Executions*, containing *inter alia* ECOSOC resolution E/RES/1989/65 of 24 May 1989 on human rights and forensic science and the *Minnesota Protocol*, was published in 1991. It gives technical guidance to States for the conduct of investigations and includes an overview of international human rights standards outlawing summary executions. It also contains a *Model Autopsy Protocol* and a *Model Protocol for disinterment and analysis of skeletal remains*.
  - B. In 1995, the *Guidelines for the conduct of United Nations inquiries into allegations of massacres* were written. The purpose of these guidelines was to establish rules of procedure that the United Nations would have to observe in the conduct of inquiries.
  - C. Six resolutions have been adopted by the United Nations Commission on Human Rights since 1992. By resolution E/CN.4/RES/1992/24, the Commission set up a standing team of forensic experts and experts in other relevant disciplines. In subsequent resolutions, it endeavoured to facilitate the implementation of the *Manual for the Prevention and Detection of Extra-Legal, Arbitrary and Summary Executions*. Moreover, it continued to encourage the establishment of courses aimed at training forensic experts, in particular in countries lacking expertise in that field.
  - D. Each year, in his report, the United Nations Secretary-General summarizes the work accomplished in the field of forensic science.
4. The above-mentioned documents do not focus on the crucial right of families to know the truth, nor on the need for families to shed light on the fate of their relatives. The focus is on the importance of international justice and on the obligation, therefore, to prosecute the authors of mass human rights violations. Even the obligation to identify dead bodies seems to be aimed chiefly at gathering enough evidence to charge those responsible for massacres. This does not mean that the anguish suffered by the families is not taken into account but only that the main purpose of investigating suspicious deaths is to try the perpetrators for the sake of international justice. The few provisions dealing with the need for families to know the truth stress a moral duty for forensic experts to seek the truth as regards the identity of dead bodies rather than a legal obligation to do so. However, indirect reference to the right of families to know the fate of their loved ones is to be found in the emphasis placed on the obligation to identify the victims and on the role played by the family during investigations.
5. The United Nations Secretary-General has nevertheless stressed the importance of the "identification of remains found in mass graves" in several reports; however, the reports also explain that, in practice, the identification process is not simple. Indeed, the scientists in charge of exhuming dead bodies give priority to determining the cause and manner of death and only later do they attempt to establish the identity of the victims. The explanation is that the state of the bodies may not enable forensic experts to do the necessary in-depth analysis. Therefore, instead of *obliging* scientists to identify the remains, one can only *recommend* that they do so. Thus, it seems that forensic experts only have an "*obligation de moyens*" (to do all possible) to identify the body. Once again, this issue is closely linked to the financial capacities of the State concerned.

## Human remains management

6. In his 1998 report, the United Nations Secretary-General pointed out that a programme had been established in the former Yugoslavia for "the excavation of mass graves and exhumation of mortal remains for the purpose of identifying deceased missing persons, returning the remains to the families concerned and, thereby, responding to the right of the families to know the truth about the fate of their loved ones". This was the first time that the Secretary-General, in his reports, referred to the right of families to know about the fate of their relatives. In its 2000 report, the United Nations Office of the High Commissioner for Human Rights stressed that "the growing number of national conflicts generating gross and massive human rights violations ha[d] provided more impetus to the *need* to resort to forensic and related experts to *identify* the victims".

### References

UN ECOSOC - E/RES/1989/65, 24 May 1989, Principles on the Effective Prevention and Investigation of Extra-Legal, Arbitrary and Summary Executions.

UN ST/CSDHA/12, 1991, Manual on the Effective Prevention and Investigation of Extra-Legal, Arbitrary and Summary Executions.

UN Office of Legal Affairs, Guidelines for the conduct of United Nations inquiries into allegations of massacres, New York, 1995.

UN Commission on Human Rights: E/CN.4/RES/1992/24, 28 February 1992; E/CN.4/RES/1993/33, 5 March 1993; E/CN.4/RES/1994/31, 4 March 1994; E/CN.4/RES/1996/31, 19 April 1996; E/CN.4/RES/1998/36, 17 April 1998 - E/CN.4/RES/2000/32, 20 April 2000.

Reports of the United Nations Secretary-General on Human Rights and Forensic Science: E/CN.4/1993/20, 5 February 1993; E/CN.4/1994/24, 7 February 1994; E/CN.4/1996/41, 7 March 1996; E/CN.4/1998/32, 5 January 1998.

Reports of the United Nations Office of the High Commissioner for Human Rights: E/CN.4/2000/57, 15 December 1999; E/CN.4/2002/67, 21 January 2002.

### 5.2.4 The families of missing persons : towards a positive involvement

The ICRC considers it important to generate guidelines on how to keep the families of missing people informed. Agencies involved in managing, exhuming and identifying remains must consider the following:

- o Any investigation or exhumation is carried out in constant interaction with the community and the families.
- o Undignified or unskilful handling of remains may further traumatize the family.
- o The family must be given a realistic expectation of the outcome, given the state of the remains, number of bodies, etc.
- o The families must be provided with information and psychological support.
- o The subsequent process of identification must be explained to the families while the process is ongoing.
- o Families should be told that subsequent identification will rely on simple techniques first, then on standard matching of *ante mortem* with *post mortem* data; only then will more sophisticated technology be used.
- o Families should be approached regarding the provision of *ante mortem* data. This is a very sensitive issue.
- o There need to be clear guidelines on how to handle divided families. A division within a family can make things very difficult. (Should there be a hierarchy of next-of-kin?)

### 5.2.5 Collecting, managing and transmitting information about human remains

The legal principles pertaining to the collection, management and transmission of information about remains will be defined in the outcome of the electronic workshop, "The legal protection of individual data and human remains" (available in early May 2002). These legal principles are important considerations for forensic specialists.

There are other specific points that forensic specialists should consider.

Strict confidentiality ensures that information which might later be used as evidence is not published. This is particularly important in the sensitive contexts under consideration.

The value of an autopsy is almost entirely dependent on the quantity and quality of the information provided before it is conducted. The information provided to pathologists prior to the autopsy is often flawed and contains errors of fact, for two reasons: first, much of the information is medical in nature and is collected and recorded by non-specialists; second, the passage of time may make important details more difficult to recall. Furthermore, those collecting the information may not understand the significance of certain details. Information which is wrong, but assumed to be right, will produce wrong identifications, wrong causes of death and wrong conclusions about the circumstances in which the death occurred.

The management of information in the context of the missing is a main focal point of interest for the families, the authorities and agencies. Mishandling information can be catastrophic for the families, any judicial process, the agencies concerned and even the political process.

### 5.2.6 Autopsies: the aims, responsibilities and obligations of forensic pathologists in the context of missing persons

This section contains pertinent excerpts from: S.Cordner, M. El Nageh, B. Linehan, D. Wells, H. McKelvie, *Ethical Practice in Laboratory Medicine and Forensic Pathology*, WHO, EMRO, 1999.

Quote

#### Two basic questions

1. To whom does the forensic pathologist owe a duty?
2. What is the content of the forensic pathologist's duty?

That these questions need to be asked is one of the things that differentiates forensic pathologists from clinicians. Mainstream bioethics is all about these two questions for clinicians. For forensic pathologists, there is not a living patient.

The answer to (these questions) can sometimes be confused because the subject of the pathologist's examination is dead. The issues for most other doctors are clearer because there is a living patient. However, there is at least the argument to be made (and it is the instinctive feeling of many forensic pathologists) that a duty is owed to the deceased, or at least the memory or reputation of the deceased, that the true cause and circumstances of the death be revealed. If such a duty is doubted, a stronger case can be made that the forensic pathologist has a duty to the community at large because of the trust that the community (including the deceased's relatives) has in the integrity of the medical profession generally. On that basis the forensic pathologist has a duty not to collude in wrongly hiding or obscuring the cause and circumstances of the death.

Unquote

*For the Missing, Prof. Stephen Cordner has added this comment: "On reflection, this paragraph is deficient in that the emphasis on identification is not explicit. Of course, in domestic practice, identification is not such a common problem. The need for identification is implicit, however, in the above attempt to define the duty of a forensic pathologist. The duty that the true course and circumstances of death be revealed only has its fullest meaning when these come to the attention of those for whom it matters most – the family and friends of the deceased. This presupposes an identification."*

Quote

#### Aims of the autopsy

The basic aims of the forensic autopsy are as follows:

- o To discover, describe and record all the pathological processes present in the deceased, and where necessary, the identifying characteristics of the deceased.
- o With knowledge of the medical history and circumstances of death, to come to conclusions about the cause and time of death and factors contributing to death and, where necessary, the identity of the deceased.
- o In situations where the circumstances of death are unknown and in question, to apply the autopsy findings and conclusions to the reconstruction of those circumstances. This will, on occasion, involve attendance at the scene of death, preferably with the body in situ.
- o To record the positive and relevant negative observation and findings in such a way as to enable another forensic pathologist at another time to independently come to his or her own conclusions about the case. As forensic pathology is essentially a visual exercise, this involves a dependence on good quality and preferably colour photography.

## Human remains management

Although these aims pertain primarily to domestic practice, they could usefully underpin aspects of work in the context of the Missing. Deviation from these aims such as a limited examination of human remains must be justified.

### The pathologist's responsibilities and obligations

A fundamental responsibility is to ensure the remains are handled in a dignified way and relatives are taken care of.

An autopsy is a unique procedure in medicine. Virtually all other procedures in almost every other aspect of medicine are performed for the benefit and with the consent of the individual. In a forensic pathology context, the deceased person has been taken out of the control of the relatives and the autopsy is often performed without the express consent of the deceased person (while alive) or the next of kin. These two factors alone place a heavy responsibility on forensic pathology systems to ensure that the autopsy is carried out in a dignified way with appropriate respect for the deceased person and interests of the next of kin. This obligation is often expressed in relevant legislation dealing with autopsies. In discharging this obligation, regard should be had for the following:

- o facilities and equipment available for the receiving and proper storage of bodies and the subsequent performance of autopsies;
- o facilities for the viewing of bodies by relatives;
- o the performance of the autopsy competently within a reasonable time of receipt of the body;
- o the ability of the next of kin, or other properly interested parties, to be represented by an appropriate qualified person at the autopsy;
- o the reconstruction of the body after the autopsy;
- o the availability of the body for funeral purposes within a reasonable time of the autopsy;
- o the provision of the results of the autopsy within a reasonable time and their availability to next of kin and other properly interested parties; and
- o the provision of the formal report within a reasonable time and its availability to next of kin and properly interested parties.

Unquote

*Prof. Stephen Cordner has added this comment: "Although these responsibilities and obligations pertain primarily to domestic practice, they also apply to work in the context of the Missing. Deviation from them must be justified."*

Quote

### The forensic specialist as an expert witness

General requirements for forensic practitioners in meeting the needs of the justice system are to:

- o be readily available;
- o be familiar with the basic principles and practice of the legal system and with the obligations of those within the system, especially the police;
- o reliably collect appropriate samples from victims of crime, scenes of crime and suspects, the proper analysis of which can provide results which can be used as evidence in an investigation and prosecution; and
- o make reliable... post mortem observations which form the basis of reasonable assessments and measured expert opinion.

In terms of attendance in court, there are many pitfalls awaiting practitioners as they give evidence of their observations and conclusions (*what follows applies equally to the formulation of conclusions and opinions as it does to the giving of evidence*). The pitfalls or the mistakes that can be made, occur in the following areas:

- o providing opinions which are at the edge of, or beyond, the expertise of the witness (*or forensic practitioner*);
- o providing opinions that are based on false assumptions or incomplete facts;
- o providing opinions based on incomplete or inadequate scientific or medical analysis; and
- o providing opinions which are biased, consciously or unconsciously, in favour of one side or the other in the proceedings.

Unquote

### 5.2.7 A team of international forensic specialists: who is in charge?

The term "forensic science" is a collective term for a group of disciplines. These include:

- o forensic pathology,
- o forensic anthropology,
- o forensic odontology,
- o forensic entomology,
- o forensic radiology,
- o forensic fingerprint identification,
- o photography,
- o molecular biology,
- o mortuary science.

In virtually all countries, human remains are examined in facilities run by medical doctors, often forensic pathologists. This is often reflected in domestic law, which requires that autopsies can only be performed by, or under the supervision of, a pathologist or medical doctor. Depending on resources, much assistance is provided by non-medical specialists.

When these professional groups move from their everyday domestic context to work in an international context, often for the first time and in a foreign jurisdiction, a specific person with relevant experience needs to be placed in charge of the examination of the remains. *This is not the same as being in overall charge of the team or operation.* This person needs to have the qualifications, skills and experience to determine:

- o the identity of the deceased;
- o pathologies (including injuries) present in the deceased; and
- o the cause of death.

This person needs to be a medical practitioner with recognized qualifications, skills and experience in forensic pathology. His or her conclusions must be accepted as credible by local officials, the families and international tribunals.

There is at present no international framework for recognizing qualifications, skills and experience. Forensic pathologists deal, as a matter of daily work, with the whole range of human remains; they are also medical practitioners who, with varying degrees of success and some spectacular failures, carry out their activities within the most sophisticated ethical framework of all the professions. In addition, domestic structures exist within which medical practitioners can be held accountable for both the practical and ethical quality of their work. Consideration should be given to the extent to which these accountability mechanisms operate in contexts involving missing persons.

### 5.2.8 The legality of undertaking forensic work in a given context

The legal framework which gives a forensic specialist certain rights to work in a given context may be determined by domestic law, international humanitarian law or the United Nations Charter. In addition, the outcome of the electronic workshop, "The legal protection of individual data and human remains", will define certain principles (available in early May 2002).

A forensic pathologist must be a medically qualified person; this is a legal prerequisite. Therefore, with regard to missing persons, the opinion, work and contract of a forensic pathologist may be different to that of a forensic anthropologist or a forensic archaeologist.

Before starting work, forensic specialists should make sure that the following questions are addressed when they are briefed or advised by the relevant authority:

- What is the legal framework within which the forensic specialist will be working? Other questions may determine this:
  - o Which domestic law applies?
  - o What part of the proposed work may be legal and what part may be illegal if performed by a foreign forensic specialist? For example, it may be lawful to watch a *post mortem* being performed by a local pathologist but unlawful, or considered unlawful under national law, to conduct an exhumation.
  - o Are his or her qualifications recognized by the authorities?

## Human remains management

- o Is the contract with the employing agency recognized by the authorities?
- o What legal support is available if the forensic specialist is arrested (whether justifiably or unjustifiably) for doing his or her work?
- o Is the work, in reality, being done in a context which is against or might be deemed to be against domestic law?
- What is the mandate and legal standing of the employing agency (if this is not the authorities) in the given context?
- Can it be assumed that such work performed under a United Nations mandate automatically pre-empts domestic law?
- Has the forensic work been incorporated into any kind of peace process to which the parties to the conflict are committed?

### 5.2.9 Guidelines for forensic specialists working with a variety of international actors

A useful starting point for forensic specialists working in contexts involving missing persons is recognizing that the authorities are the main players in every sense and that it is with the authorities that the responsibility for management of remains ultimately lies. Other agencies would have a lesser role if the authorities fulfilled their responsibilities.

Forensic specialists must understand the different context and priorities that the employing agency might give to their work. They must understand the mission of the employing agency and are responsible for ensuring that the agency is recognized as competent and credible and is willing to work with other agencies. Forensic specialists should also be aware of the wider agenda such an agency may have, e.g., the promotion of human rights and investigating violations (agencies involved in human rights advocacy, such as Physicians for Human Rights and Human Rights Watch); the promotion of international humanitarian law while preserving neutrality and impartiality (e.g., the ICRC); the pursuit of international justice (e.g., an international criminal tribunal).

Forensic specialists must understand the points of compatibility and incompatibility of the different entities and their legal mandates. It is also important to establish which points in the entire process of managing human remains the different entities emphasize.

Consideration of these points will help forensic specialists work within an ethical framework while promoting the application of international humanitarian law and human rights law and at the same time minimizing the families' distress. If these points are not considered, the forensic specialist's credibility might be undermined.

### 5.2.10 Employing forensic specialists: contract considerations

A contract by which a forensic specialist is engaged to work in a context specifically involving missing persons must include the following:

- o an affirmation of professional qualifications;
- o a commitment to work by standard guidelines relating to both exhumation, autopsies **and** identification;
- o a commitment to, if necessary, exhume the remains, identify the body and establish the cause of death on an impartial and objective basis;
- o a commitment to consider the family in parallel in all matters pertaining to remains and to ensure that the authorities or employing agency have done everything possible to make sure that the families are informed and supported;
- o a commitment to treat any remains with due respect;
- o a commitment to brief any forensic specialist who replaces the contractee and to affirm the obligation that that person continues to work by the same guidelines;
- o an indication of how this work will fit into the mandate and legal status of the employing agency;
- o an assurance of security from the authorities;
- o a reference to the handling and preservation of all evidence by standard means;
- o an understanding that exhumation will not take place without initiating a process of identification;
- o a clear indication of whether or not the forensic specialist is expected to present findings in court;

## Human remains management

- o a commitment that health and safety procedures will be followed;
- o a commitment that adequate insurance coverage - such as malpractice insurance - has been provided for all eventualities, as the coverage pertaining to the specialist's domestic work may not apply;
- o an agreement that the practitioner has the right to copies of documents and photos for which he or she was responsible.

### 5.2.11 Forensic specialists and violations of international humanitarian law and human rights

Forensic specialists wishing to become involved in cases involving violations of international humanitarian law or human rights law must realize that there are serious pitfalls.

The following is an excerpt from: S.Cordner, M. El Nageh, B. Linehan, D. Wells, H. McKelvie, *Ethical Practice in Laboratory Medicine and Forensic Pathology*, WHO, EMRO, 1999.

Quote

The ethical principles underpinning medical practice run counter to the medical practitioner's collusion in any form of violations of international humanitarian law or human rights. This is especially relevant for forensic practitioners, as their role and responsibilities may entail examining those who have been killed or injured in circumstances of torture or illegal imprisonment, or other circumstances that amount to such violations. This can place practitioners in extremely compromising situations, which may, in varying degrees, amount to participation in violations. For example, forensic practitioners may participate:

- o consciously, by failing to record and effectively document signs of abuse, or by failure to ensure that abuse is reported to the appropriate authorities;
- o reluctantly, where their own or professional values are outweighed by pressure from government or other agencies; or
- o unconsciously, where insufficient training or skills result in failure to recognize and record abuses adequately.

Any form of participation in violations of international humanitarian law or human rights amounts to a breach of a forensic practitioner's professional ethical obligations. Decisions to adhere, or not to adhere, to ethical standards are made consciously or unconsciously by individuals, taking into account other matters such as their own and others' safety and security.

Unquote

*During the electronic workshop, Prof. Stephen Cordner added: "Forensic practitioners can quite easily collude with violations of international humanitarian law and human rights, even unconsciously. On the other hand, no one is expected or obliged to be a hero and to withstand coercion which involves threats to one's own or another's security."*

### 5.2.12 An international standard-setting body for forensic specialists (with regard to missing persons and the International Criminal Court): a possible outcome of this workshop?

Is it reasonable to propose that the outcome of the workshops on the missing include the identification or even the establishment of an international standard-setting body for forensic specialists working in this field? This body would be responsible for legal, ethical and technical standards applicable both in respect of missing people and in the context of the International Criminal Court.

Such a body could encourage governments to build into their forensic services a capacity to send people for international work, or promote the establishment in different regions or countries of Missing Persons Clearing Houses (see background paper by Dr Alex Olumbe).

Urgent consideration should be given to arrangements with an international network of forensic organizations to ensure the staffing capacity exists to respond to events. Such arrangements would improve both the teaching of the skills and knowledge acquired in such assignments and pertinent research.

### 5.2.13 Identification: a proposed strategy (for contexts involving missing persons)

#### Introduction

As with any scientific discipline applied in the context of armed conflict or its aftermath, there must be a realistic appraisal of the objectives that are obtainable in that context and whether modern technologies necessarily help reach them.

In the context of the missing, it is clear that the forensic specialist's task in identifying, for example, the remains of people buried in a mass grave is different from that in a domestic situation. This means that different or simpler technologies may be more appropriate and that the likelihood of absolute certainty of identification may be slightly less. However, using simpler or makeshift technologies does not mean lowering standards of practice; a high standard of work is possible. In the case of forensic specialists working in the field, this requires flexibility to change one's practice where necessary and a willingness to work according to certain standard guidelines and in cooperation with other specialists and agencies.

#### A proposed strategy for identification

A positive identification can be made by keeping to the following list of priorities:

1. In the absence of decomposition or mutilation of remains, immediate and visual positive identification of remains by the family (a **subjective** match) may, with regard to missing persons, have priority over all other methods. If local law insists and the family and circumstances permit, an **objective** match should be sought by the methods considered below.
2. Positive identification of decomposed or mutilated remains, clothing or personal effects by the family - usually by a family member - (subjective match) *must be combined with* a match using traditional techniques of *ante mortem* and *post mortem* data matching (an objective match) based on the following:
  - o fingerprints if the skin is preserved and *ante mortem* records exist;
  - o dental records if *ante mortem* records exist;
  - o personal data, belongings and clothes;
  - o medical records.The match should be agreed by two independent forensic specialists. If there is any doubt about the subjective and / or objective match or both, DNA testing may then be appropriate.
3. Where there is no subjective match, there must be an adequate match using the above objective methods *and* the match must be agreed upon by two forensic specialists. If the experts cannot agree, DNA testing may then be appropriate.

In addition, where there is no subjective match:

- o traditional techniques which match *ante mortem* and *post mortem* data have priority over other laboratory techniques;
- o what is acceptable to the family must be scientifically defensible;
- o the process of making a positive identification must be ethically defensible.

However, at a practical level:

- o the degree of certainty required for the identification process may vary from one context to another;
  - o any misidentification of remains has the potential to render other remains non-identifiable.
4. Remains which are not identified must be coded; this code must be registered on the *post mortem* data and at the precise location where the remains are stored or buried. In this way, in the event of *ante mortem* data becoming available, the precise location of the individual remains will be known.

#### Comments on this proposed strategy

Prof. Stephen Cordner: " *For the first point to be valid, an expert judgement has to be made that the body is capable of being identified i.e., it is not so decomposed or traumatised that visual identification would be unreliable. There are*

## Human remains management

*examples of visual identification even in optimal circumstances being mistaken. The person believes they are about to be shown their relative, close their eyes at the critical moment because they can't bear the thought of seeing the person dead, and confirm the identification!! So proper supervision of the visual positive identification is critical. Such an identification should not preclude the recording of basic identifying data or any autopsy."*

Dr Bill Haglund: *"The basic premise here is problematic. For a scientist, objective infers a scientifically defensible opinion that can be independently verified by independent experts and based on existing records. In the context of identification, these types of identification include: fingerprints, dental records, medical records and DNA. Visual identification, clothing and personal effects, and even body markings and tattoos can prove problematic. Circumstantial identification in the domestic context may be more reliable, but that does not make it scientific. In the end, they boil down to subjective opinion whoever makes them. I realize that most of identification in the world are made by these means but mistakes are made even under the best circumstances. Subjective identifications become especially problematic when the context in which they are being made is in conflict and post-conflict circumstances and when there is time and/or distance interning between the time of disappearance and the time the remains are recovered. For example, for victims of certain Kosovo graves one might defend circumstantial identifications verified by survivor-made identifications. I believe this sort of identification was practice when local dead had been buried in or near their own villages and, at times, possibly buried by people who knew them. For Srebrenica victims this would not be possible. Mandates for proposed individuals in a multiple victim grave should also be held suspect and only be used as a potential guideline for who might be in a grave. When there is doubt, objective means of identification should be pursued. Another issue to think about here is that families often have doubts about how identifications are made. They have the right to seek outside verification. If an identification proves wrong, or strongly in doubt, this casts suspicion on all identifications made in the project."*

### 5.2.14 Introduction to using DNA for identification in the contexts involving missing persons

#### Introduction

The identification of human remains involves complex scientific, technical, legal, ethical and cultural issues. In recent years, the issue has been further complicated by the arrival of technologies that permit analysis of DNA in remains and in people who might be relatives of missing persons. The objective of the preparatory documents for this workshop is to provide some legal and ethical guidance for the use of DNA analysis within an operational context. Specific scientific and technical aspects will be considered in a later workshop along with pertinent social and cultural issues.

Human remains can be identified by a number of means. The most obvious and most common are direct means: a dead body may have identity papers or identity tags; the relatives or friends of the dead person may make an immediate identification. When direct identification is not possible, forensic science may help by comparing detailed findings of the remains with information about the person before their death (e.g., gender, height, weight, dental records, scars, old fractures, finger prints). This comparison of *ante mortem* and *post mortem* data can be supplemented by laboratory tests such as blood group (ABO markers) and HLA typing if these were known before the person died. Since the mid-1980s, techniques for identification involving the analysis of DNA in remains have become technically possible and available. DNA analysis using certain techniques can apparently provide near 100% certainty of proof of identity. DNA tests carry an equally important potential to exclude a family relationship.

#### Some technical aspects

##### 1. Five steps in the process

The process of using DNA for identification of remains has five steps:

1. retrieving the DNA from whatever source of the remains;
2. retrieving DNA from likely relatives of the missing person or from the missing person's hair, saliva stains or unwashed underclothes;
3. profiling the DNA (by marker identification for nuclear DNA or by sequencing of sections in mitochondrial DNA - see below) from both sources;
4. matching the results of the process of profiling;

## Human remains management

5. deciding on the degree of matching that equates with more than 99% certainty of the claimed relationship between the person (the remains) and the family member.

### 2. What is the difference between nuclear and mitochondrial DNA?

The two sorts of DNA used for the purposes of identification by family matching in exhumed remains are:

#### *Nuclear DNA*

Nuclear DNA is relatively easy and fast to analyse. It is very difficult to extract from bones and teeth and is therefore best extracted from blood, soft tissue or blood stains. It degrades in a few weeks if the remains are not carefully stored.

The most accurate matching is done *either* when quality DNA of the missing person can be harvested (hair, saliva, etc.) *or* when both parents of the presumed missing person can give a blood sample. Nuclear DNA is much more difficult to use for matching with other relatives. Obviously, considerable complications arise when the presumed father is not the biological father.

For identification purposes, there are about 30 "markers" identified in human nuclear DNA, each of which has between 4 and 30 variables or "alleles". Each person's nuclear DNA is duplex and the alleles differ between each of the two strands. There are thus many millions of possibilities; however, any variation in markers must be found in either the mother's or the father's nuclear DNA. There are a number of commercial kits for testing these markers.

#### *Mitochondrial DNA*

Analysis of mitochondrial DNA is slow, difficult and very expensive. It is possible to extract it from bones and teeth and so it can be used in testing old remains.

Mitochondrial DNA is passed to a person only through the maternal line. This means a person's remains can be matched to the mother, maternal grandmother or maternal aunts or uncles, i.e., it can be used for matching more distant relatives. It also means that mitochondrial DNA is not unique to any one person. Furthermore, about 0.1% of the population may share the same mitochondrial DNA.

The analysis is difficult because it is not done by detection of markers with a kit but by sequencing (base by base) of the DNA. Two sections of mitochondrial DNA are variable and it is these sections which are sequenced. In the future, it may be possible to do the analysis using a paper strip of markers.

### 3. Software considerations

In small numbers, the matching can be done on an individual basis, i.e., by direct vision of the results of profiling. The software probably exists to do the matching for large numbers in national disaster agencies such as the Royal Canadian Mounted Police (which did the DNA matching of the victims of Swissair 111).

CODIS is the software developed by the FBI for matching the nuclear DNA harvested from different crimes; this pertains to individuals. Mitosearch is the software, also developed by the FBI, used to indicate, for instance, which ethnic group a person comes from, thus narrowing criminal searches.

### **5.2.15 DNA analysis for identification in contexts involving missing persons: operational issues**

The legal principles pertaining to the use of DNA analysis in identification will be defined in the outcome of the electronic workshop, "The legal protection of individual data and human remains" (available in May 2002). There are also non-legal questions specific to the use of DNA in context involving missing persons. This document presents a series of questions to which there are no immediate answers. Some of the questions may also be considered in the workshop, "Human remains: management of remains and of information on the dead". The principle issue is whether DNA analysis for the purposes of identification has worldwide operational feasibility.

## Human remains management

The questions are:

- o What are the costs?
- o What are the logistic implications?
- o Is the programme sustainable?
- o Who bears responsibility for collecting, transporting and analyzing samples when responsibility for the programme is shared by different agencies?
- o Who bears responsibility for errors in these processes?
- o How reliable and accurate are techniques using nuclear DNA technology, e.g., Powerplex 16, for confirming or refuting a claimed family relationship?
- o How reliable and accurate are techniques using sequencing of HV1 and HV2 areas of mitochondrial DNA for ascertaining or refuting the claimed family relationship?
- o How large must the relevant databases be to ascertain the reliability and accuracy of such techniques?
- o Does the necessary software exist to do the analysis and the matching on a large scale?
- o Is the software available for use in the field and is it "user-friendly"?

There are also wider questions raised by the availability of advanced DNA technologies, such as:

- o Will the expectations of families and communities be unreasonably elevated or changed?
- o How should families and communities be educated about the advantages and disadvantages of DNA analysis?
- o What is an appropriate response to requests to use DNA analysis to confirm cases from earlier conflicts that have been "closed"?
- o To what extent, as a principle, should new technologies be introduced into the field when they are still in the research or development phase?
- o How and when should the issue of research using anonymized data be considered?
- o How are individual and community questions about non-biological fathers handled?

### 5.3 ICRC Preparatory documents to workshop Human remains: Management of human remains & information on the dead

#### 5.3.1 Theme 1 - Autopsy protocols and recording *post mortem* data

That part of the autopsy relating to identification should focus on the details that might be matched with *ante mortem* data. Some particularly important points are listed below.

1. The time since death should be estimated.
2. The body should be photographed clothed and without clothes.
3. All shoes, clothes and personal effects should be noted and stored.
4. The following should be recorded:
  - A. hair colour;
  - B. sex;
  - C. height;
  - D. weight;
  - E. likely age;
  - F. general build (e.g., fat or thin).
5. The unclothed body should be examined for distinctive features such as:
  - A. tattoos;
  - B. birthmarks;
  - C. unusual hair distribution;
  - D. scars (surgical or traumatic);
  - E. nicotine staining of fingers;
  - F. the state of the fingernails.
6. Fingerprints should be taken.
7. If the remains consist only of bones, any signs of previous fractures should be noted.
8. It is essential that a forensic odontologist examine and if possible x-ray any remaining teeth.
9. Material should be kept only for the purposes of identification or to establish the cause of death.

Two autopsy protocols are referred to:

1. **UN Manual on the effective prevention and investigation of extra-legal, arbitrary and summary executions - ST/CSDHA/12 - 1991 - IV. Model autopsy protocol**, which is the same as the **Guidelines for the conduct of United Nations inquiries into allegations of massacres, 1995 - Annex IV** (see annex A);
2. **INTERPOL-DVI Autopsy Protocol** (see annex B).

#### 5.3.2 Theme 2 - Collecting *ante mortem* data: a proposed standard formula

This document compares the forms used to collect *ante mortem* data by Physicians for Human Rights (PHR) in Cyprus and in Bosnia, by Interpol-DVI (Disaster Victim Identification) and by the Argentine Forensic Anthropology Team (EAAF).

<b>INTERPOL DVI</b>	Asks numerous questions about personal belongings: clothes, shoes, jewellery, etc.
	Asks many precise questions about medical information provided by medical doctor, dentist, hospital records.
	Is the only form that asks questions about blood, fingerprints, DNA, X-rays.
	Asks for no information on the circumstances of the disappearance.
<b>PHR Cyprus</b>	Is the most elaborate form: all the questions are formulated so as not to cause the person being interviewed any distress. The questions are very precise and detailed.
	Asks for detailed information on the missing person's dental and medical history.
	Asks many questions about the circumstances of the disappearance, but does not take into consideration the fact that the person could still be in custody. Gives the impression that the person is dead/has been buried.
	Asks for detailed information on personal belongings.

## Human remains management

<b>PHR Bosnia</b>	Asks for detailed information on the missing person's identity: last known address, profession, company, place of work.
	Takes into account the fact that the missing person could still be in custody.
	Asks for detailed information on the missing person's physical description, particularly the hair.
	Is the only form that asks about the identity of the nearest maternal relative.
<b>EAAF</b>	Not very detailed, with few guidelines for the interviewer.
	The questions are general, and there is no list of examples.
	Few questions about the circumstances of the disappearance.
	Relatively detailed with regard to dental history.

Standard proposals are made for:

1. the information that should be collected about *missing persons presumed dead*;
2. the information that should be noted for the *person interviewed*;
3. the information that should be collected from *other people*.

For all three types of information, the four forms are compared in detail to obtain a well-grounded standard proposal.

The following comments were made during the electronic workshop on *Human remains and forensic sciences*, which took place in February and March 2002:

- Dr Stephen Cordner:  
*"The standard proposed in the comparative table looks excellent to me. Much will depend on the attentiveness of those completing the forms, the quality of the translators, and the understanding that both those groups have of the use the information will be put to."*
- Dr Bill Haglund:  
*"It should be understood that the examples of 'formulas' of ante mortem data collection often need to take into consideration past progress that may have been made regarding the missing issue (information already available), the culture and infrastructure that would account for certain types of information being available, and the time period of the deaths. For example, in Cyprus, a majority of the DNA had already been collected (maternal as well as paternal), genealogies of families had already been documented, and circumstances of death and burial were often known. The disappearances had occurred twenty-five plus years previously.*

*For Bosnia, the nearest maternal relationships were crucial because the lab in which initial analyses were being conducted and the techniques available at the time of the project's beginning were swayed towards mitochondria analyses. The DVI 'formula' is taken in the context of social infrastructures that have not been compromised by recent conflict and/or can assume that much medical, dental and other documentation, such as fingerprints, exists. No circumstances about the disappearance are asked because it is assumed they are unknown."*

### 5.3.2.1 The information that should be collected about *missing persons presumed dead*

#### Section 1

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - basic</b>				
Family name	First name	First name	Name	Full name
Forename	Last name	Last name (Surname)	Last name	Alias
			Nickname	
	Father's name	Father's name		Father's name
				Mother's name
Marital status	If a woman, is she married?	Marital status		Marital status
		Name of spouse/fiance		

## Human remains management

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
				Name of spouse/fiance
Family name at birth	If yes, what was her surname before marriage?	If married, surname before marriage		If married, surname before marriage
	Sex	Sex	Sex	Sex
Date of birth	What was the date when the missing person was born?	Date of birth	Date of birth	Date of birth
	How old is the missing person?			Age
			Age when last seen alive	
	Where was the missing person born? Place + municipality	Place of birth	Place of birth	Place of birth
				District of birth
				Province of birth
				Country of birth
Nationality	What is his/her nationality ?		Nationality	Nationality of birth
			Ethnic group	
National ID Number			ID	ID card number
Religion				Religion
				Rank
				Military number
			Single/married	
			Offspring	

### Section 2

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - last known permanent address</b>				
Full Address	Where was he/she living before the war? Full address		Last resident address	Phone number
				Last known address
				Last known place
				Last known district
				Last known province
				Last known country

### Section 3

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - occupational status</b>				
Occupation	What was the status of the missing person before the war? (farmer, company unemployed, medically disabled, soldier, policeman, housewife, retired/pensioner, other)	Working status/occupation at time of disappearance (student, farmer, unemployed, soldier, policeman, private sector, other)	Profession	Occupation
	Was the missing person employed with a company before the war?			
	In which company did he/she used to work?		Working place	In which company did he/she work?

## Human remains management

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
	Name, place + municipality			
				Place
				District
				Province
				Country
	Was the missing person in school at the beginning of the war?		Political, trade union, student, other affiliations	
	If yes, name of the school, place + municipality			Name of the school
				Place
				District
				Province
				Country

### Section 4

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal on the missing person - photographs / documents</b>				
Photographs: enclosed, obtainable	Do you have any personal document of the missing person? If yes, what type of document?	Do you have with you a photo of your relative in which he/she is smiling and the detention is visible?		Photographs: enclosed, obtainable
Documents: official records, police records, medical records, hospital records, hospital x-rays, dental records, dental x-rays, dental place, other records.	Is a photo of the missing person available? Do you have the photo now? If no, who has the photo and where do they live? (Full name + full address)	If yes, would you allow us to make a copy of the photo and to return/mail it back to you? + Address where we can mail the photo.		Documents: official records, police records, medical records, hospital records, hospital x-rays, dental records, dental x-rays, dental place, other records.

### Section 5

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - blood relation</b>				
DNA			Genealogical tree of the victim (for DNA purposes)	DNA

### Section 6

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - fingerprints</b>				
Ever fingerprinted?				Ever fingerprinted?

### Section 7

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - physical description</b>				
Height	Do you know the actual height of the missing person? If yes, what is the height? If no, can you show me approximately how tall he/she is?	What was his /her height? Do you remember it approximately by memory or with precision from an identity card?	Physical complexion: size	Height
Weight			Stature: exact, approx.	Weight

## Human remains management

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
			Weight	
Build			Chest: broad, regular, narrow	Build
Race: caucasoid, mongoloid, negroid,				Race (caucasian, mongoloid, negroid)
	Is the person right-handed, left-handed or ambidextrous?		Laterality	Is the person right-handed, left-handed or ambidextrous?

### Section 8

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - hair</b>				
Baldness	Does the missing person have hair?	Did your relative have hair?	Hair amount	Baldness
Hair colour	What colour is the missing person's hair?	What colour was his/her hair?	Hair colour	Hair colour
Type: natural, artificial hairpiece			Hair type	Type (natural, artificial hairpiece)
Shade: light, medium, dark, turning grey				Shade (light, medium, dark, greying)
Thickness				Thickness
	Does the missing person have any grey hair?			Does the missing person have any grey hair?
	If the missing person is a woman, did she dye her hair?			If the missing person is a woman, did she dye her hair?
	If yes, did she use colour or henna?			If yes, did she use colour or henna?
Hair length	What length is the missing person's hair?	What length was his/her hair?		Hair length
Style: straight, wavy, curly, parted	What kind of hair is it: straight, wavy or curly?	What kind of hair : straight, wavy, or curly?		Style (straight, wavy, curly, parted)

### Section 9

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - facial hair</b>				
Beard: type + colour	Does he have a beard?		Beard: colour and shape	Beard type
				Beard colour
Moustache: type + colour	Does he have a moustache?		Moustache: colour and shape	Moustache type
				Moustache colour

### Section 10

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - body hair</b>				
Body hair: extent + colour	Does he have hair on his chest?			Hair on the chest (extent)
				Chest hair colour
	Does he have hair on his back?			Hair on the back (extent)
				Back hair colour

## Human remains management

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
Pubic hair: extent + colour				Pubic hair (extent)
				Pubic hair Colour

### Section 11

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - ears</b>				
Size / angle, ear lobes				Size
				Angle
				Ear lobes

### Section 12

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - mouth</b>				
Shape / other				Shape / other
Lips: shape / other				Lips: shape / other

### Section 13

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - forehead</b>				
Height / width / inclination			Skull: shape and characteristics of the head: dolicocephalic/brachicephalic, supraorbital arches, other.	Height / width / inclination

### Section 14

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - glasses</b>				
Glasses: Always wearer : y/n	Does he/she wear glasses?	Did he/she wear glasses?	Glasses: yes/no	Did he/she wear glasses? Always? y/n
		What were the glasses for (myopia, astigmatism, farsightedness)?		What were the glasses for (myopia, astigmatism, farsightedness)?
Frame Lenses (glass), lenses/shape	If yes, can you describe the frame of the glasses?	What did the glasses look like? Frame type?		What did the glasses look like? Frame type
		What colour were the frames?		What colour were the frames?
Optometrist				Optometrist
Contact lenses	Does he/she wear contact lenses?	Did he wear contact lenses?		Did he/she use contact lenses?

### Section 15

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - eyes</b>				
Colour / shade, distance between eyes, peculiarities	What colour are the missing person's eyes?			Eye colour
				Shade, distance between eyes
Eyebrows: shape /				Eyebrows: shape /

## Human remains management

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
thickness				thickness

### Section 16

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - nose</b>				
Size / shape + peculiarities, curve/angle			Shape of the nose: straight, eaglelike (vertical), narrow, broad (horiztional)	Size / shape + peculiarities, curve/angle

### Section 17

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - chin</b>				
Size / inclination + shape			Shape of the chin	Size / inclination + shape

### Section 18

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - neck</b>				
Length / shape, + peculiarities				Length / shape, + peculiarities

### Section 19

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - hands</b>				
Shape / size, nail length, peculiarities				Shape / size, nail length, peculiarities

### Section 20

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - feet</b>				
Shape / size, nail length, peculiarities				Shape / size, nail length, peculiarities

### Section 21

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - skin traits</b>				
Specific details: scars, skin marks, tattoo marks, malformations, amputations: head, neck, right arm, left arm, right hand, left hand, body front, body back, right leg, left leg, right foot, left foot	Does the missing person have any tattoos? If yes, please describe below:		Identifying skin traits: tattos, scars, birth marks, spots, others. Give dimensions and characteristics	Does the missing person have any tattoos? If yes, please describe below:
	Does the missing person have any injury scars, surgical scars or surface scars (burned)? If yes, describe below :			Does the missing have any injury scars, surgical scars or surface scars (burned)? If yes, describe below:
Other peculiarities:	Does the missing person			Does the missing have any

## Human remains management

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
describe and draw	have any other marks on his/her skin ? If yes, describe below :			other marks on his/her skin ? If yes, describe:
Circumcision				Circumcision

### Section 22

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - smoking habits</b>				
Type: cigarettes, cigars, pipe, other		Did he/she smoke? If yes, what did he/she smoke (cigarettes, cigars, pipe, chew tobacco?)	Smoker: yes/no Cigarettes, pipe, cigars. How much?	Did he/she smoke? If yes, what did he/she smoke (cigarettes, cigars, pipe, chew tobacco)?
		Did he/she have a cigarette lighter? Please describe it.		Did he/she have a cigarette lighter? Please describe it.
		Do you remember the brand of the cigarettes? Please describe it.		Do you remember the brand of the cigarettes? Please describe it.
		Did he/she use a cigarette holder. Please describe it.		Did he/she use a cigarette holder? Please describe it.

### Section 23

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - general medical history</b>				
	Has the missing person had any operations on the brain or head? When was the operation?	Did your relative have any accident while playing at school or home, working, driving, doing sports, other activity? Please give details.		Has the missing person had any operations on the brain or head? When was the operation?
	Has the person ever had any operations on any bones, including the jaw, spine or arms? If yes, what bone? What was the operation?	Did your relative ever have a : sprain/twist, dislocation, fracture, other injury? to which part of the body?	Lesions in joints: twists, dislocations, others	Has the person ever had any operation on any bones, including the jaw, spine or arms? If yes, what bone? What kind of operation?
Implant: intrauterine contraceptive devices, other implants	Does he/she have any medical devices or implants in his/her body such as: pacemaker, screws, wires or artificial joints? If yes, name them.		External elements in the body: plastic or metal prosthesis, IUD, non organic heart valve, others.	Does he/she have any medical devices or implants in his/her body such as intrauterine contraceptive devices, pacemaker, screws, wires or artificial joints? If yes, name them.
	Has he/she ever had a broken bone? If yes, did he/she go to the doctor or hospital for the broken bone? Which bone was broken?		Fractures: type and circumstances in which the fracture occurred	Has he/she ever had a broken bone? If yes, did he/she go to the doctor or hospital for the broken bone? Which bone was broken?
	On which side of the body was the bone broken?			On which side of the body was the bone broken?
	Date of the broken bone.	When did this take place?	Date of the fracture	Date of the broken bone.
		Was a splinter or cast used?		Was a splinter or cast used?

## Human remains management

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
	Where was he/she treated for this broken bone?	Where was he/she treated (doctor, hospital)	Did a doctor see it?	Where was he/she treated for this broken bone?
	Does the person walk with a permanent limp? Give the reason for the limp.	Did he/she walk with a permanent limp? If yes, give more information which might help in the identification.		Does the person walk with a permanent limp? Give the reason for the limp ?
		Why did he/she have the limp? Was he/she born with the limp or did he/she have it after an injury?		Why did he/she have the limp? Was he/she born with the limp or did he/she acquire it after an injury?
		Did your relative have any deformity of the spine? If yes, please describe what the deformity looked like.	Congenital deformities: spina bifida, extra ribs or vertebrae, others	Did your relative have any deformity of the spine? If yes, please describe what the deformity looked like.
		Did he/she have any problems / pain with their joints? Shoulders, back, knees. What was the location of the joint problems?	Professional or acquired deformities: pain in the lumbar area, disk hernia, others	Did he/she have any problems/pain with the joints? Shoulders, back, knees. What was the location of the joint problems?
	Does the missing person have any other special visible characteristics from childhood or adulthood such as curvature of the spine, arthritis, harelip or other deformities of the head, face, upper extremity for example?	Did the person have any deformity from this? What sort of deformity did the person have?	Serious diseases with consequences on bones: TBC, starvation, poliomyelitis, rickets, sinusitis, decalcification, others	Does the missing person have any other special visible characteristics from Childhood or adulthood such as curvature of the spine, arthritis, harelip or other deformities of the head, face, upper extremity for example? Did the person acquire any deformity from this? What sort of deformity did the person have?

### Section 24

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - amputation, missing body parts</b>				
	Has the missing person lost any body parts? If yes, what are the missing parts?	Did he/she have an amputation / a missing body limb? which limb? Please provide more information.		Did he/she have an amputated, missing body limb? which limb? Please provide more information.
		Has the limb been missing since birth?		Has the limb been missing since birth?
		Was it surgically removed?		Was it surgically removed?
		Did it disappear at the time of the disappearance/death?		Did it disappear at the time of the disappearance/death?
		Did your relative have any surgery on the head? If yes, what kind of surgery?		Did your relative have any surgery to the head? If yes, what kind of surgery?
		Did he/she ever have a cyst on the head?		Did he/she ever have a cyst on their head?

## Human remains management

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
		Did the relative have any medical devices (pacemaker for heart, valves in heart, rods in back, plates or screws)? If yes, what medical device did he have?		Did the relative have any medical devices (pacemaker for heart, valves in heart, rods in back, plates or screws)? If yes, what medical device did he have?
		When was the device implanted?		When was the device implanted?
	Does the missing person have any prosthesis? If yes, what kind of prosthesis?	Did he/she have any artificial limbs (arm or leg)? If yes, which limb?		Did he/she have any artificial limbs (arm or leg)? If yes, which limb?

### Section 25

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - for woman</b>				
	Was the missing person pregnant at the time of the disappearance?	Was she pregnant at the time of her disappearance?	If the victim is a woman, indicate number of pregnancies and deliveries	Was the missing person pregnant when she disappeared?

### Section 26

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - medical records</b>				
General state of health: describe past and present diseases and / or treatment	Are there any medical problems the missing person suffers from that require medicine or special medical equipment?	Are there any medical problems that your relative suffered from that required medication or special medical equipment? Did he/she have problems such as arthritis, TB, severe heart disease, kidney dialysis, severe lung disease, asthma, skin condition?		Did your relative suffer from any medical condition that required medication or special medical equipment? Did he/she have problems such as arthritis, TB, severe heart disease, kidney dialysis, severe lung disease, asthma, skin condition?
Medication (what medicines are kept at residence?)	Was the missing person carrying any medication such as skin cream or tablets?	What medical equipment might he/she have been carrying (asthma inhaler, skin cream tubes, syringe for insulin, pill bottles)?		What medical equipment might he/she have been carrying (asthma inhaler, skin cream tubes, syringe for insulin, pill bottles)?
	Did he/she usually carry any medical supplies such as an inhaler for breathing, skin cream tubes, syringe, bandages, pills or tablets, etc.	Was he/she taking medication at the time of the disappearance/death? If yes, what medication was he/she taking?		Was he/she taking medication at the time of the disappearance/death? If yes, what medication was he/she taking?
	What type of container did the person carry the medication in?	What did he/she carry the medication in?		What did he/she carry the medication in?

## Human remains management

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
		Has he/she been in hospital?	Indicate any doctor/hospital/clinic were it would be possible to recover any physical data on the victim.	Has he/she been in hospital?
		What was he/she treated for in the Hospital?		What was he/she treated for in the hospital?
		If yes, in which hospital and when?		In which hospital and when?
Family doctor: Name, address + phone		Did he/she have a physician?		Did he/she have a physician?
		Do you know who operated on him/her?		Do you know who operated on him/her?
Medical information provided by family doctor / specialist: regular / irregular patient?		If yes, What is the name of the physician? Were is he/she working?		If Yes, what is the name of the physician? Were is he/she working?

### Section 27

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - medical records available</b>				
Medical records lists: symptoms, findings diagnoses, treatment, prescriptions, reference to specialist, operations, scars, fractures, organs missing, hospitalization, other,		Are there any other medical records that you might have at home? If yes, please describe them.		Medical records lists: symptoms, findings diagnoses, treatment, prescriptions, reference to specialist, operations, scars, fractures, organs missing, hospitalization, other.
Addicted to: tobacco, alcohol, medicine, narcotics.				Addicted to: smoking, alcohol, medicine, narcotics
Infectious disease: hepatitis, aids, tuberculosis, other.				Infectious disease: hepatitis, aids, tuberculosis, other.
If women: abortions, births, hysterectomy.				If women: abortions, births, hysterectomy
Blood group				Blood group
Further medical information				Further medical information
X-rays showing specific conditions			Are there X-rays of the fracture?	X-rays showing specific conditions
Organs removed				Organs removed
Prostheses				Prostheses
Other artificial aids				Other artificial aids

### Section 28

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - dental history</b>				
Dental data provided by dentist / institution: address + documents		Did your relative have a dentist or go to a dental clinic?	Indicate name of dentist, hospital or clinic where dental information on the victim might be available.	Did your relative have a dentist or go to a dental clinic?
		What is the name and address of the dentist?		See section 39 "Personal data - Dentist"

## Human remains management

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
			Bucal hygiene: bad, overage, good.	
			He/she had a full set of teeth? yes/no, doesn't know	
Conditions: cast restoration, dentures, gaps, other, upper part, full upper, inlays, crowns, bridges.	Does the missing person have any of the following dental conditions: fillings, extractions, gold teeth, silver teeth, broken teeth, crowns, black/brown teeth, decayed teeth, upper prosthesis?	Number and/or describe: fillings, extractions, crowns, silver teeth, gold teeth, black/brown teeth, broken teeth, decayed teeth, bridges, dentures.	If the victim had lost teeth, indicate which ones. If the relative does not remember the exact location and name of the missing teeth/tooth, indicate upper or lower, right or left side, anterior or posterior area.	Number and/or describe: fillings, extractions, crowns, silver teeth, gold teeth, black/brown teeth, broken teeth, decayed teeth, bridges, dentures.
			Indicate the situation of each of the four molars. Description of size and shape of the central and lateral upper and lower incisors.	
		Did he/she suffer from toothaches?		Did he/she suffer from toothaches?
		When he/she smiled, what did you notice about his/her teeth?	Fractured teeth? yes/no  Colour of the teeth: indicate if the victim had stained teeth. Stains can be the result of smoking, of certain drugs, drinking water with too much fluoride, other.	When he/she smiled, what did you notice about his/her teeth?
			Bruxism (grinding teeth while sleeping): yes/no	
	Missing all teeth with upper and lower dentures.	Was your relative's jaw pushed out, pulled in or in normal alignment?	Indicate the position of the teeth/tooth.	Was your relative's jaw pushed out, pulled in or normally aligned?
	Overlapping teeth? If yes, where is the overlap?	Did he/she have overlapping teeth?	Rotation of teeth: gyration, mesialization, etc.	Did he/she have overlapping teeth?
Specific data: crowns, bridges and dentures.	A gap or space between the upper two front teeth? A gap or space between the lower two front teeth?	Did he/she have a gap between the teeth?	Interincisal diastema: yes/no. Description.	Did he/she have a gap between the teeth?
Further data: occlusion, attrition, anomalies, smoker, periodontal status, etc.	Is there any additional information you can give me about his/her dental history?	Is there any additional information you can give me about his/her teeth (rotation of teeth)?	Restoration: filling, jacket (metal, golden, porcelain, acrylic, root canal, partial or complete prosthesis, others)	Is there any additional information you can give me about his/her teeth (rotation of teeth)?
X-rays available or further material?		Are you aware of any dental records?	Congenital abnormalities: supernumerary teeth, agenesis, hypoplasia, others.	Are you aware of the existence of any dental records?
Dental information obtained from family members and/or others.		If yes, please tell me the location of the dental records.		X-rays available or further material?
		What is the name of the dentist?		See section 39 "Dentist"

## Human remains management

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
		When did the dentist last see him/her?		

### Section 29

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on missing person - clothes</b>				
Clothing and shoes (carried on person or in luggage). Hat, overcoat, scarf, gloves, coat, pullover, tie, shirt, waistcoat, vest, trousers, underpants, socks, dress, cardigan, blouse, skirt, petticoat, chemise, brassiere, panties, girdle, corset, stockings, tights, belt buckle, braces, other.	Do you know what clothes/shoes the missing person was wearing at the time of the disappearance? If yes, please describe them to me	Military uniform, T-shirt, shirt, pullover, jacket, vest, trousers, shorts, skirt, dress, shoes, boots, underwear, belt, socks.	Clothes of the victim.	Clothing and shoes (carried on person or in luggage). Hat, overcoat, scarf, gloves, coat, pullover, tie, shirt, waistcoat, vest, trousers, underpants, socks, dress, cardigan, blouse, skirt, petticoat, chemise, brassiere, panties, girdle, corset, stockings, tights, belt buckle, braces, other.
	If no, who can describe the clothes? Full name + Address			

### Section 30

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - shoes</b>				
		What was his/her shoe size? Do you remember it approximately by memory or accurately?		What was his/her shoe size?
Shoes: type, light, heavy, boots, other / material, colour, design, label, size.				Shoes: type, light, heavy, boots, other / material, colour, design, label, size.

### Section 31

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data of relative - personal effects</b>				
Watch: always wore : y/n? digital, analogue, other / material, colour, design, make, inscription.  Jewellery: wedding ring, other rings, earrings, ear clips, neck chains, necklace, bracelets, other chains, pendant on chain, piercing trinkets, nose ring, anklet, other, etc.	Was the missing person carrying jewellery or other items with him/her at the time of the disappearance, such as a watch, ring, etc.? If yes, please describe them to me.	Describe / draw any bracelet, chain, necklace, ring, other, he/she was wearing.	Personal effects of the victim	Watch: always wore : y/n. digital, analogue, other / material, colour, design, make, inscription.  Jewellery: wedding ring, other rings, earrings, ear clips, neck chains, necklace, bracelets, other chains, pendant on chain, piercing trinkets, nose ring, anklet, other, etc.
Identity papers: passport, driver's licence, credit cards, identity card, donor				Identity papers: passport, driver's licence, credit cards, identity card, donor

## Human remains management

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
card, travellers cheques, personal cheques, health card, other.				card, travellers cheques, personal cheques, health card, other.
		Are there any photographs that show these items? If yes, would you allow us to make a copy of the photo and to return/mail it back to you? Address where we can mail the photo.		
Always carried : y/n Wallet, purse, money belt, badges/keys, currency, other.		What did he/she normally carry in their pockets? keys, wallet, photos, gifts, pocket knives, comb, rosary beads, other.		What did he/she normally carry in their pockets? keys, wallet, photos, gifts, pocket knives, comb, rosary beads, purse, money belt, badges/keys, currency, other.

### Section 32

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - information about the disappearance</b>				
	When did the/she disappear? If not exact date, then record the date interval.	Did you see/talk to your relative before the time of the disappearance / death? If yes, what was the date? If no, who informed you about the circumstances of his disappearance / death ?		See Section 33 "Information related directly to the moment of disappearance / death"
	Did you see the missing person at the time of the disappearance? If yes, when? If no, who told you about his/her disappearance and when?			See Section 33 "Information related directly to the moment of disappearance / death"

### Section 33

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - information related directly to the moment of disappearance / death</b>				
	When was the last time you saw the missing person? If not exact date, then record the date interval. Date last saw the missing person.		Date and place of Detention/Kidnapping/Execution/Murder	When was the last time you saw the missing person? If not exact date, then record the date interval. Date last saw the missing person.
	Where did you last see the missing person? Explain the circumstances.			Where did you last see the missing person? Explain the circumstances.
	Was the person in someone's custody the last time you saw them? If yes, in whose custody was he/she taken away?			Was the person in someone's custody the last time you saw them? If yes, in whose custody was he/she taken away?
	Is there information you can give about those persons?			Do you have any information on those

## Human remains management

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
				persons?
	Was he/she with other people who are still missing? If yes, do you know the names?		His/her detention/kidnapping/ execution/murder is related with other people? Yes/No	Was he/she with other people who are still missing? If yes, do you know the names?
	Was the missing person wounded at the time of last sighting? If yes, what was the date of wounding?	Was your relative wounded at the time of the disappearance/death? If yes, what was the date of injury?		Was your relative wounded at the time of the disappearance/death? If yes, what was the date of injury?
		What is the source of this information?		What is the source of this information?
	What caused the wound? Bullet, grenades, mine, others, accident, unknown.	What caused the injury?		What caused the injury?
	What part of the body was wounded? What side of the body was wounded?	What part of the body was wounded?		What part of the body was wounded?
		Was he/she hospitalized before his/her disappearance/death?		Was he/she hospitalized before his/her disappearance/death?
	Where was he/she wounded? Full address.	Location where he/she was wounded/arrested?		Location where he/she was wounded/arrested?
		Do you know who was with him/her at the time? If yes, please give details.		Do you know who was with him/her at the time? If yes, please give details.
	Have you ever heard from another person that he/she may have died?		If yes, please put the name of the other people, explain the relation with the victim and if they were detained, kidnapped, executed or murder together.	Have you ever heard from another person that he/she may have died?
	Do you know where they saw his/her body?			Do you know where they saw his/her body?
	Was there a witness who saw his/her body?		Eyewitnesses of his/her detention/kidnapping/execution/ murder	Was there a witness who saw his/her body?
	When did the witness see his/her body? If yes please tell me the witness name + full address.			When did the witness see his/her body? please tell me the witness name + full address
	Did you give in writing testimony about the circumstances of last sighting or disappearance? If yes, where is that information?	Location of disappearance or burial. Source of information.		Did you give written testimony about the circumstances in which the person was last sighted or disappeared? If yes, where is that information?
	Do you know where they saw his/her body, where was it?			Do you know where they saw his/her body?
	Is there written testimony given by witnesses about the death of the missing			Is there written testimony given by witnesses about the death of the missing

## Human remains management

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
	person? If yes, where is that information?			person? If yes, where is that information?
		Was there an exhumation of your relative's remains? If yes, were the remains given to you?		Were your relative's remains exhumed? If yes, were the remains given to you?
	Do you have information on a possible burial site? If yes, where?	Where are the remains of your relative today (buried, placed in an ossuary or cemetery)?		Where are the remains of your relative today (buried, placed in an ossuary or cemetery)?
		Is there any other information that you wish to add?		Is there any other information that you wish to add?
		Person to be contacted in case of a positive identification of skeletal remains (name, relationship, phone number, address)		Person to be contacted in case of a positive identification of skeletal remains (name, relationship, phone number, address)

### Section 34

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - witness</b>				
	Please tell me the name and address of the person who last saw the missing person?			Please tell me the name of the person who last saw the missing person?
				Street
				Town/village
				District
				Province
				Country
	What is the relationship of the informant to the missing person?			What is the relationship of the informant to the missing person?
	Do you know a contact person for the above?			Do you know a contact person for the above?
	Did you see the missing person at the time of the disappearance?			See Section 33 "Information related directly to the moment of disappearance / death"
	If yes, when?			
	If no, who told you about his/her disappearance and when?			

## Human remains management

### 5.3.2.2 The information that should be noted for the persons interviewed

#### Section 35

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the relative interviewed</b>				
Name	First name	First name	Notifier	Full name
	Last name	Last name		
				Alias
	Father's name	Father's name		Father's name
				Mother's name
		Date of birth		Date of birth
	If a married woman, surname before marriage	Surname before marriage		Surname before marriage
Relationship	Relationship	Relationship	Relationship to the victim	The missing person is my: (relationship)
	Date last saw the missing person + where?			See Section 33
			Phone number/E-mail address	Phone number
Address	Address + municipality + street and house number + place + telephone	Street and house number / city, village, telephone	Address	Street
			City/state Zip code	Town/Village
				District
				Province
				Country
		Do you have any personal documents of your relative? (ID, passport, military ID, driver's license)		See Section 4 "Photographs / documents"
Photographs: enclosed, obtainable		Have any personal items of your relative been recognized/returned?		See Section 4 "Photographs / documents"
			Date	Date of interview
				Place of interview
			Case number	Interview conducted by

### 5.3.2.3 The information that should be collected from other people

#### Section 36

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - next-of-kin</b>				
Name + address + phone + relationship				Full name
				The missing person is his/her: (relationship)
				Phone number
				Street
				Place
				District
				Province
				Country

## Human remains management

### Section 37

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - for visual recognition</b>				
Name + address + phone + relationship				Full name
				The missing person is his/her: (relationship)
				Phone number
				Street
				Place
				District
				Province
				Country

### Section 38

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - doctor</b>				
Family doctor: name + address			Indicate any doctor hospital/clinic where it would be possible to recover any physical data on the victim	Family doctor's name
				Phone number
				Street
				Place
				District
				Province
				Country

### Section 39

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - dentist</b>				
Family dentist: name + address			Name of dentist, hospital or clinic where dental information about the victim might be available	Family dentist's name
				Phone
				Street
				Place
				District
				Province
				Country
Distinguishing features				

### Section 40

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
<b>Personal data on the missing person - closest maternal relative</b>				
	First name			First name
	Last name			Last name
	Father's name			Father's name
	If a married woman: Surname before marriage			If a married woman: surname before marriage

## Human remains management

INTERPOL-DVI	PHR BOSNIA	PHR CYPRUS	Argentine Forensic Anthropology Team	STANDARD PROPOSAL
	Relationship			The missing person is his/her: (relationship)
	Address			Street
				Place
				District
				Province
				Country

### 5.3.3 Theme 3 - DNA analysis for identification in the context of missing persons: operational considerations

1. The legal and ethical principles pertaining to the use of DNA analysis for identification were defined in the output of the workshops on *The legal protection of personal data and human remains* and *Human remains: law, politics and ethics*. There are many other questions pertaining to the use of DNA to identify missing persons. That DNA is an invaluable aid to identification is not in doubt; the principle issue is whether DNA analysis for the purposes of identification is feasible worldwide.
2. The questions are:
  - A. What are the costs?
  - B. What are the logistical implications?
  - C. Is the programme sustainable?
  - D. Who bears responsibility for collecting, transporting and analysing samples when responsibilities for the programme are shared between different agencies?
  - E. Who bears responsibility for errors in those processes?
  - F. How reliable and accurate are nuclear DNA techniques such as Powerplex 16 for confirming or refuting a claimed family relationship?
  - G. How reliable and accurate are techniques using sequencing of HV1 and HV2 areas of mitochondria DNA for ascertaining or refuting a claimed family relationship?
  - H. Is the software to do DNA analysis and store the data available on a non-commercial basis and is it "user-friendly"?
  - I. At what state of development is the software to do large-scale matching?
3. Broader questions are raised by the availability of more advanced DNA technologies, such as:
  - A. Will the expectations of families and communities be unreasonably elevated or changed?
  - B. How should families and communities be educated about the advantages and disadvantages of DNA analysis?
  - C. What is the best way to respond to requests to use DNA analysis for "closed" cases from past conflicts?
  - D. How and when should the issue of research using anonymized data be considered?
  - E. How should individual and community questions about non-biological fathers be handled?
4. When implementing identification programmes in which DNA does not have primacy, certain technical prerequisites should be fulfilled before DNA analysis is considered as a means of making or excluding a positive identification. These include:
  - A. *in terms of the human remains:*
    - a. positive identification has not been achieved by other means;
    - b. the remains contain an adequate source of quality DNA.
  - B. *in terms of the family:*
    - a. the family or families of the persons whose remains are being analysed can be found;
    - b. the family understands that using DNA analysis may take a long time, especially when large groups of remains are involved and mitochondria DNA must be analysed;
    - c. the family understands that DNA testing may not yield positive results;
    - d. the family is willing to provide samples.

## Human remains management

### C. generally:

- a. there is adequate technical support for correct sampling, storage and analysis;
- b. the information technology is adequate;
- c. there is guaranteed funding;
- d. the testing and analysis process is sustainable;
- e. the laboratory employed carries an assurance of quality of work and agrees to abide by the legal principles governing the protection of personal data;
- f. memoranda of understanding have been drawn up between those involved and take into account the recommendations of the workshop on *Human remains: law, politics and ethics*;
- g. responsibility has been established for matching and for errors;
- h. the rules govern the handling and ownership of samples and results have been established;
- i. the chain of custody of samples has been established.

### 5.3.4 Theme 4 - Practical guidelines relating to the exhumation of remains, *post mortem* detection of torture and disinterment and analysis of skeletal remains

#### Section 1. Proposed standard protocol for exhumation

Certain steps should be followed in strict order:

1. Locate the grave site.
2. Establish a security perimeter.
3. If permitted, photograph and document surface features / evidence.
4. Establish the boundaries of the grave.
5. Remove the soil covering the remains.
6. Expose the remains.
7. Map and photograph the remains.
8. Note the position of, label distinctly and keep separate any personnel effects or other objects not attached to the remains (e.g., keys, bullets).
9. Label distinctly and individually all remains, whether parts or whole bodies.
10. Remove the remains (while keeping them as an entire body whenever possible).
11. Store the remains.
12. If appropriate, permit the family immediate visual access to the remains for identification purposes

#### Section 2: Guidelines for the conduct of United Nations inquiries into allegations of massacres, 1995 - Annex IV

##### Appendix 1 - *Post mortem* detection of torture (see annex C)

##### Appendix 2 - Drawings of parts of the human body for identification of torture (see annex D)

#### Section 3: Guidelines for the conduct of United Nations inquiries into allegations of massacres, 1995 - Annex V - Model Protocol for disinterment and analysis of skeletal remains (see annex E)

In the electronic workshop, Dr Bill Haglund commented:

*"I know this is an already established document. However, the exhumation section is weak, in part because mass graves are not really taken into consideration. For the purposes of our discussion: the term 'commingling' is misleading. Multiple bodies in a grave, even multiple skeletons, are not necessarily commingled (admixed). They may only appear so to the uninitiated or become so if improperly exhumed. 'Pedestaling' is not the only approach to exposing remains, in fact it may be impossible under certain circumstances. Experience and common sense should dictate."*

### 5.3.5 Theme 5 - Transfer and repatriation of remains

Certain steps must be taken before the remains can be transferred or repatriated.

1. At every stage, all the necessary documents must be available.
2. The family, the authorities or, in the case of foreigners, the relevant embassy must issue a written request.
3. The authorities and any other relevant parties must be informed.

## Human remains management

4. The authorities and the families must be made to understand that the transfer/repatriation does not necessarily involve identification.
5. A certificate must be signed on delivery of the remains by whoever requested the transfer/repatriation.
6. Any of the deceased's personal effects or identity documents transferred along with the body should be mentioned on the hand-over certificate;
7. It must be established that the transfer is not part of a remains-exchange "business".
8. The transferring party should be informed that intentionally mutilated remains will not be transferred unless the receiving party has been informed of the mutilation in advance and consented to the transfer with that knowledge.

### 5.3.6 Theme 6 - Involving the family in the management, exhumation and identification of human remains

1. **How are communities and families involved in the exhumation and identification of remains?**
  - A. A community or family may have been deeply traumatized by killings or massacres involving their members. Uncertainty about the fate of those unaccounted for and the identification of remains may simply add to their distress.
  - B. The families of missing people may be involved in the exhumation process in a number of ways:
    - a. they may know where the remains or graves are or are likely to be situated (including on territory controlled by the former enemy);
    - b. they may identify remains after recovery;
    - c. they may volunteer or be asked to provide *ante mortem* data or even blood samples;
    - d. they may be further traumatized by undignified or disrespectful handling of the remains;
    - e. they can be politically active;
    - f. they can hinder recovery work or even present a security threat to the exhumation team;
    - g. they can be involved in exhumation and identification;
    - h. they may wish to veto the exhumation (this requires careful consideration).
2. **Informing the communities and families about the exhumation**
  - A. The communities and families must be informed at the planning stage of an exhumation.
  - B. The following should be borne in mind:
    - a. the family's observation of the exhumation process may lead it to accept the results more easily;
    - b. religious or community leaders (with no ties to the authorities) should be contacted;
    - c. an education and information campaign for the community may be necessary;
    - d. it may be appropriate to discuss some kind of memorial at an early stage;
    - e. in some contexts, it may be appropriate to have a communication strategy whereby the community is informed about the exhumation's progress;
    - f. any psychiatrists, psychologists or social workers who might be working with the families should be contacted, informed and, if possible, involved;
    - g. in terms of closure, the time factor may be an important consideration in how the community reacts and what the family's expectations are.
3. **Informing families of the death of a relative and returning personal effects and human remains**
  - A. Informing families that a relative is dead and returning personal effects or human remains requires planning and consideration of the cultural and religious context.
    - a. The member of the family who should receive the information, personal effects or human remains should be decided in advance (this may be an adult son or daughter, the head of the household or eldest family member).
    - b. Whenever possible, an appointment should be made in advance to ensure the presence of the family member(s) who should be present.
    - c. The families should be informed that they can ask other people to attend.
    - d. Those delivering the information, personal effects or human remains should be accompanied by a community or religious leader (and/or by a health professional) who will have received all available information beforehand and be in a position to pass it directly to the family and to provide the necessary support.
    - e. It is useful to have prior knowledge of appropriate social worker or community support.

## Human remains management

- B. In addition, before returning human remains, the following should be considered:
  - a. how the remains will be delivered;
  - b. the state of the remains, in order to help the family prepare for the possibility, or not, of viewing them;
  - c. the likely options vis-à-vis burial, cremation etc.;
  - d. the potential support to be offered to the family for the funeral.
- C. An official document confirming the death of the relative and setting in motion the legal consequences of death should be issued to the family whenever possible, as set forth in 1 above. A decision must be made about whether it is appropriate to deliver the document with the remains or at a later date.
- D. Strong emotions may be expressed. Staff informing families of the death of a relative or returning personal effects or human remains must be prepared and supported psychologically for such tasks so that they do not develop "secondary traumatization".

## Human remains management

### 6. Participants

#### 6.1 Electronic workshop *Human remains & forensic sciences*

Body	Function	Full name	Remark
Monash University, Victorian Institute of Forensic Medicine, Melbourne (Australia)	Director	Prof Stephen Cordner	
Netherlands School of Public Health (Netherlands (the))	Director, Medicolegal Department	Prof Dr Barend A. J. Cohen	
Physician for Human Rights	Director, International Forensic Program	Dr William D. Haglund	
The Medical Legal Centre - Sheffield University (United Kingdom of Great Britain and Northern Ireland (the))	Director, Forensic Pathologist	Prof Chris Milroy	
(United States of America (the))	Forensic Anthropologist	Dr Clyde Snow	
International Committee of the Red Cross, Health and Relief Division & Legal Division	Health Coordinator	Dr Robin Coupland	

#### 6.2 Workshop *Human remains: Law, politics & ethics*

Body	Function	Full name	Remark
Amnesty International, International Secretariat	Researcher, Americas Program	Ms Tracy Ulltveit-Moe	
Argentine Forensic Anthropology Team (EAAF) (Argentina)	Member of EAAF	Mr Luis Fondebrider	
British Medical Association (United Kingdom of Great Britain and Northern Ireland (the))	Head, Professional Resources and Research Group	Dr Vivienne Nathanson	With a written contribution only
German Society of Legal Medicine (Germany)	Professor	Prof. Dr. Markus Rothschild	
Institute of Forensic Medicine (Yugoslavia)	Forensic pathologist	Dr Djordje Alempijevic	
Institute for Forensic Medicine and Criminology (Croatia)	Coordinator of Process of Identification	Prof Dr Davor Strinovic, PhD	
International Commission of Jurists (ICJ) (Colombia)	Legal Adviser	Mr Federico Andreu	
International Service for Human Rights (ISHR)	Director	Dr Morris Tidball-Binz	
Ministry of Health, Medico-Legal Services (Kenya)	Chief Government Pathologist	Dr Alex Kirasi Olumbe	
Monash University, Victorian Institute of Forensic Medicine, Melbourne (Australia)	Director	Prof Stephen Cordner	
Netherlands School of Public Health (Netherlands (the))	Director, Medicolegal Department	Prof Dr Barend A. J. Cohen	
Open Society Archives	Councillor	Mr Ivan Szekely	
Physician for Human Rights	Director, International Forensic Program	Dr William D. Haglund	
President Office, Human Disaster Management Council (Sri Lanka)	Chairman	Dr David Ratnavale	
United Nations - Office of the High Commissioner for Human Rights - OHCHR	Policy Planning and Methodology Team, Human Rights Officer	Mr Roberto Ricci	

## Human remains management

Body	Function	Full name	Remark
University of California - Human Rights Center (United States of America (the))	Director	Mr Eric Stover	
University of Dundee, Scotland (United Kingdom of Great Britain and Northern Ireland (the))	Professor of Forensic Medicine, Member of the Scientific Advisory Board of the International Commission on Missing Persons (ICMP)	Prof. Derrick J. Pounder	
University of Geneva, Faculty of Medicine, Institute of Legal Medicine (Switzerland)	Biologist, Head of DNA Laboratory	Mr Christian Gehrig	
University of Geneva, Faculty of Medicine, Institute of Legal Medicine (Switzerland)	Head of anatomo-pathology unit	Dr Romano La Harpe	
World Organisation Against Torture (OMCT)	Director	Mr Eric Sottas	
International Committee of the Red Cross, Health and Relief Division	Medical Delegate	Dr Jonathan Beynon	
International Committee of the Red Cross, Health and Relief Division	Health delegate	Ms Clare Wilson	
International Committee of the Red Cross, Health and Relief Division & Legal Division	Health Coordinator	Dr Robin Coupland	
International Committee of the Red Cross, Legal Division	Legal Adviser	Ms Laura Olson	Present according to topic dealt with
International Committee of the Red Cross, Project "The Missing"	Head	Ms Sophie Martin	Present according to topic dealt with
International Committee of the Red Cross, Project "The Missing"	Deputy Head	Mr Laurent Fellay	
International Committee of the Red Cross, Project "The Missing"	Deputy Head	Ms Ariane Tombet-Caushaj	

### 6.3 Workshop *Human remains: management of remains and of information on the dead*

Body	Function	Full name	Remark
AMANI Trust (Zimbabwe)	Director, Clinical psychologist	Ms Shari Arden Eppel	
Argentine Forensic Anthropology Team (EAAF) (Argentina)	Member of EAAF	Mr Luis Fondebrider	
Center of forensic medicine and criminalistic examination, Ministry of Defense (Russian Federation (the))	Chief manager of molecular genetic laboratory	Dr Sergey Glebovich Kharlamov	
Defensoria del Pueblo/Comisión de Búsqueda de Personas Desaparecidas (Colombia)	Technical Secretary	Dr. Fernando Iregui Camelo	
Federal commission for tracing missing persons (Bosnia and Herzegovina)	Chairman	Mr Amor Masovic	
German Society of Legal Medicine (Germany)	Professor	Prof. Dr. Markus Rothschild	
Guatemalan Forensic Anthropology Foundation (Guatemala)	Executive Director	Mr Fredy Peccerelly	
Institute of Forensic Medicine (Yugoslavia)	Forensic pathologist	Dr Djordje Alempijevic	
International Commission on Missing Persons (ICMP) (United	Family Association Development Program	Mr Edwin F. Huffine	

## Human remains management

Body	Function	Full name	Remark
States of America (the))			
International Organization for Migration			With a written contribution only
International Service for Human Rights (ISHR)	Director	Dr Morris Tidball-Binz	
Ministry of Health, The National Center of Forensic Medicine (Israel)	Director, Forensic Pathologist	Prof Jehuda Hiss MD	
Monash University, Melbourn (Australia)	Professor	Prof Stephen Cordner	
National Society for Human Rights (Namibia)	Executive Director	Mr Phil ya Nangoloh	
Netherlands School of Public Health (Netherlands (the))	Director, Medicolegal Department	Prof Dr Barend A. J. Cohen	
Organisation for Security and co-operation in Europe (OSCE) - Mission in Kosovo	Missing Persons Coordinator, Consultant Forensic Anthropologist	Ms. Tarja Formisto	
Permanent Mission of Eritrea (Eritrea)	Consul	Mr Bereket Woldeyohannes	
Physician for Human Rights	Director, International Forensic Program	Dr William D. Haglund	
State Commission of Searching of the Fighters Lost in Abkhazia and Reserving Rights of their Families (Georgia)	Database manager	Ms Ketevan Merebovna Eremeishvili	
United Nations - International Criminal Tribunal for former Yugoslavia - ICTY	Deputy Chief of Investigations	Mr Stephen Raymond Upton	
United Nations - Office of the High Commissioner for Human Rights - OHCHR	Policy Planning and Methodology Team, Human Rights Officer	Mr Roberto Ricci	
United Nations General Secretariat - Office of the Under-Secretary-General for Peacekeeping - UNMEE	Human Rights Officer	Ms. Gillian Kitley	
United Nations General Secretariat - Committee on Missing Persons in Cyprus		Mr Pierre Gubéran	
University of California - Human Rights Center and State of California Department of Justice DNA Laboratory (United States of America (the))	Science advisor	Dr. Cristian Orrego	
University of Geneva, Faculty of Medicine, Institute of Legal Medicine (Switzerland)	Biologist, Head of DNA Laboratory	Mr Christian Gehrig	
University of Geneva, Faculty of Medicine, Institute of Legal Medicine (Switzerland)	Head of anatomo-pathology unit	Dr Romano La Harpe	
University of Sheffield/Nottingham (United Kingdom of Great Britain and Northern Ireland (the))	Forensic Pathologist	Prof Christopher Mark Milroy	
International Committee of the Red Cross, Health and Relief Division	Medical Delegate	Dr Jonathan Beynon	
International Committee of the Red Cross, Health and Relief Division	Health delegate	Ms Clare Wilson	

## Human remains management

Body	Function	Full name	Remark
International Committee of the Red Cross, Health and Relief Division & Legal Division	Health Coordinator	Dr Robin Coupland	
International Committee of the Red Cross, Legal Division	Legal Adviser	Ms Laura Olson	Present according to topic dealt with
International Committee of the Red Cross, Project "The Missing"	Head	Ms Sophie Martin	Present according to topic dealt with
International Committee of the Red Cross, Project "The Missing"	Deputy Head	Mr Laurent Fellay	
International Committee of the Red Cross, Project "The Missing"	Deputy Head	Ms Ariane Tombet-Caushaj	
International Committee of the Red Cross, Project "The Missing"	Deputy Head	Mr Thierry Schreyer	

## Human remains management

### 7. Programs of the workshops

#### 7.1 Workshop *Human remains: Law, politics & ethics*

Workshop Title	Human remains: Law, politics & ethics
Date	23.05.2002 - 09:00 to 18:00 24.05.2002 - 09:00 to 17:00

#### Day 1, Thursday 23 May 2002

##### 09:00 - 10:00

Welcome

Introduction of the participants

Administrative details

Introduction to the Missing project

Principle issues and organisation of the workshop

#### **Theme 1 : Exhumation and identification of remains: the tension between justice and identification**

**Objectives:** To establish best practice guidelines to ensure that identification of human remains for the purpose of informing and returning them to the families is given equal importance in any exhumation process in the context of the Missing.

Topics to be addressed:

- a. Legal rights of the families to know the fate of their relatives and to receive the remains
  - o How can forensic specialists better uphold these rights?
- b. Responsibilities of forensic specialists to ensure identification in the context of the Missing
  - o Does emphasising identification challenge existing practice?
  - o How does working with other international actors affect these responsibilities?
  - o What are the responsibilities of an exhumation team towards the affected families?
- c. Standards of practice for forensic specialists working in the context of the Missing
  - o What are the responsibilities & obligations of forensic specialists specific to working in the context of the Missing?
  - o What should be included in a contract for a forensic specialist to work in the context of the Missing?
  - o What can forensic specialists do to promote the "**Identification of human remains: Principles commonly accepted**"?
  - o How should forensic specialists determine whether their work is legal in a given context?
  - o Should there be an international body governing standards of practice?

**Chaired by:** Eric Stover

##### 10:00 - 10:30

Presentation of the tasks for two/three working groups

##### 10:30 - 11:00 Pause

##### 11:00 - 12:30 - In Working group

##### 14:00 - 15:30 - In Working group

##### 15:30 - 16:00 - Pause

##### 16:00 - 18:00 - Reports of working groups & conclusions relating to theme 1.

## Human remains management

Day two - Friday 24 May 2002

**Theme 2: Criteria for identification and the role of DNA analysis**

**Objectives:** To establish who should be responsible for identification and what the most appropriate means are to make an identification in the context of the Missing.

Topics to be addressed:

- a. The role and responsibilities of different forensic specialists in identification in the context of the Missing
  - o Considering the constraints imposed by the context of the Missing, can or should practice relating to identification change?
  - o Does the division of responsibilities between different forensic disciplines change in the context of the Missing?
  - o What are the elements of a standardised protocol for identification?
- b. The role and risks of DNA analysis for identification in the context of the Missing
  - o What can forensic specialists do to promote the "**Protection of personal data & of genetic information: Principles commonly accepted**"?
  - o Are the costs and complexity of a DNA program compatible with operational reality?
  - o What are the future implications of the availability of DNA analysis?
  - o What is the reliability and the accuracy of DNA techniques?
  - o Are there other unanswered legal or ethical questions for using DNA analysis in the context of the Missing?
- c. The role of families in identification
  - o Should blood samples be taken at the time of collecting antemortem data?
  - o How might cultural differences impact on a programme of identification of remains using DNA analysis?
  - o Is it possible to create a strategy for when the family does not accept the identification?
  - o How can the benefits and correct place of DNA analysis be communicated to families and the community without raising false hopes?
  - o Should a proactive strategy be put in place to deal with errors of identification?
  - o How should the issue of non-biological fathers be handled when nuclear DNA analysis is widely used?

**Chaired by:** Stephen Cordner

**09:00 - 09:30**

Presentation of the tasks for two/three working groups

**09:30 - 10:30 - In Working group**

**10:30 - 11:00 - Pause**

**11:00 - 12:30 - In Working group**

**14:00 - 15:30 - Reports of working groups & conclusions relating to theme 2**

**15:30 - 16:00 - Pause**

**16:00 - 17:00 - Final summary and conclusions (Robin Coupland)**

### 7.2 Workshop Human remains: Management of the dead & of information on the dead

Workshop Title	Human remains: management of remains and of information on the dead
Date	10.07.2002 - 09:00 to 18:00 11.07.2002 - 09:00 to 18:00 12.07.2002 - 09:00 to 17:00

Day 1 - Wednesday 10.07

**09:00 - 10:00**

Welcome

Introduction of the participants

Introduction of the Missing project

Principle issues and organization of the workshop

**10:00 - 10:30 Pause**

## Human remains management

### **Theme 1: A standard autopsy protocol and standardized collection of post mortem data**

**Objectives:** To reach consensus on standardized formats for an autopsy protocol and post mortem data collection

Topics to be discussed:

- a. Is the "Minnesota" protocol the gold standard in terms of procedure? Does it need modification?
- b. Is the DVI autopsy form the gold standard? Does it need modification for use in the context of the Missing?
- c. Do these adequately address examination of partial remains?
- d. If exhumation is being done to establish cause of death as a first priority, what measures should a forensic specialist undertake to facilitate identification at a later date?
- e. How can or should the examination of human remains be abbreviated when:
  - o there is an excessive workload for the available forensic expertise?
  - o it is simply not practical to perform a full autopsy?

**Chaired by: Markus Rothschild**

**10:30 - 10.45 - Presentation of the work to achieve in two/three working groups**

**10.45 - 12:30 - In Working group**

**14:00 - 15:30 - Reports of working groups & conclusions relating to theme 1**

**15.30 - 16.00 - Pause**

### **Theme 2: A standard form of antemortem data collection**

**Objectives:** To reach consensus on a standard format for collection of antemortem data

Topic to be discussed:

The standard proposal drawn from Interpol DVI, EAAF and PHR:

- o Is the proposed standardized format adequate?
- o What needs to be added or removed?
- o What are the elements which should be "flagged" as most useful in electronic screening?
- o What are the necessary next steps?

**Chaired by: Morris Tidball-Binz**

**16.00 - 16.15 - Presentation of the work to achieve in two/three working groups**

**16:15 - 18:00 - In working group**

### **Day 2 - Thursday 11.07**

**Theme 2 continued.....**

**09.00 - 10.30 - Reports of working groups & conclusions relating to theme 2.**

**10.30 - 11.00 - Pause**

## Human remains management

### Theme 3: Standard criteria for identification including use of DNA analysis

**Objectives:** To reach consensus on a strategy for identification and clarification of the role of DNA analysis

Topics to be discussed:

- a. How are the three ways of making an identification (see 2.1.2.1, A in "*Human remains: Law, politics & ethic (Blue document of same name, Section 2.1.2 - page 9)*") and the movement between them influenced by:
  - o a large workload e.g. a mass grave?
  - o skeletal remains?
  - o co-mingled remains?
  - o partial remains?
  - o when any possible reference population is distant, widely dispersed or difficult to identify?
- b. The role of DNA analysis in identification in the context of the Missing.
  - o What details need to be added to 2.1.2.2 (in "*Human remains: Law, politics & ethic (Blue document of same name, Section 2.1.2 - page 9)*") and ICRC PrepDocs - Theme 3 - "*DNA analysis for identification in the context of the Missing: some operational issues - Green document page 21*"?
  - o What factors impact on the operational feasibility of using DNA analysis for identification in the context of the Missing?

**Chaired by:** Stephen Cordner

**11.00 - 11.15 - Presentation of the work to achieve in two/three working groups**

**11.15 - 12.30 In working group**

**14.00 - 15.30 In working group**

**15.30 - 16.00 Pause**

**16.00 - 17.00 In working group**

**17.00 - 18.00 Reports of working groups & conclusions relating to theme 3**

**Day 3 - Friday 12.07**

**Theme 4: Practical guidelines relating to exhumation of remains, post mortem detection of torture and disinterment and analysis of skeletal remains**

**Objectives:** To comment on the reference documents.

**Chaired by:** Stephen Cordner

**09.00 - 10.30 - Plenary discussion - theme 4**

**10.30 - 11.00 - Pause**

**Theme 5: Practical checklists for management of remains without forensic specialists**

**Objectives:** To comment on the reference documents.

**Chaired by:** Bill Haglund

**11.00 - 12.30 Plenary discussion theme 5**

**12.30 - 14.00 - Lunch**

**Theme 6: Involvement of the family in management, exhumation and identification of remains**

**Objectives:** To comment on the reference documents.

**Chaired by:** Luis Fondebrider

**14.00 - 15.30 - Plenary discussion theme 6**

**15:30 - 16:00 - Pause**

**15.30 - 16.00 - Plenary - Conclusions and recommendations**

**Annex A: UN Manual on the effective prevention and investigation of extra-legal, arbitrary and summary executions - ST/CSDHA/12 - 1991 - IV. Model autopsy protocol which is the same as Guidelines for the conduct of United Nations inquiries into allegations of massacres, 1995 - Annex IV**

**A. Introduction**

Difficult or sensitive cases should ideally be the responsibility of an objective, experienced, well-equipped and well-trained prosecutor (the person performing the autopsy and preparing the written report) who is separate from any potentially involved political organization or entity. Unfortunately, this ideal is often unattainable. This proposed model autopsy protocol includes a comprehensive checklist of the steps in a basic forensic postmortem examination that should be followed to the extent possible given the resources available. Use of this autopsy protocol will permit early and final resolution of potentially controversial cases and will thwart the speculation and innuendo that are fueled by unanswered, partially answered or poorly answered questions in the investigation of an apparently suspicious death.

This model autopsy protocol is intended to have several applications and may be of value to the following categories of individuals:

- (a) Experienced forensic pathologists may follow this model autopsy protocol to ensure a systematic examination and to facilitate meaningful positive or negative criticism by later observers. While trained pathologists may justifiably abridge certain aspects of the postmortem examination or written descriptions of their findings in routine cases, abridged examinations or reports are never appropriate in potentially controversial cases. Rather, a systematic and comprehensive examination and report are required to prevent the omission or loss of important details;
- (b) General pathologists or other physicians who have not been trained in forensic pathology but are familiar with basic postmortem examination techniques may supplement their customary autopsy procedures with this model autopsy protocol. It may also alert them to situations in which they should seek consultation, as written material cannot replace the knowledge gained through experience;
- (c) Independent consultants whose expertise has been requested in observing, performing or reviewing an autopsy may cite this model autopsy protocol and its proposed minimum criteria as a basis for their actions or opinions;
- (d) Governmental authorities, international political organizations, law enforcement agencies, families or friends of decedents, or representatives of potential defendants charged with responsibility for a death may use this model autopsy protocol to establish appropriate procedures for the postmortem examination prior to its performance;
- (e) Historians, journalists, attorneys, judges, other physicians and representatives of the public may also use this model autopsy protocol as a benchmark for evaluating an autopsy and its findings;
- (f) Governments or individuals who are attempting either to establish or upgrade their medicolegal system for investigating deaths may use this model autopsy protocol as a guideline, representing the procedures and goals to be incorporated into an ideal medicolegal system.

While performing any medicolegal death investigation, the prosecutor should collect information that will establish the identity of the deceased, the time and place of death, the cause of death, and the manner or mode of death (homicide, suicide, accident or natural).

It is of the utmost importance that an autopsy performed following a controversial death be thorough in scope. The documentation and recording of the autopsy findings should be equally thorough so as to permit meaningful use of the autopsy results (see annex II, below). It is important to have as few omissions or discrepancies as possible, as proponents of different interpretations of a case may take advantage of any perceived shortcomings in the investigation. An autopsy performed in a controversial death should meet certain minimum criteria if the autopsy report is to be proffered as meaningful or conclusive by the prosecutor, the autopsy's sponsoring agency or governmental unit, or anyone else attempting to make use of such an autopsy's findings or conclusions.

This model autopsy protocol is designed to be used in diverse situations. Resources such as autopsy rooms, X-ray equipment or adequately trained personnel are not available everywhere. Forensic pathologists must operate under widely divergent political systems. In addition, social and religious customs vary widely throughout the world; an autopsy is an expected and routine procedure in some areas, while it is abhorred in others. A prosecutor, therefore, may not always be able to follow all of the steps in this protocol when performing autopsies. Variation from this

## Human remains management

protocol may be inevitable or even preferable in some cases. It is suggested, however, that any major deviations, with the supporting reasons, should be noted.

It is important that the body should be made available to the prosecutor for a minimum of 12 hours in order to assure an adequate and unhurried examination. Unrealistic limits or conditions are occasionally placed upon the prosecutor with respect to the length of time permitted for the examination or the circumstances under which an examination is allowed. When conditions are imposed, the prosecutor should be able to refuse to perform a compromised examination and should prepare a report explaining this position. Such a refusal should not be interpreted as indicating that an examination was unnecessary or inappropriate. If the prosecutor decides to proceed with the examination notwithstanding difficult conditions or circumstances, he or she should include in the autopsy report an explanation of the limitations or impediments.

Certain steps in this model autopsy protocol have been emphasized by the use of boldface type. These represent the most essential elements of the protocol.

### ***B. Proposed model autopsy protocol***

#### 1. Scene investigation

The prosecutor(s) and medical investigators should have the right of access to the scene where the body is found. The medical personnel should be notified immediately to assure that no alteration of the body has occurred. If access to the scene was denied, if the body was altered or if information was withheld, this should be stated in the prosecutor's report.

A system for co-ordination between the medical and non-medical investigators (e.g. law enforcement agencies) should be established. This should address such issues as how the prosecutor will be notified and who will be in charge of the scene. Obtaining certain types of evidence is often the role of the non-medical investigators, but the medical investigators who have access to the body at the scene of death should perform the following steps:

- (a) Photograph the body as it is found and after it has been moved;
- (b) Record the body position and condition, including body warmth or coolness, lividity and rigidity;
- (c) Protect the deceased's hands, e.g. with paper bags;
- (d) Note the ambient temperature. In cases where the time of death is an issue, rectal temperature should be recorded and any insects present should be collected for forensic entomological study. Which procedure is applicable will depend on the length of the apparent postmortem interval;
- (e) Examine the scene for blood, as this may be useful in identifying suspects;
- (f) Record the identities of all persons at the scene;
- (g) Obtain information from scene witnesses, including those who last saw the decedent alive, and when, where and under what circumstances. Interview any emergency medical personnel who may have had contact with the body;
- (h) Obtain identification of the body and other pertinent information from friends or relatives. Obtain the deceased's medical history from his or her physician(s) and hospital charts, including any previous surgery, alcohol or drug use, suicide attempts and habits;
- (i) Place the body in a body pouch or its equivalent. Save this pouch after the body has been removed from it;
- (j) Store the body in a secure refrigerated location so that tampering with the body and its evidence cannot occur;
- (k) Make sure that projectiles, guns, knives and other weapons are available for examination by the responsible medical personnel;
- (l) If the decedent was hospitalized prior to death, obtain admission or blood specimens and any X-rays, and review and summarize hospital records;
- (m) Before beginning the autopsy, become familiar with the types of torture or violence that are prevalent in that country or locale (see annex III).

## Human remains management

### 2. Autopsy

The following Protocol should be followed during the autopsy:

- (a) Record the date, starting and finishing times, and place of the autopsy (a complex autopsy may take as long as an entire working day);
- (b) Record the name(s) of the prosecutor(s), the participating assistant(s), and all other persons present during the autopsy, including the medical and/or scientific degrees and professional, political or administrative affiliations(s) of each. Each person's role in the autopsy should be indicated, and one person should be designated as the principal prosecutor who will have the authority to direct the performance of the autopsy. Observers and other team members are subject to direction by, and should not interfere with, the principal prosecutor. The time(s) during the autopsy when each person is present should be included. The use of a "sign-in" sheet is recommended;
- (c) Adequate photographs are crucial for thorough documentation of autopsy findings:
  - (i) Photographs should be in colour (transparency or negative/print), in focus, adequately illuminated, and taken by a professional or good quality camera. Each photograph should contain a ruled reference scale, an identifying case name or number, and a sample of standard grey. A description of the camera (including the lens "f-number" and focal length), film and the lighting system must be included in the autopsy report. If more than one camera is utilized, the identifying information should be recorded for each. Photographs should also include information indicating which camera took each picture, if more than one camera is used. The identity of the person taking the photographs should be recorded;
  - (ii) Serial photographs reflecting the course of the external examination must be included. Photograph the body prior to and following undressing, washing or cleaning and shaving;
  - (iii) Supplement close-up photographs with distant and/or immediate range photographs to permit orientation and identification of the close-up photographs;
  - (iv) Photographs should be comprehensive in scope and must confirm the presence of all demonstrable signs of injury or disease commented upon in the autopsy report;
  - (v) Identifying facial features should be portrayed (after washing or cleaning the body), with photographs of a full frontal aspect of the face, and right and left profiles of the face with hair in normal position and with hair retracted, if necessary, to reveal the ears;
- (d) Radiograph the body before it is removed from its pouch or wrappings. X-rays should be repeated both before and after undressing the body. Fluoroscopy may also be performed. Photograph all X-ray films;
  - (i) Obtain dental X-rays, even if identification has been established in other ways;
  - (ii) Document any skeletal system injury by X-ray. Skeletal X-rays may also record anatomic defects or surgical procedures. Check especially for fractures of the fingers, toes and other bones in the hands and feet. Skeletal X-rays may also aid in the identification of the deceased, by detecting identifying characteristics, estimating age and height, and determining sex and race. Frontal sinus films should also be taken, as these can be particularly useful for identification purposes;
  - (iii) Take X-rays in gunshot cases to aid in locating the projectile(s). Recover, photograph and save any projectile or major projectile fragment that is seen on an X-ray. Other radio-opaque objects (pacemakers, artificial joints or valves, knife fragments etc.) documented with X-rays should also be removed, photographed and saved;
  - (iv) Skeletal X-rays are essential in children to assist in determining age and developmental status;
- (e) Before the clothing is removed, examine the body and the clothing. Photograph the clothed body. Record any jewellery present;
- (f) The clothing should be carefully removed over a clean sheet or body pouch. Let the clothing dry if it is bloody or wet. Describe the clothing that is removed and label it in a permanent fashion. Either place the clothes in the custody of a responsible person or keep them, as they may be useful as evidence or for identification;
- (g) The external examination, focusing on a search for external evidence of injury is, in most cases, the most important portion of the autopsy;

## Human remains management

- (i) Photograph all surfaces - 100 per cent of the body area. Take good quality, well-focused, colour photographs with adequate illumination;
- (ii) Describe and document the means used to make the identification. Examine the body and record the deceased's apparent age, length, weight, sex, head hair style and length, nutritional status, muscular development and colour of skin, eyes and hair (head, facial and body);
- (iii) In children, measure also the head circumference, crown-rump length and crown-heel length;
- (iv) Record the degree, location and fixation of rigor and livor mortis;
- (v) Note body warmth or coolness and state of preservation; note any decomposition changes, such as skin slippage. Evaluate the general condition of the body and note adipocere formation, maggots, eggs or anything else that suggests the time or place of death;
- (vi) With all injuries, record the size, shape, pattern, location (related to obvious anatomic landmarks), colour, course, direction, depth and structure involved. Attempt to distinguish injuries resulting from therapeutic measures from those unrelated to medical treatment. In the description of projectile wounds, note the presence or absence of soot, gunpowder, or singeing. If gunshot residue is present, document it photographically and save it for analysis. Attempt to determine whether the gunshot wound is an entry or exit wound. If an entry wound is present and no exit wound is seen, the projectile must be found and saved or accounted for. Excise wound tract tissue samples for microscopic examination. Tape together the edges of knife wounds to assess the blade size and characteristics;
- (vii) Photograph all injuries, taking two colour pictures of each, labelled with the autopsy identification number on a scale that is oriented parallel or perpendicular to the injury. Shave hair where necessary to clarify an injury, and take photographs before and after shaving. Save all hair removed from the site of the injury. Take photographs before and after washing the site of any injury. Wash the body only after any blood or material that may have come from an assailant has been collected and saved;
- (viii) Examine the skin. Note and photograph any scars, areas of keloid formation, tattoos, prominent moles, areas of increased or decreased pigmentation, and anything distinctive or unique such as birthmarks. Note any bruises and incise them for delineation of their extent. Excise them for microscopic examination. The head and genital area should be checked with special care. Note any injection sites or puncture wounds and excise them to use for toxicological evaluation. Note any abrasions and excise them; microscopic sections may be useful for attempting to date the time of injury. Note any bite marks; these should be photographed to record the dental pattern, swabbed for saliva testing (before the body is washed) and excised for microscopic examination. Bite marks should also be analysed by a forensic odontologist, if possible. Note any burn marks and attempt to determine the cause (burning rubber, a cigarette, electricity, a blowtorch, acid, hot oil etc.). Excise any suspicious areas for microscopic examination, as it may be possible to distinguish microscopically between burns caused by electricity and those caused by heat;
- (ix) Identify and label any foreign object that is recovered, including its relation to specific injuries. Do not scratch the sides or tip of any projectiles. Photograph each projectile and large projectile fragment with an identifying label, and then place each in a sealed, padded and labelled container in order to maintain the chain of custody;
- (x) Collect a blood specimen of at least 50 cc from a subclavian or femoral vessel;
- (xi) Examine the head and external scalp, bearing in mind that injuries may be hidden by the hair. Shave hair where necessary. Check for fleas and lice, as these may indicate unsanitary conditions prior to death. Note any alopecia as this may be caused by malnutrition, heavy metals (e.g. thallium), drugs or traction. Pull, do not cut, 20 representative head hairs and save them, as hair may also be useful for detecting some drugs and poisons;
- (xii) Examine the teeth and note their condition. Record any that are absent, loose or damaged, and record all dental work (restorations, fillings etc.), using a dental identification system to identify each tooth. Check the gums for periodontal disease. Photograph dentures, if any, and save them if the decedent's identity is unknown. Remove the mandible and maxilla if necessary for identification. Check the inside of the mouth and note any evidence of trauma, injection sites, needle marks or biting of the lips, cheeks or tongue. Note any articles or substances in the mouth. In cases of suspected sexual assault, save oral fluid or get a swab for spermatozoa and acid phosphatase evaluation. (Swabs taken at the tooth-gum

## Human remains management

junction and samples from between the teeth provide the best specimens for identifying spermatozoa.) Also take swabs from the oral cavity for seminal fluid typing. Dry the swabs quickly with cool, blown air if possible, and preserve them in clean plain paper envelopes. If rigor mortis prevents an adequate examination, the masseter muscles may be cut to permit better exposure;

- (xiii) Examine the face and note if it is cyanotic or if petechiae are present;
    - a. Examine the eyes and view the conjunctiva of both the globes and the eyelids. Note any petechiae in the upper or lower eyelids. Note any scleral icterus. Save contact lenses, if any are present. Collect at least 1 ml of vitreous humor from each eye;
    - b. Examine the nose and ears and note any evidence of trauma, haemorrhage or other abnormalities. Examine the tympanic membranes;
  - (xiv) Examine the neck externally on all aspects and note any contusions, abrasions or petechiae. Describe and document injury patterns to differentiate manual, ligature and hanging strangulation. Examine the neck at the conclusion of the autopsy, when the blood has drained out of the area and the tissues are dry;
  - (xv) Examine all surfaces of the extremities: arms, forearms, wrists, hands, legs and feet, and note any "defence" wounds. Dissect and describe any injuries. Note any bruises about the wrists or ankles that may suggest restraints such as handcuffs or suspension. Examine the medial and lateral surfaces of the fingers, the anterior forearms and the backs of the knees for bruises;
  - (xvi) Note any broken or missing fingernails. Note any gunpowder residue on the hands, document photographically and save it for analysis. Take fingerprints in all cases. If the decedent's identity is unknown and fingerprints cannot be obtained, remove the "glove" of the skin, if present. Save the fingers if no other means of obtaining fingerprints is possible. Save fingernail clippings and any under-nail tissue (nail scrapings). Examine the fingernail and toenail beds for evidence of objects having been pushed beneath the nails. Nails can be removed by dissecting the lateral margins and proximal base, and then the undersurface of the nails can be inspected. If this is done, the hands must be photographed before and after the nails are removed. Carefully examine the soles of the feet, noting any evidence of beating. Incise the soles to delineate the extent of any injuries. Examine the palms and knees, looking especially for glass shards or lacerations;
  - (xvii) Examine the external genitalia and note the presence of any foreign material or semen. Note the size, location and number of any abrasions or contusions. Note any injury to the inner thighs or peri-anal area. Look for peri-anal burns;
  - (xviii) In cases of suspected sexual assault, examine all potentially involved orifices. A speculum should be used to examine the vaginal walls. Collect foreign hair by combing the pubic hair. Pull and save at least 20 of the deceased's own pubic hairs, including roots. Aspirate fluid from the vagina and/or rectum for acid phosphatase, blood group and spermatozoa evaluation. Take swabs from the same areas for seminal fluid typing. Dry the swabs quickly with cool, blown air if-possible, and preserve them in clean plain paper envelopes;
  - (xix) The length of the back, the buttocks and extremities including wrists and ankles must be systematically incised to look for deep injuries. The shoulders, elbows, hips and knee joints must also be incised to look for ligamentous injury;
- (h) The internal examination for internal evidence of injury should clarify and augment the external examination;
- (i) Be systematic in the internal examination. Perform the examination either by body regions or by systems, including the cardiovascular, respiratory, biliary, gastrointestinal, reticuloendothelial, genitourinary, endocrine, musculoskeletal, and central nervous systems. Record the weight, size, shape, colour and consistency of each organ, and note any neoplasia, inflammation, anomalies, haemorrhage, ischemia, infarcts, surgical procedures or injuries. Take sections of normal and any abnormal areas of each organ for microscopic examination. Take samples of any fractured bones for radiographic and microscopic estimation of the age of the fracture;
  - (ii) Examine the chest. Note any abnormalities of the breasts. Record any rib fractures, noting whether cardiopulmonary resuscitation was attempted. Before opening, check for pneumothoraces. Record the thickness of subcutaneous fat. Immediately after opening the chest, evaluate the pleural cavities and the pericardial sac for the presence of blood or other fluid, and describe and quantify any fluid present. Save

## Human remains management

any fluid present until foreign objects are accounted for. Note the presence of air embolism, characterized by frothy blood within the right atrium and right ventricle. Trace any injuries before removing the organs. If blood is not available at other sites, collect a sample directly from the heart. Examine the heart, noting degree and location of coronary artery disease or other abnormalities. Examine the lungs, noting any abnormalities;

- (iii) Examine the abdomen and record the amount of subcutaneous fat. Retain 50 grams of adipose tissue for toxicological evaluation. Note the interrelationships of the organs. Trace any injuries before removing the organs. Note any fluid or blood present in the peritoneal cavity, and save it until foreign objects are accounted for. Save all urine and bile for toxicologic examination;
  - (iv) Remove, examine and record the quantitative information on the liver, spleen, pancreas, kidneys and adrenal glands. Save at least 150 grams each of kidney and liver for toxicological evaluation. Remove the gastrointestinal tract and examine the contents. Note any food present and its degree of digestion. Save the contents of the stomach. If a more detailed toxicological evaluation is desired, the contents of other regions of the gastrointestinal tract may be saved. Examine the rectum and anus for burns, lacerations or other injuries. Locate and retain any foreign bodies present. Examine the aorta, inferior vena cava and iliac vessels;
  - (v) Examine the organs in the pelvis, including ovaries, fallopian tubes, uterus, vagina, testes, prostate gland, seminal vesicles, urethra and urinary bladder. Trace any injuries before removing the organs. Remove these organs carefully so as not to injure them artifactually. Note any evidence of previous or current pregnancy, miscarriage or delivery. Save any foreign objects within the cervix, uterus, vagina, urethra or rectum;
  - (vi) Palpate the head and examine the external and internal surfaces of the scalp, noting any trauma or haemorrhage. Note any skull fractures. Remove the calvarium carefully and note epidural and subdural haematomas. Quantify, date and save any haematomas that are present. Remove the dura to examine the internal surface of the skull for fractures. Remove the brain and note any abnormalities. Dissect and describe any injuries. Cerebral cortical atrophy, whether focal or generalized, should be specifically commented upon;
  - (vii) Evaluate the cerebral vessels. Save at least 150 grams of cerebral tissue for toxicological evaluation. Submerge the brain in fixative prior to examination, if this is indicated;
  - (viii) Examine the neck after the heart and brain have been removed and the neck vessels have been drained. Remove the neck organs, taking care not to fracture the hyoid bone. Dissect and describe any injuries. Check the mucosa of the larynx, pyriform sinuses and esophagus, and note any petechiae, edema or burns caused by corrosive substances. Note any articles or substances within the lumina of these structures. Examine the thyroid gland. Separate and examine the parathyroid glands, if they are readily identifiable;
  - (ix) Dissect the neck muscles, noting any haemorrhage. Remove all organs, including the tongue. Dissect the muscles from the bones and note any fractures of the hyoid bone or thyroid or cricoid cartilages;
  - (x) Examine the cervical, thoracic and lumbar spine. Examine the vertebrae from their anterior aspects and note any fractures, dislocations. Compressions or haemorrhages. Examine the vertebral bodies. Cerebrospinal fluid may be obtained if additional toxicological evaluation is indicated;
  - (xi) In cases in which spinal injury is suspected, dissect and describe the spinal cord. Examine the cervical spine anteriorly and note any haemorrhage in the paravertebral muscles. The posterior approach is best for evaluating high cervical injuries. Open the spinal canal and remove the spinal cord. Make transverse sections every 0.5 cm and note any abnormalities;
- (i) After the autopsy has been completed, record which specimens have been saved. Label all specimens with the name of the deceased, the autopsy identification number, the date and time of collection, the name of the prosector and the contents. Carefully preserve all evidence and record the chain of custody with appropriate release forms;
- (i) Perform appropriate toxicologic tests and retain portions of the tested samples to permit retesting;
    - a. Tissues: 150 grams of liver and kidney should be saved routinely. Brain, hair and adipose tissue may be saved for additional studies in cases where drugs, poisons or other toxic substances are suspected;

## Human remains management

- b. Fluids: 50 cc (if possible) of blood (spin and save serum in all or some of the tubes), all available urine, vitreous humor and stomach contents should be saved routinely. Bile, regional gastrointestinal tract contents and cerebrospinal fluid should be saved in cases where drugs, poisons or toxic substances are suspected. Oral, vaginal and rectal fluid should be saved in cases of suspected sexual assault;
- (ii) Representative samples of all major organs, including areas of normal and any abnormal tissue, should be processed histologically and stained with hematoxylin and eosin (and other stains as indicated). The slides, wet tissue and paraffin blocks should be kept indefinitely;
- (iii) Evidence that must be saved includes:
  - a. All foreign objects, including projectiles, projectile fragments, pellets, knives and fibers. Projectiles must be subjected to ballistic analysis;
  - b. All clothes and personal effects of the deceased, worn by or in the possession of the deceased at the time of death;
  - c. Fingernails and under nail scrapings;
  - d. Hair, foreign and pubic, in cases of suspected sexual assault;
  - e. Head hair, in cases where the place of death or location of the body prior to its discovery may be an issue;
- (j) After the autopsy, all unretained organs should be replaced in the body, and the body should be well embalmed to facilitate a second autopsy in case one is desired at some future point;
- (k) The written autopsy report should address those items that are emphasized in boldface type in the protocol. At the end of the autopsy report should be a summary of the findings and the cause of death. This should include the prosecutor's comments attributing any injuries to external trauma, therapeutic efforts, postmortem change, or other causes. A full report should be given to the appropriate authorities and to the deceased's family.

**Annex B:     *INTERPOL - DVI Autopsy Protocol***



PMFormEng.pdf

## Human remains management

### Annex C: Guidelines for the conduct of United Nations inquiries into allegations of massacres, 1995 - Annex IV - Appendix 1 - Post mortem detection of torture

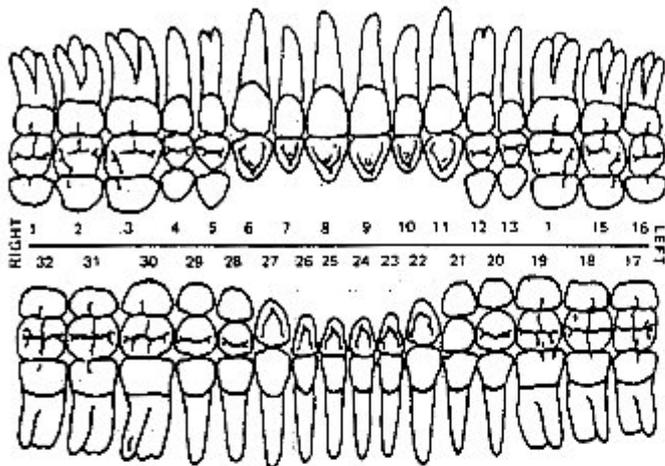
Torture technique	Physical findings
Beating	
1. General	Scars. Bruises. Lacerations. Multiple fractures at different stages of healing, especially in unusual locations, which have not been medically treated.
2. To the soles of the feet ("falanga", "falaka", "bastinado"), or fractures of the bones of the feet.	Haemorrhage in the soft tissues of the soles of the feet and ankles. Aseptic necrosis.
3. With the palms on both ears simultaneously ("el telefono").	Ruptured or scarred tympanic membranes. Injuries to external ear.
4. On the abdomen, while lying on a table with the upper half of the body unsupported ("operating table", "el quirofano").	Bruises on the abdomen. Back injuries. Ruptured abdominal viscera.
5. To the head.	Cerebral cortical atrophy. Scars. Skull fractures. Bruises. Haematomas.
Suspension	
6. By the wrists ("la bandera").	Bruises or scars about the wrists. Joint injuries.
7. By the arms or neck.	Bruises or scars at the site of binding. Prominent lividity in the lower extremities.
8. By the ankles ("murcielago")	
9. Head down, from a horizontal pole placed under the knees with the wrists bound to the ankles ("parrot's perch", "Jack", "pau de arara").	Bruises or scars on the anterior forearms and backs of the knees/ Marks on the wrists and ankles.
Near suffocation	
10. Forced immersion of head in water, often contaminated "wet submarine", "pileta", "Latina").	Faecal material or other debris in the mouth, pharynx, trachea, esophagus or lungs. Intrathoracic petechiae. Intra-thoracic petechiae.
11. Tying of a plastic bag over the head ("dry submarine").	Intra-thoracic petechiae.
Sexual abuse	
12. Sexual abuse	Sexually transmitted diseases. Pregnancy. Injuries to breasts, external genitalia, vagina, anus or rectum.
Forced posture	
13. Prolonged standing ("el planton").	Dependent edema. Petechiae in lower extremities.
14. Forced straddling of a bar ("saw horse", "el cabellete").	
15. Cattle prod ("la picana").	Burns: appearance depends on the age of the injury. Immediately: red spots, vesicles, and/or black exudate. Within a few weeks: circular, reddish, macular scars. At several months: small, white, reddish or brown spots resembling telangiectasias.
16. Wires connected to a source of electricity.	
17. Heated metal skewer inserted into the anus ("black slave").	Peri-anal or rectal burns.
Miscellaneous	
18. Dehydration (spiders, insects, rats, mice, dogs)	Vitreous humor electrolyte abnormalities.

Annex D: Guidelines for the conduct of United Nations inquiries into allegations of massacres, 1995 - Annex IV - Appendix 2 - Drawings of parts of human body for identification of torture

Annex III

DRAWINGS OF PARTS OF HUMAN BODY FOR IDENTIFICATION OF TORTURE

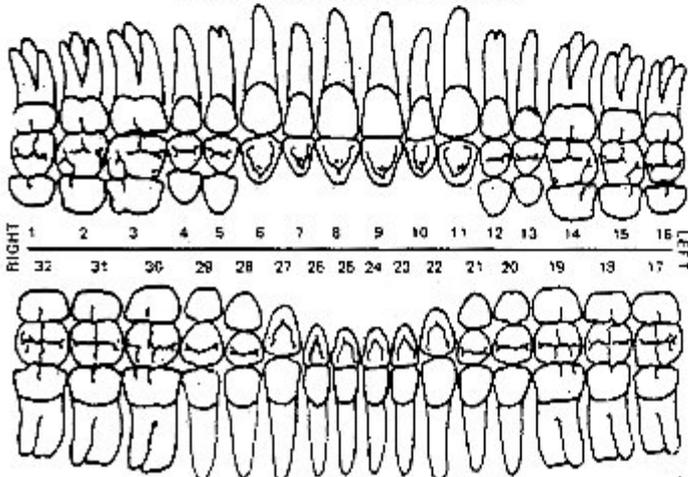
MARK ALL EXISTING RESTORATIONS AND MISSING TEETH ON THIS CHART



Describe completely all Prosthetic Appliances or Fixed Bridges \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

MARK ALL CARIES ON THIS CHART

Outline all caries and 'X' out all missing teeth



Estimated Age \_\_\_\_\_  
 Sex \_\_\_\_\_  
 Race \_\_\_\_\_

Circle descriptive term.  
 Prosthetic Appliances Present.

Maxilla  
 Full Denture  
 Partial Denture  
 Fixed Bridge

Mandible  
 Full Denture  
 Partial Denture  
 Fixed Bridge

Stains on teeth  
 Slight  
 Moderate  
 Severe

Circle descriptive term.  
 Relationship  
 Normal  
 Undershot  
 Overbite

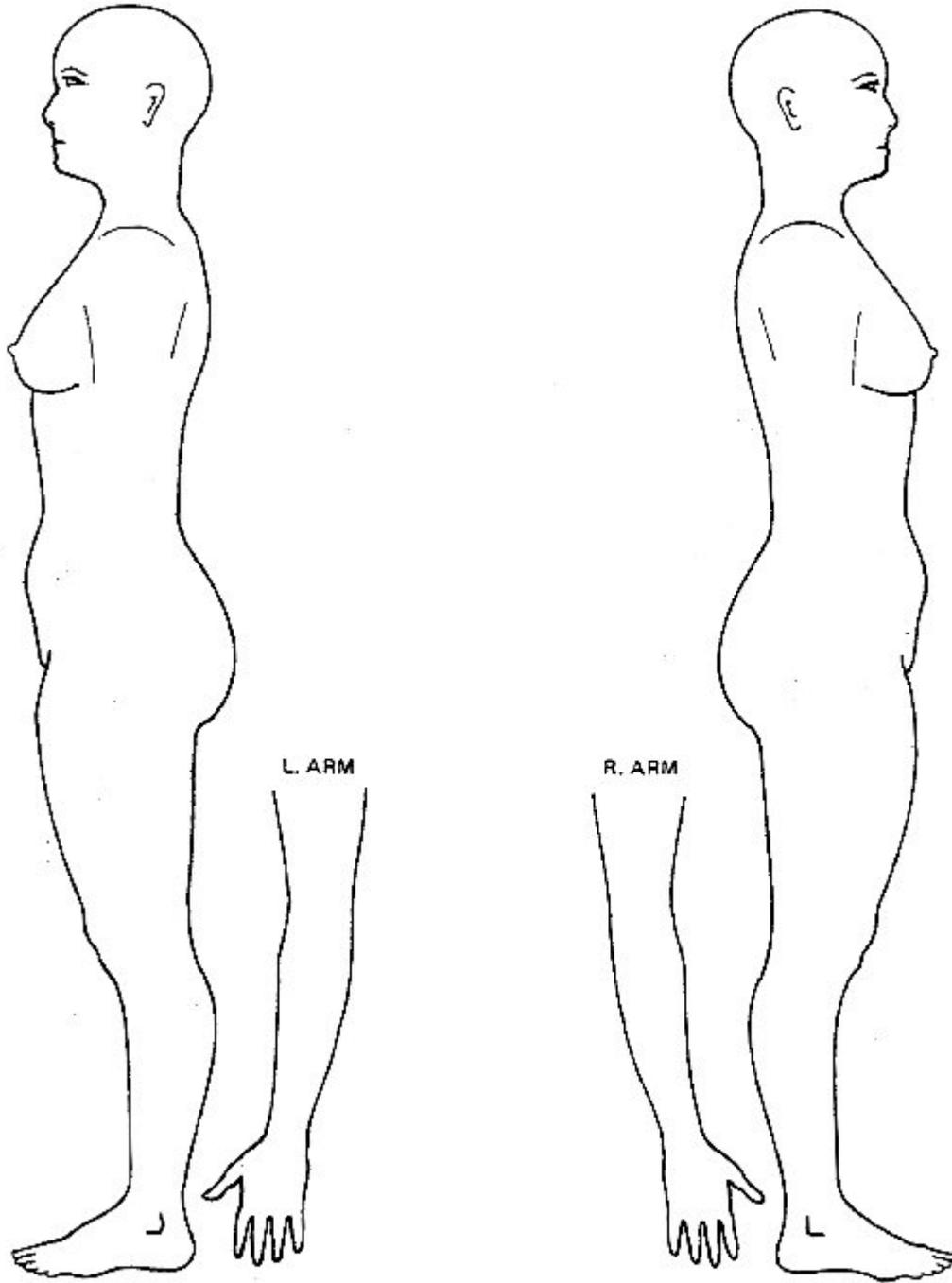
Periodontal Condition  
 Excellent  
 Average  
 Poor

Calculus  
 Slight  
 Moderate  
 Severe



Human remains management

FULL BODY, FEMALE – LATERAL VIEW

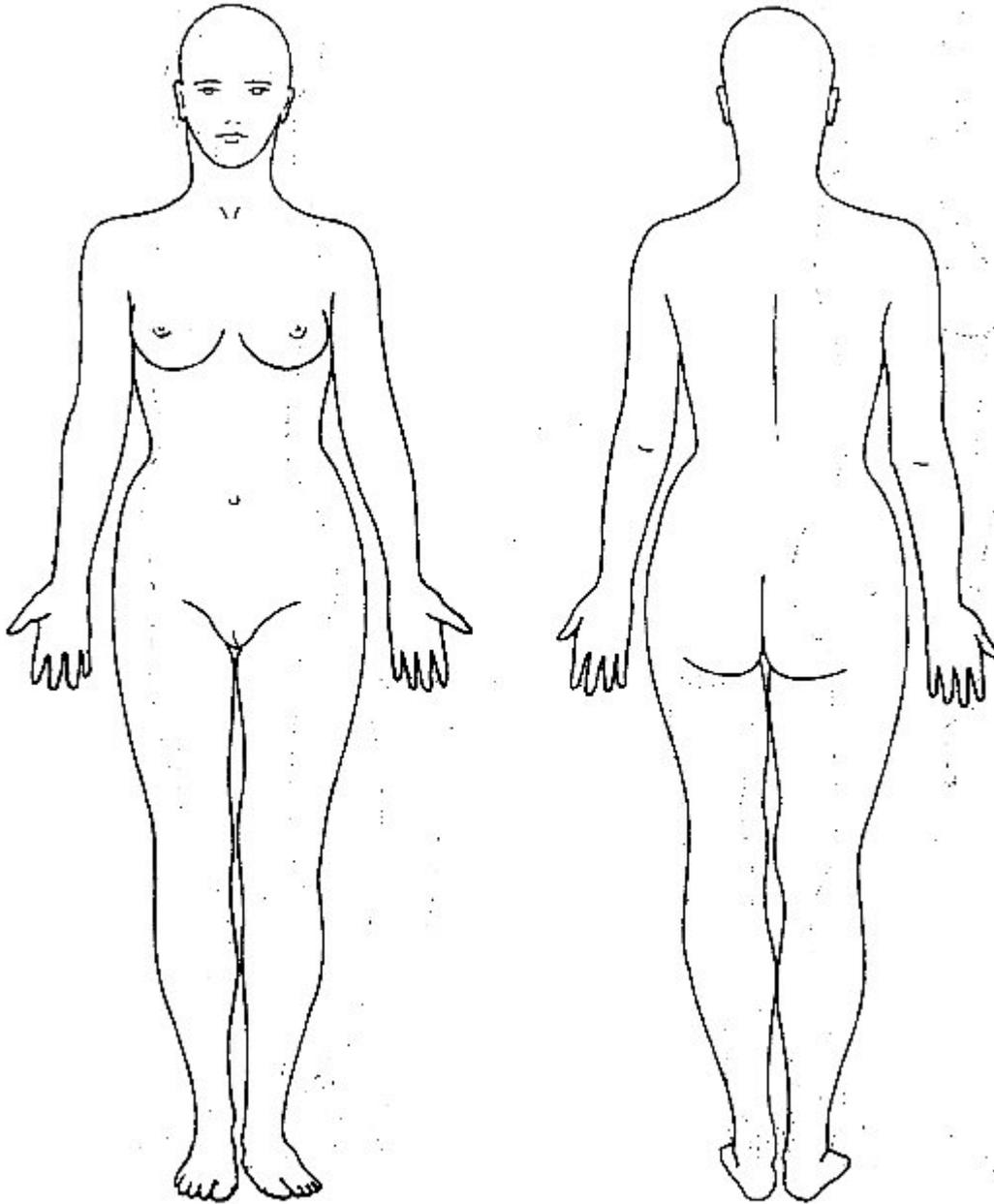


Name \_\_\_\_\_ Case No. \_\_\_\_\_

Date \_\_\_\_\_

Human remains management

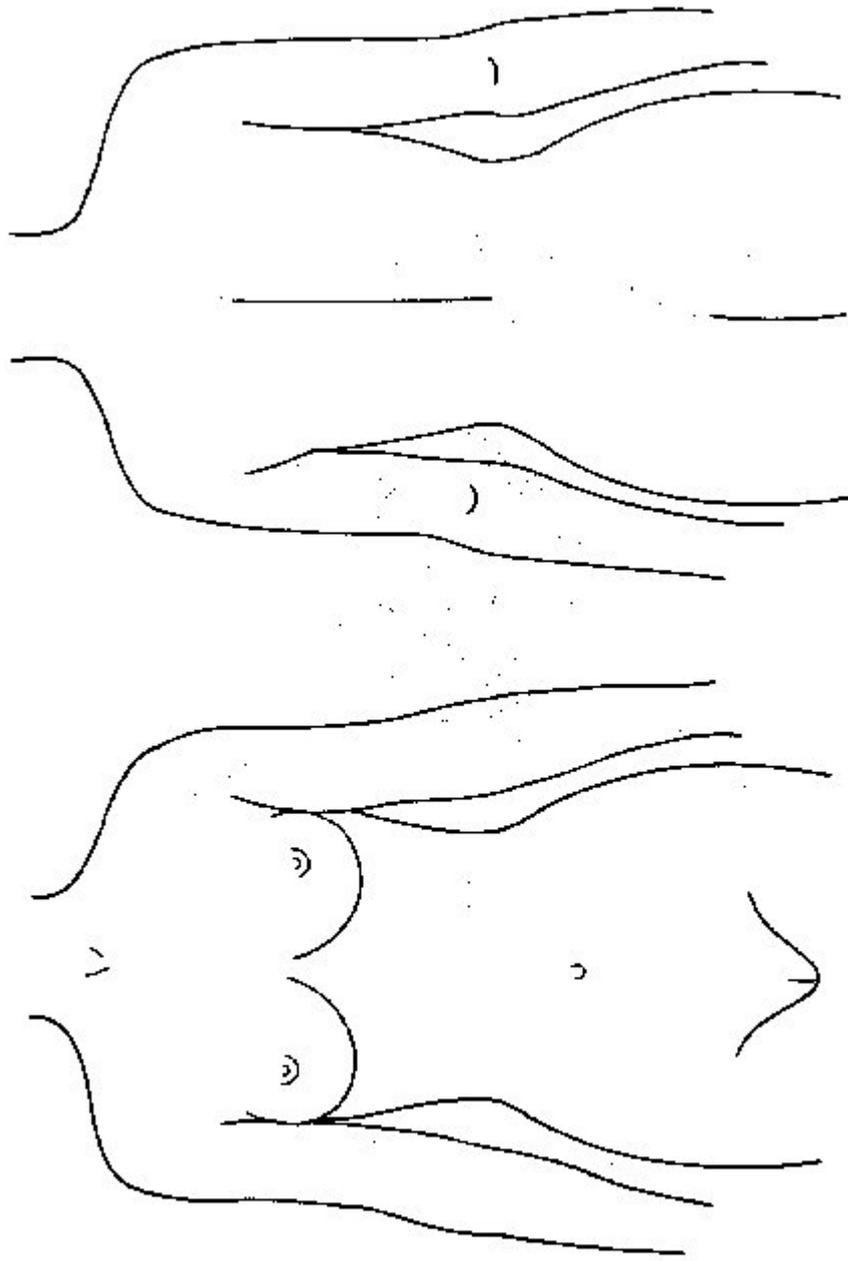
FULL BODY, FEMALE – ANTERIOR AND POSTERIOR VIEWS



Name \_\_\_\_\_ Case No. \_\_\_\_\_

Date \_\_\_\_\_

Human remains management

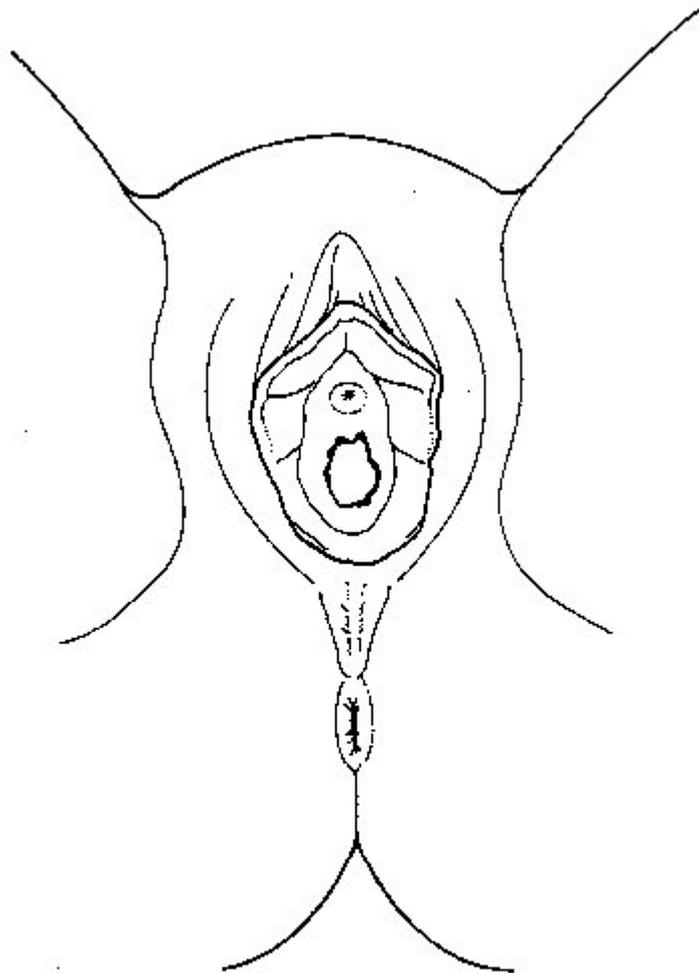


Name \_\_\_\_\_ Case No. \_\_\_\_\_

Date \_\_\_\_\_

Human remains management

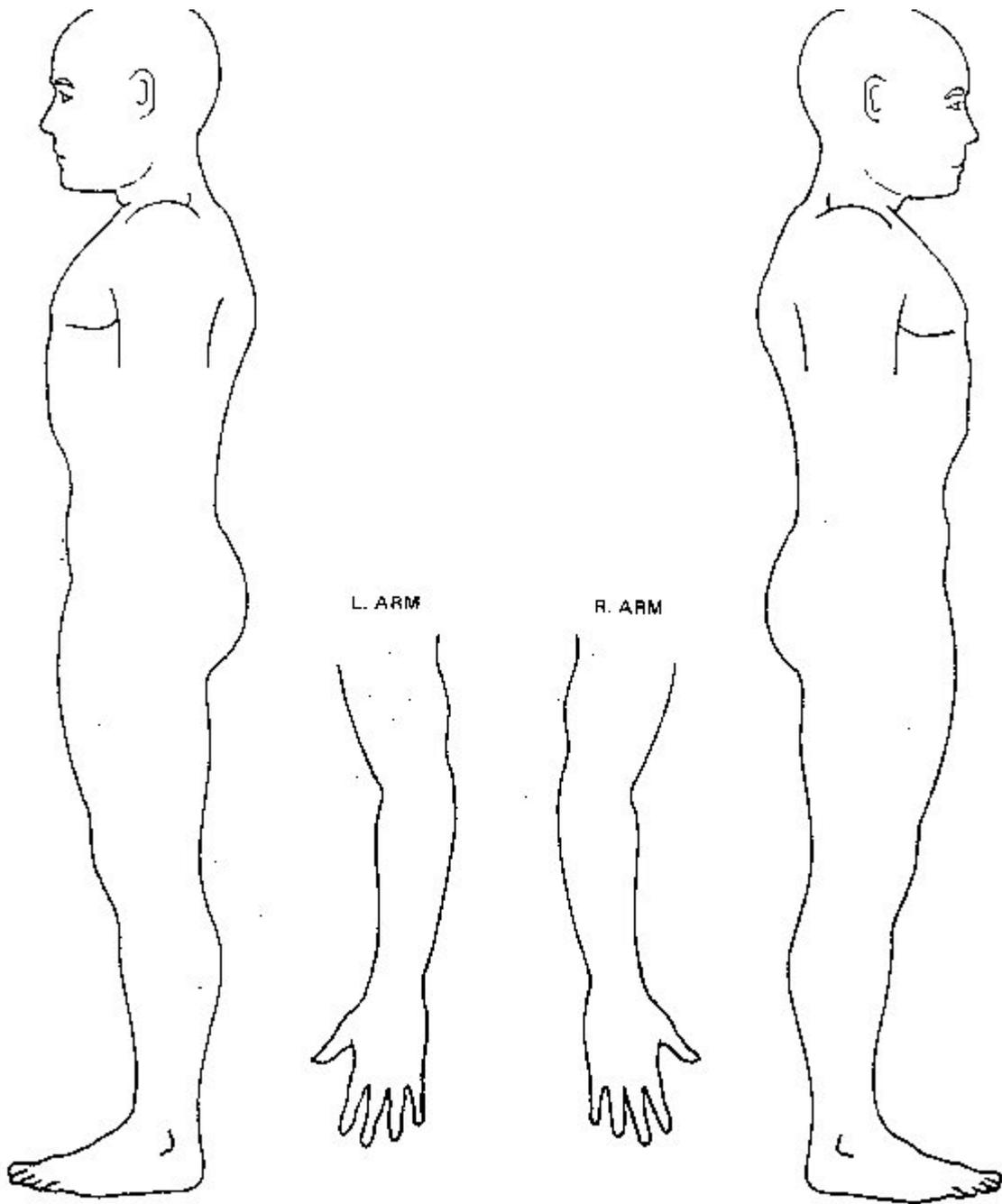
PERINEUM – FEMALE



Name \_\_\_\_\_ Case No. \_\_\_\_\_

Date \_\_\_\_\_

Human remains management

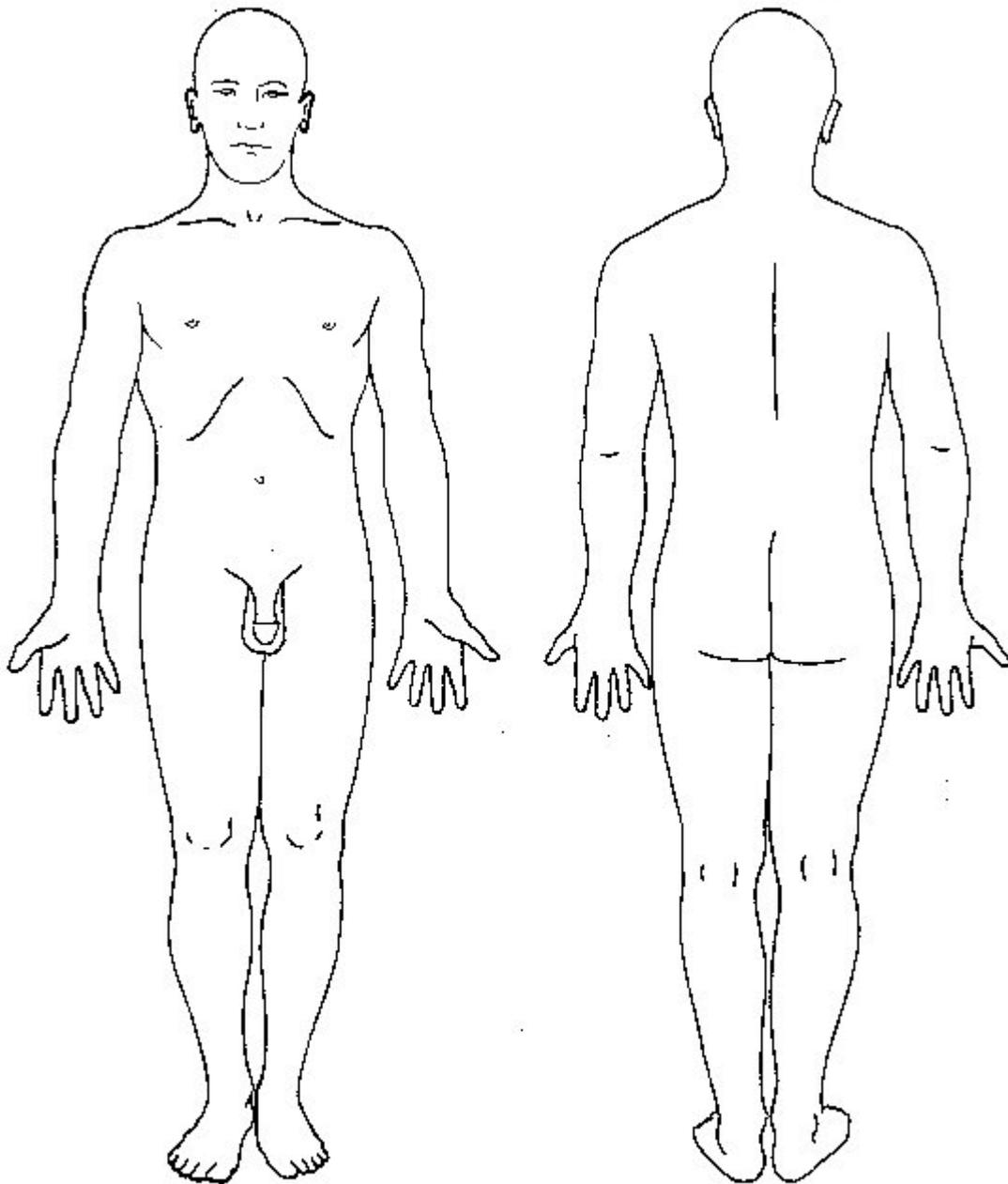


Name \_\_\_\_\_ Case No. \_\_\_\_\_

Date \_\_\_\_\_

Human remains management

FULL BODY, MALE – ANTERIOR AND POSTERIOR VIEWS (VENTRAL AND DORSAL)

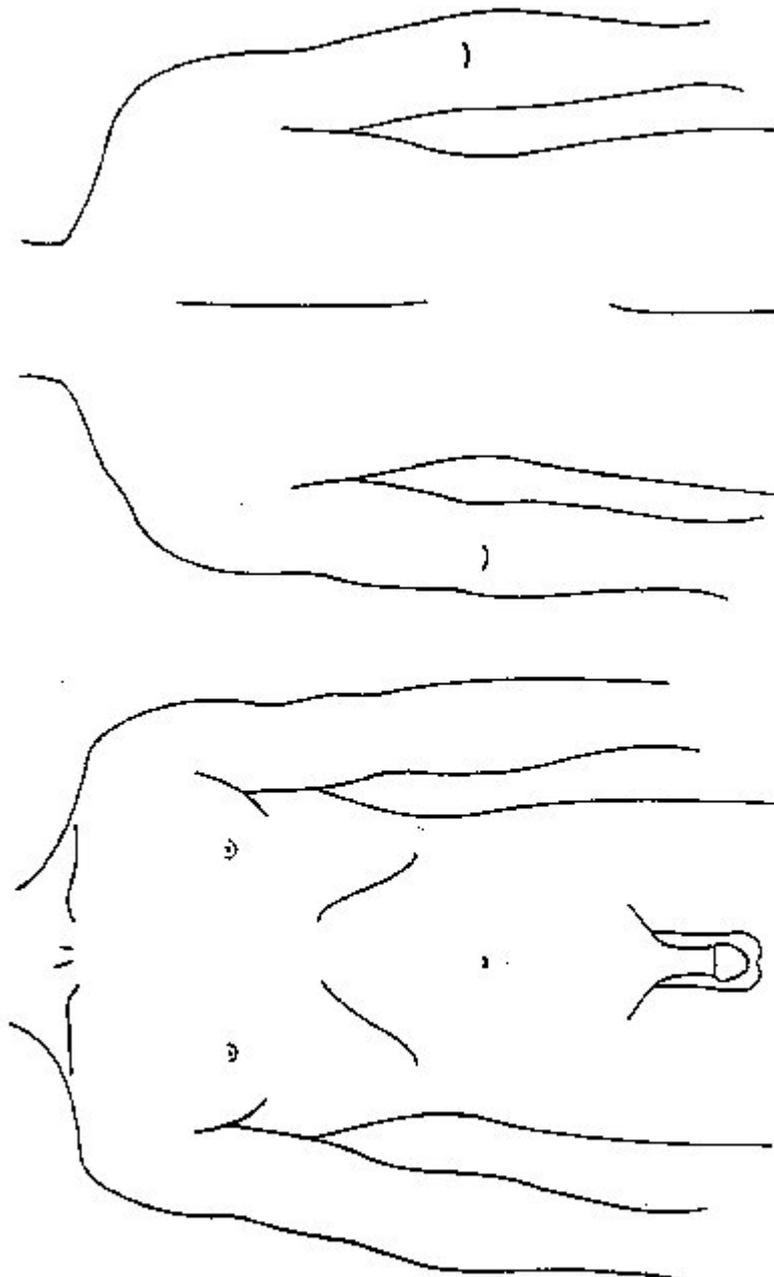


Name \_\_\_\_\_ Case No. \_\_\_\_\_

Date \_\_\_\_\_

Human remains management

THORACIC ABDOMINAL, MALE – ANTERIOR AND POSTERIOR VIEWS

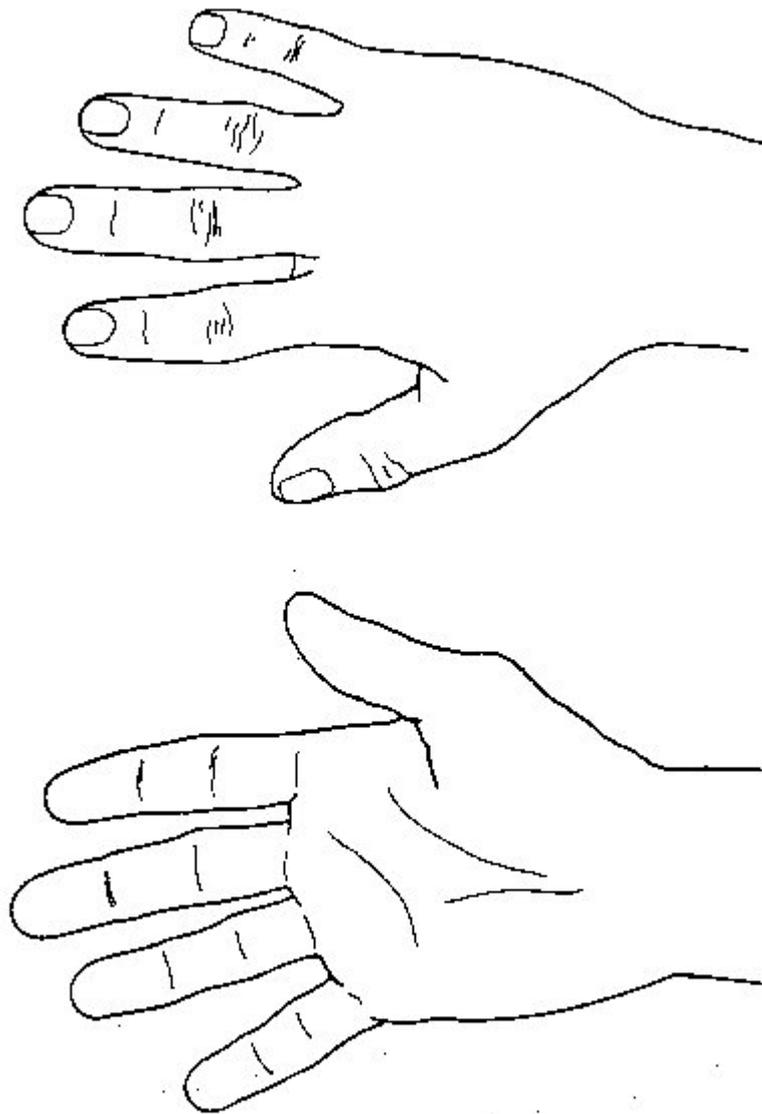


Name \_\_\_\_\_ Case No. \_\_\_\_\_

Date \_\_\_\_\_

Human remains management

RIGHT HAND – PALMAR AND DORSAL

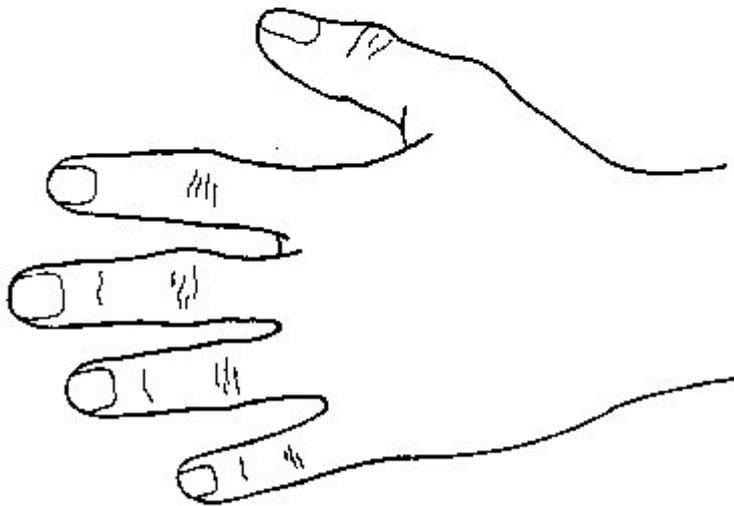
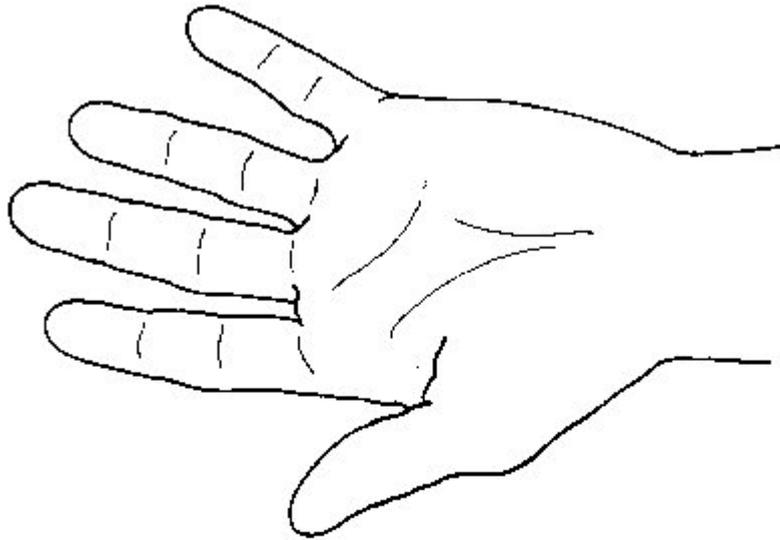


Name \_\_\_\_\_ Case No. \_\_\_\_\_

Date \_\_\_\_\_

Human remains management

LEFT HAND - PALMAR AND DORSAL



Name \_\_\_\_\_ Case No. \_\_\_\_\_

Date \_\_\_\_\_

Human remains management

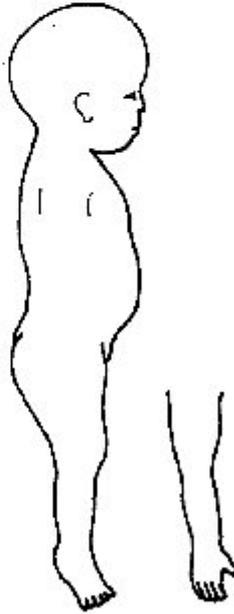
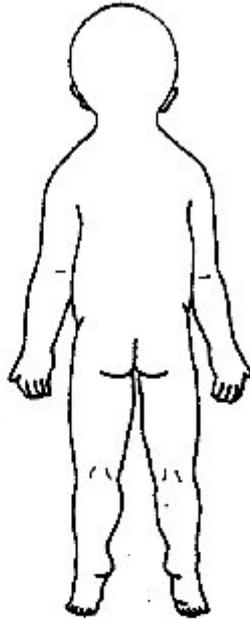
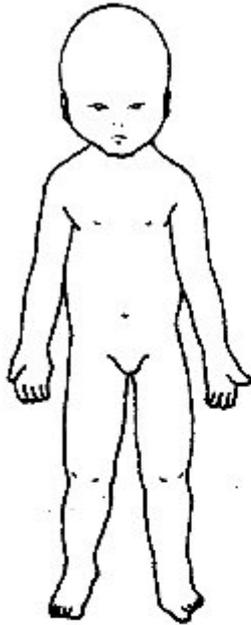
FEET – LEFT AND RIGHT PLANTAR SURFACES



Name \_\_\_\_\_ Case No. \_\_\_\_\_  
Date \_\_\_\_\_

Human remains management

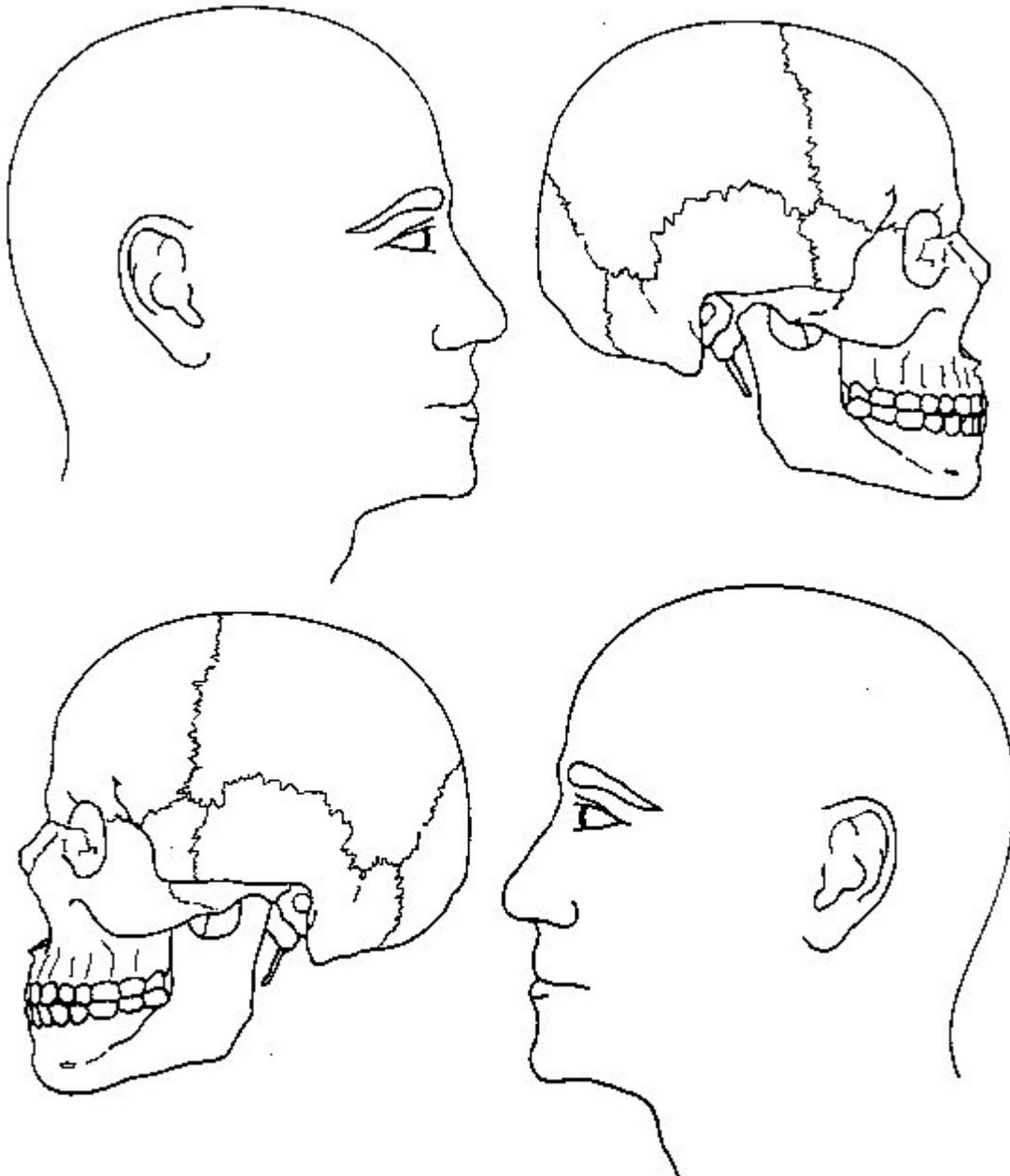
INFANT – VENTRAL, DORSAL, AND LEFT AND RIGHT LATERAL VIEWS



Name \_\_\_\_\_ Case No. \_\_\_\_\_

Date \_\_\_\_\_

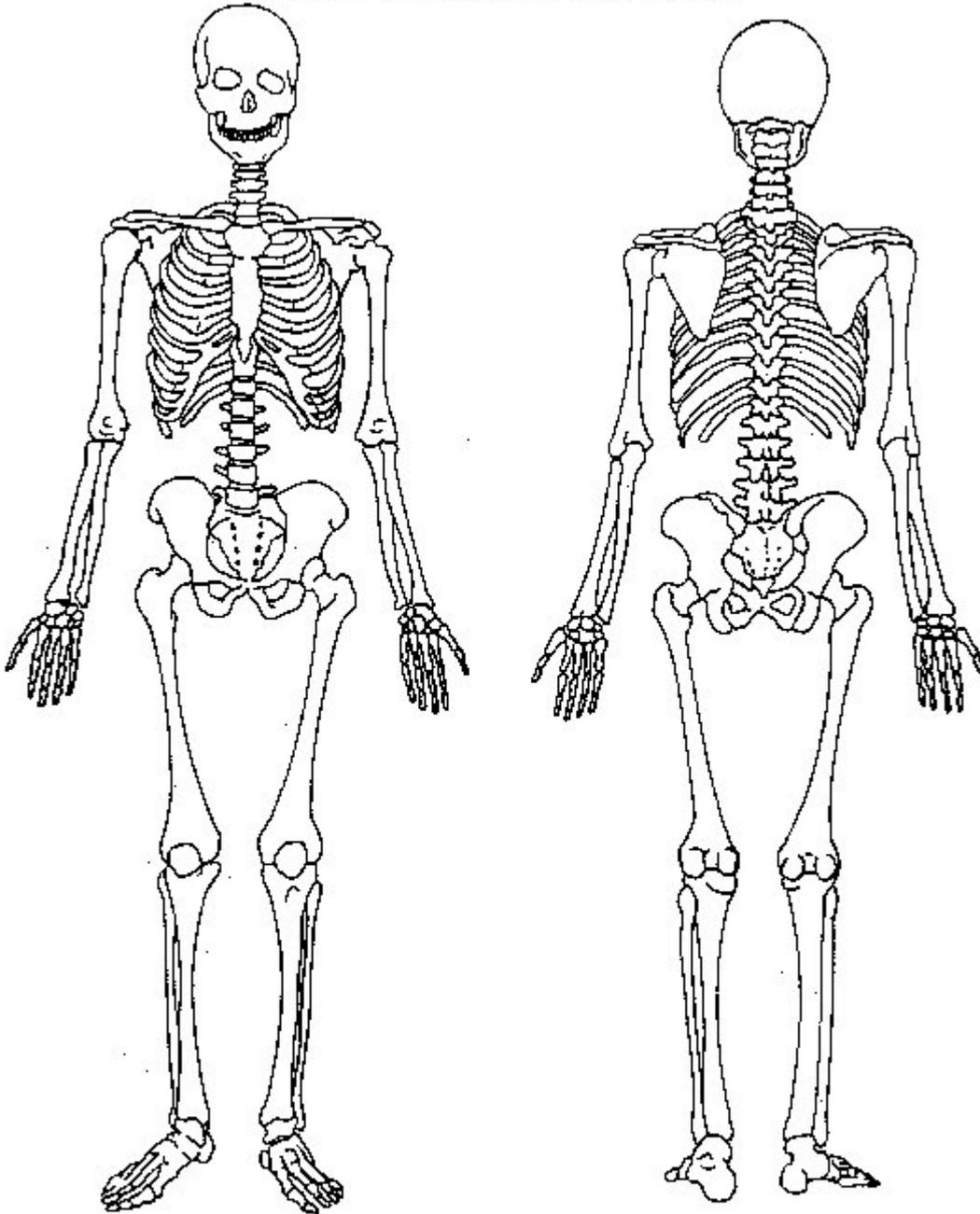
HEAD – SURFACE AND SKELETAL ANATOMY, LATERAL VIEW



Name \_\_\_\_\_ Case No. \_\_\_\_\_

Date \_\_\_\_\_

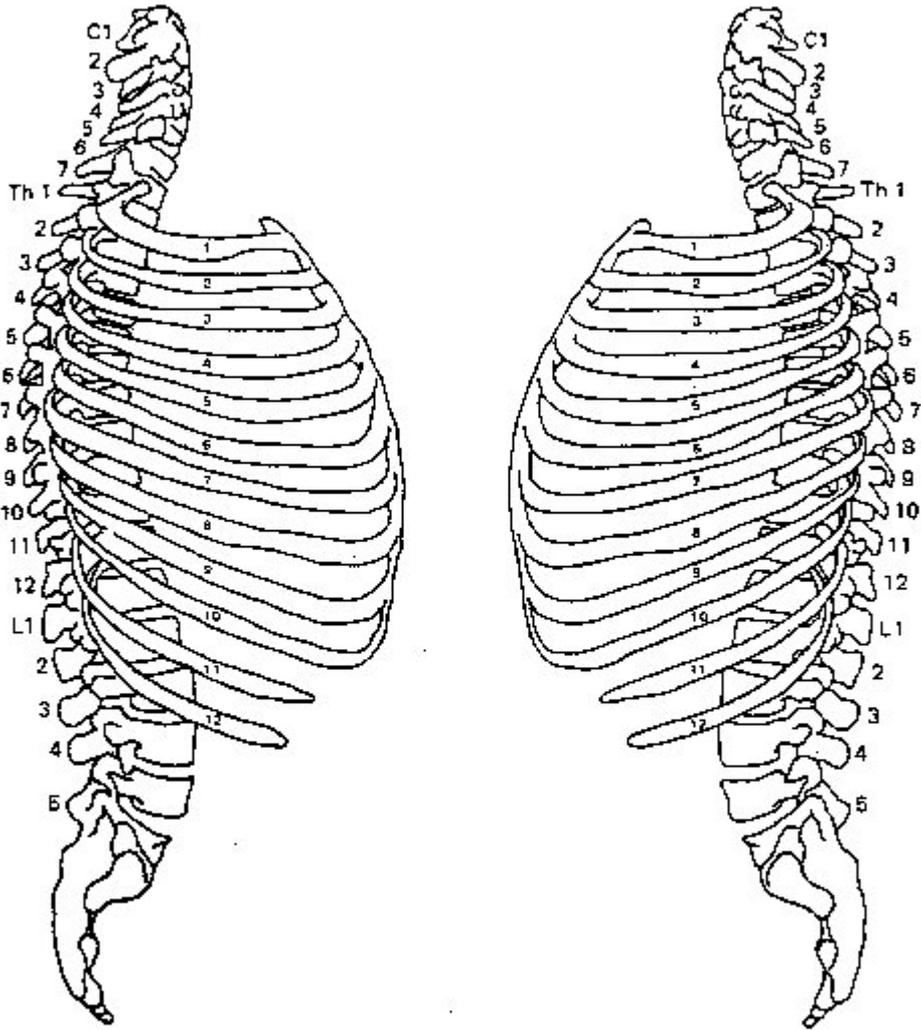
SKELETON – ANTERIOR AND POSTERIOR VIEWS



Name \_\_\_\_\_ Case No. \_\_\_\_\_

Date \_\_\_\_\_

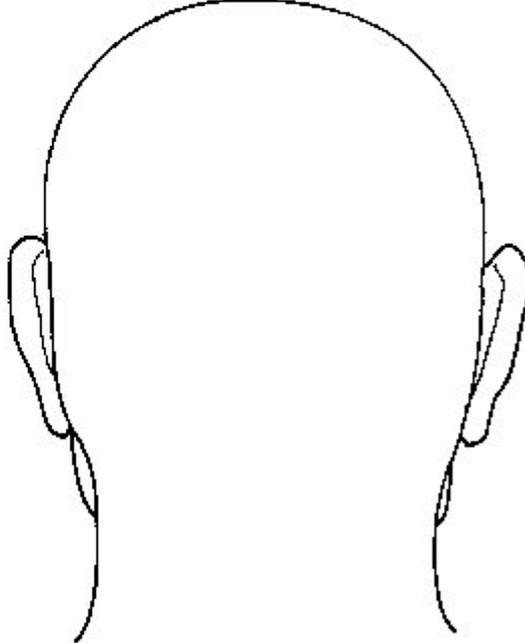
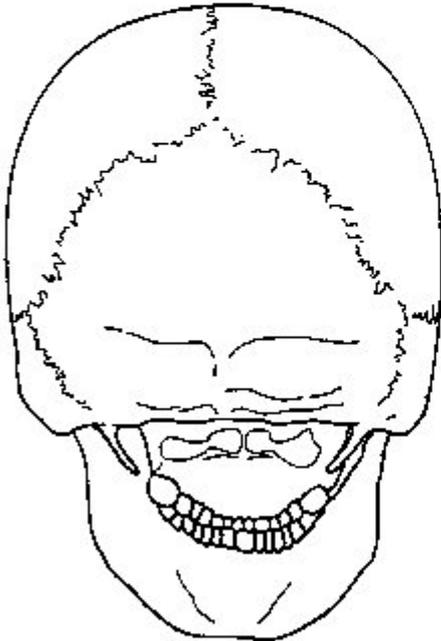
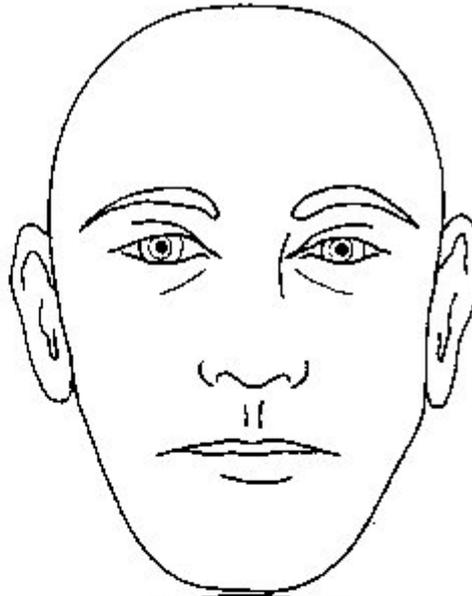
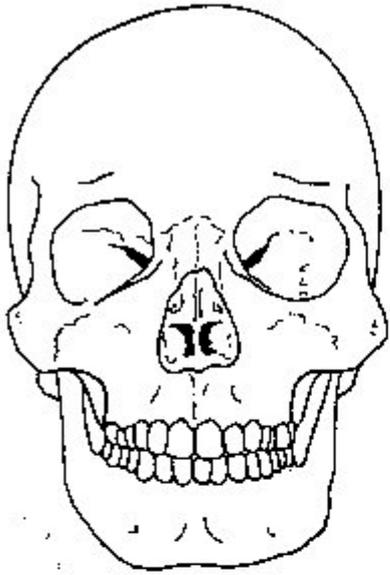
VERTEBRAL COLUMN AND RIB CAGE – LEFT AND RIGHT LATERAL VIEWS



Name \_\_\_\_\_ Case No. \_\_\_\_\_  
Date \_\_\_\_\_

Human remains management

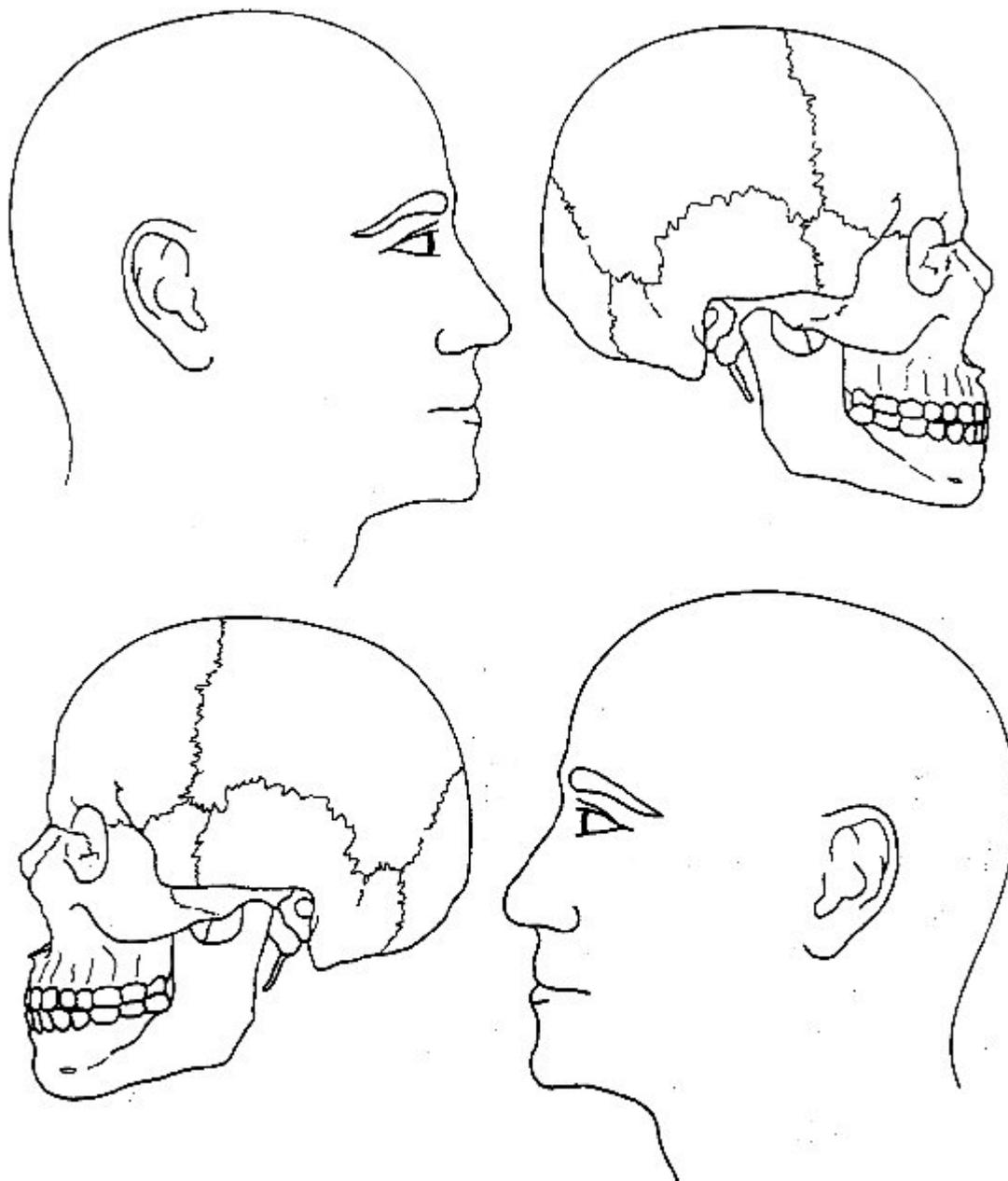
HEAD – SURFACE AND SKELETAL ANATOMY, ANTERIOR AND POSTERIOR VIEWS



Name \_\_\_\_\_ Case No. \_\_\_\_\_

Date \_\_\_\_\_

HEAD – SURFACE AND SKELETAL ANATOMY, LATERAL VIEW

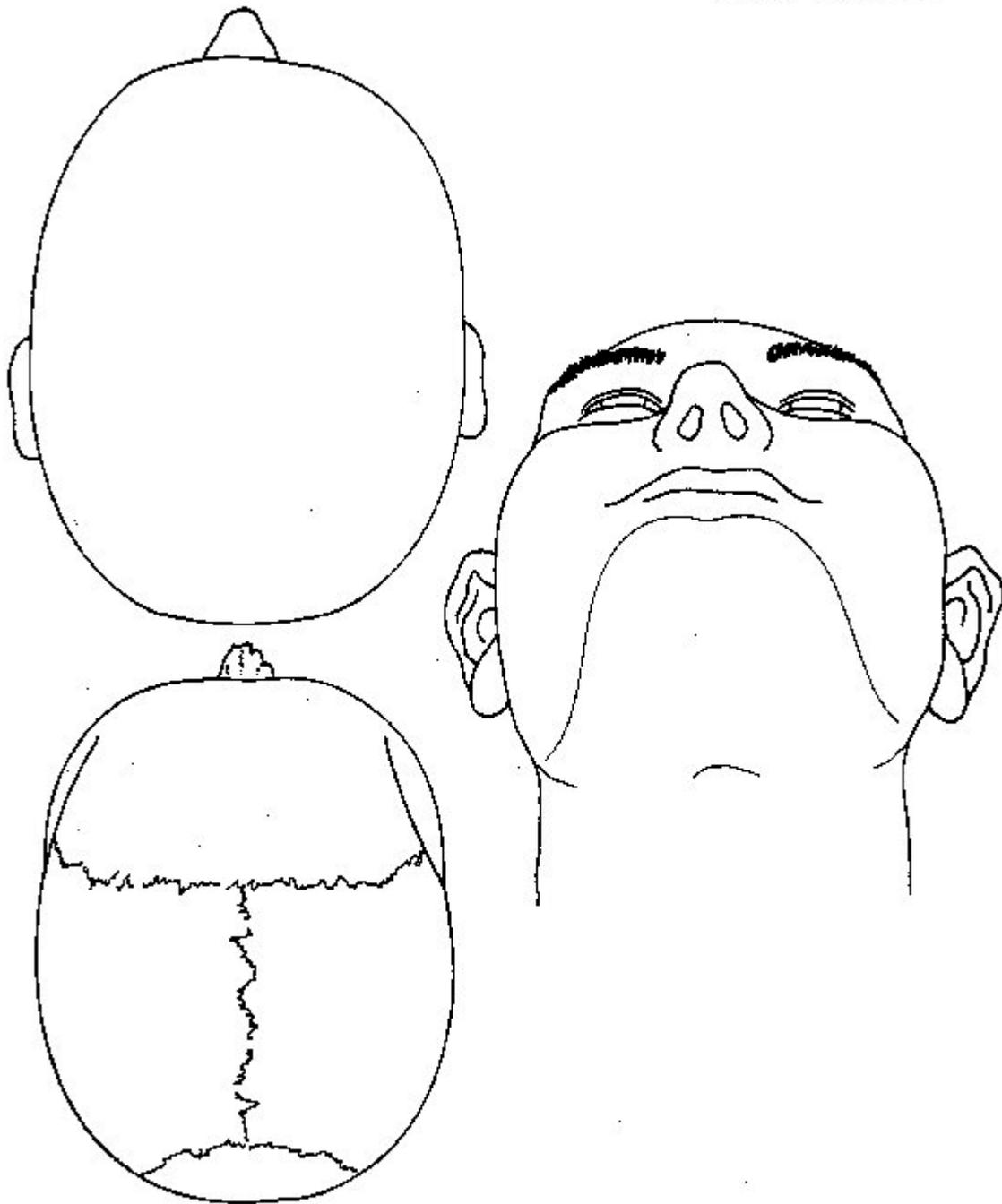


Name \_\_\_\_\_ Case No. \_\_\_\_\_

Date \_\_\_\_\_

Human remains management

HEAD – SURFACE AND SKELETAL ANATOMY, SUPERIOR VIEW – INFERIOR VIEW OF NECK

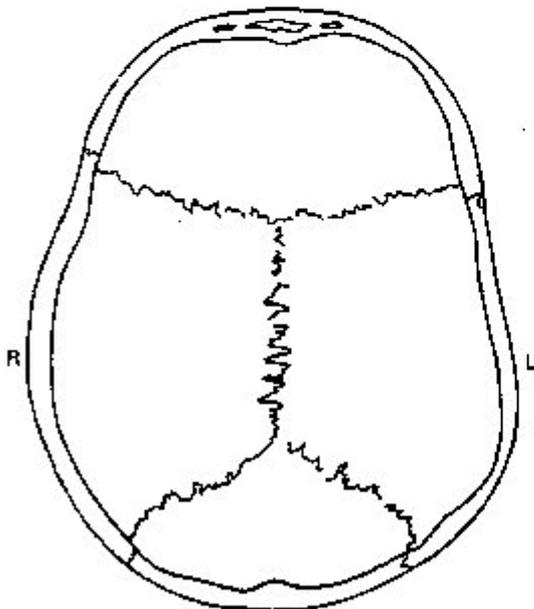
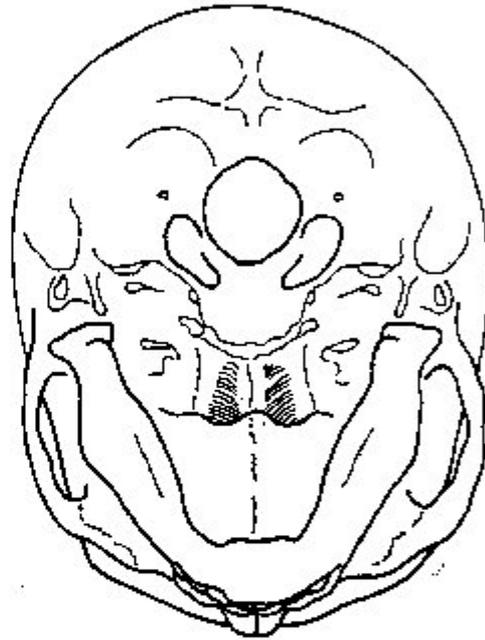
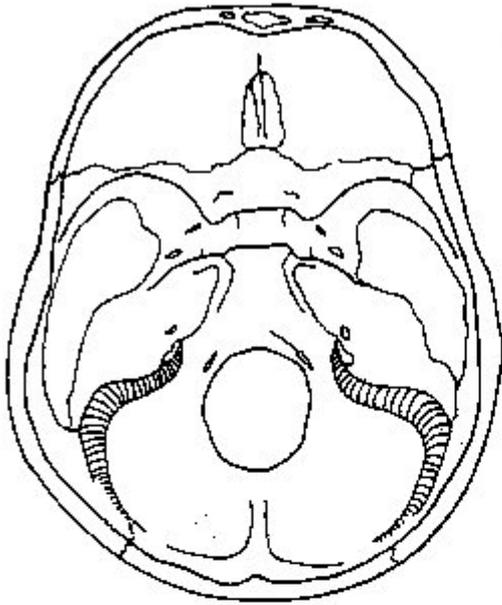


Name \_\_\_\_\_

Case No. \_\_\_\_\_

Date \_\_\_\_\_

SKULL – BASE, INFERIOR AND SUPERIOR VIEWS (PLUS CALVARIUM)

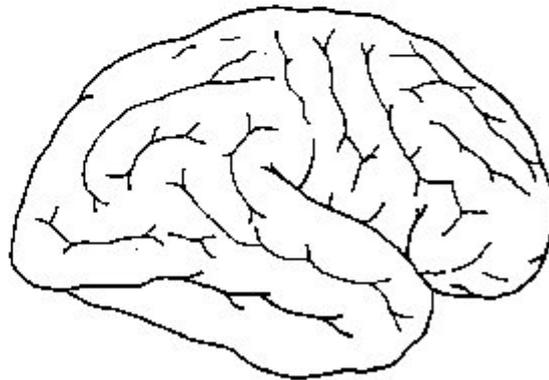
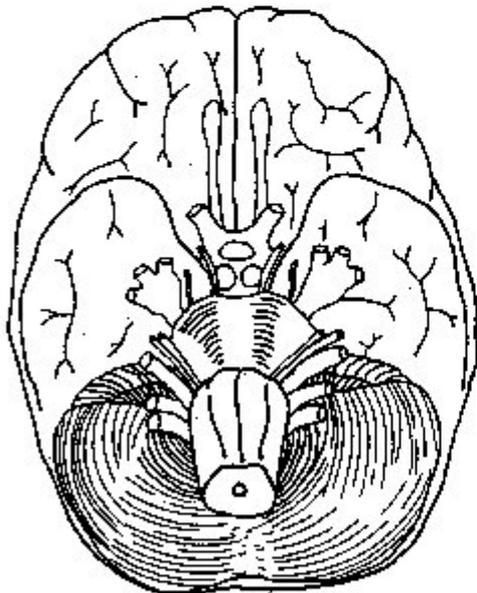
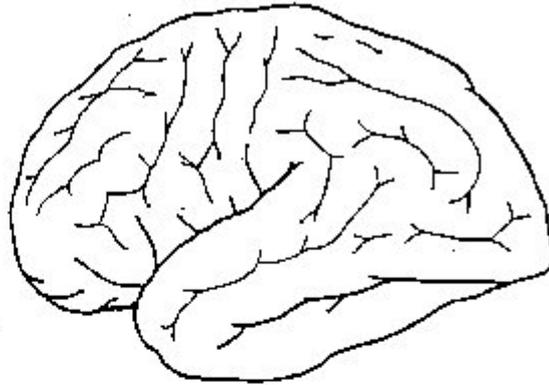
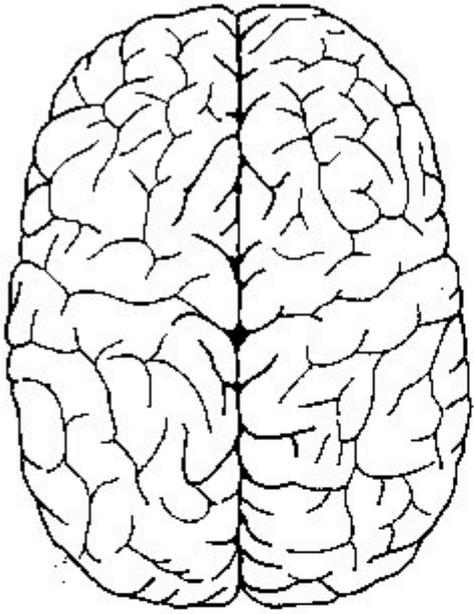


INNER VIEW OF SKULL

Name \_\_\_\_\_ Case No. \_\_\_\_\_

Date \_\_\_\_\_

BRAIN – SUPERIOR, INFERIOR, AND LATERAL VIEWS



Name \_\_\_\_\_ Case No. \_\_\_\_\_

Date \_\_\_\_\_

Human remains management

STAB WOUND CHART

NAME \_\_\_\_\_ City or County \_\_\_\_\_

		WOUND NO.										
		1	2	3	4	5	6	7	8	9	10	
1. Location of wound:	Head											
	Neck											
	Chest											
	Abdomen											
	Back											
	Arm <	Right										
		Left										
	Leg <	Right										
		Left										
	2. The skin wound is:	Horiz.										
Vert.												
Oblique												
3. Centimetres from wound to:	Top of head											
	Right of midline											
	Left of midline											
4. Wound size in millimetres	Width											
	Length											
	Diam.											
5. Direction of wound:	Backward											
	Forward											
	Upward											
	Downward											
	Medially											
	Laterally											

Photographs made: Yes \_\_\_\_\_ No \_\_\_\_\_

REMARKS:

Examined by: \_\_\_\_\_ Date: \_\_\_\_\_

Human remains management

FIREARM WOUND CHART

NAME \_\_\_\_\_ CASE NO. \_\_\_\_\_

		WOUND NO.											
		1		2		3		4		5		6	
		Ent.	Ex.	Ent.	Ex.	Ent.	Ex.	Ent.	Ex.	Ent.	Ex.	Ent.	Ex.
1. Location of wound:	Head												
	Neck												
	Chest												
	Abdomen												
	Back												
	Right Arm <												
	Left Arm <												
	Right Leg <												
Left Leg <													
2. Size of wound: (Centimetres)	Diam.												
	Width												
	Length												
3. Centimetres from wound to:	Top of head												
	Right of midline												
	Left of midline												
4. Firearm Residue:	On skin												
	Clothing												
	Absent												
5. Direction of missile through body:	Backward												
	Forward												
	Downward												
	Upward												
	To right												
To left													
6. Missile Recovered:	Probable Calibre												
	Shotgun												

Photographs: \_\_\_\_\_ X-rays: \_\_\_\_\_

REMARKS:

Examiner: \_\_\_\_\_ Date: \_\_\_\_\_

### **Annex E: Guidelines for the conduct of United Nations inquiries into allegations of massacres, 1995 - Annex V - Model Protocol for disinterment and analysis of skeletal remains**

#### ***A. Introduction***

This proposed model protocol for the disinterment and analysis of skeletal remains includes a comprehensive checklist of the steps in a basic forensic examination. The objectives of an anthropological investigation are the same as those of a medicolegal investigation of a recently deceased person. The anthropologist must collect information that will establish the identity of the deceased, the time and place of death, the cause of death and the manner or mode of death (homicide, suicide, accident or natural). The approach of the anthropologist differs, however, because of the nature of the material to be examined. Typically, a prosecutor is required to examine a body, whereas an anthropologist is required to examine a skeleton. The prosecutor focuses on information obtained from soft tissues, whereas the anthropologist focuses on information from hard tissues. Since decomposition is a continuous process, the work of both specialists can overlap. An anthropologist may examine a fresh body when bone is exposed or when bone trauma is a factor. An experienced prosecutor may be required when mummified tissues are present. In some circumstances, use of both this protocol and the model autopsy protocol may be necessary to yield the maximum information. The degree of decomposition of the body will dictate the type of investigation and, therefore, the protocol(s) to be followed.

The questions addressed by the anthropologist differ from those pursued in a typical autopsy. The anthropological investigation invests more time and attention to basic questions such as the following:

- (a) Are the remains human?
- (b) Do they represent a single individual or several?
- (c) What was the decedent's sex, race, stature, body weight, handedness and physique?
- (d) Are there any skeletal traits or anomalies that could serve to positively identify the decedent?

The time, cause and manner of death are also addressed by the anthropologist, but the margin of error is usually greater than that which can be achieved by an autopsy shortly after death.

This model protocol may be of use in many diverse situations. Its application may be affected, however, by poor conditions, inadequate financial resources or lack of time. Variation from the protocol may be inevitable or even preferable in some cases. It is suggested, however, that any major deviations, with the supporting reasons, should be noted in the final report.

#### ***B. Proposed model skeletal analysis protocol***

##### **1. Scene investigation**

A burial recovery should be handled with the same exacting care given to a crime-scene search. Efforts should be co-ordinated between the principal investigator and the consulting physical anthropologist or archaeologist. Human remains are frequently exhumed by law enforcement officers or cemetery workers unskilled in the techniques of forensic anthropology. Valuable information may be lost in this manner and false information is sometimes generated. Disinterment by untrained persons should be prohibited. The consulting anthropologist should be present to conduct or supervise the disinterment. Specific problems and procedures accompany the excavation of each type of burial. The amount of information obtained from the excavation depends on knowledge of the burial situation and judgement based on experience. The final report should include a rationale for the excavation procedure.

The following procedure should be followed during disinterment:

- (a) Record the date, location, starting and finishing times of the disinterment, and the names of all workers;
- (b) Record the information in narrative form, supplemented by sketches and photographs;
- (c) Photograph the work area from the same perspective before work begins and after it ends every day to document any disturbance not related to the official procedure;
- (d) In some cases, it is necessary to first locate the grave within a given area. There are numerous methods of locating graves, depending on the age of the grave:
  - (i) An experienced archaeologist may recognize clues such as changes in surface contour and variation in local vegetation;

## Human remains management

- (ii) A metal probe can be used to locate the less compact soil characteristics of grave fill;
- (iii) The area to be explored can be cleared and the top soil scraped away with a flat shovel. Graves appear darker than the surrounding ground because the darker topsoil has mixed with the lighter subsoil in the grave fill. Sometimes a light spraying of the surface with water may enhance a grave's outline;
- (e) Classify the burial as follows:
  - (i) Individual or commingled. A grave may contain the remains of one person buried alone, or it may contain the commingled remains of two or more persons buried either at the same time or over a period of time;
  - (ii) Isolated or adjacent. An isolated grave is separate from other graves and can be excavated without concern about encroaching upon another grave. Adjacent graves, such as in a crowded cemetery, require a different excavation technique because the wall of one grave is also the wall of another grave;
  - (iii) Primary or secondary. A primary grave is the grave in which the deceased is first placed. If the remains are then removed and reburied, the grave is considered to be secondary;
  - (iv) Undisturbed or disturbed. An undisturbed burial is unchanged (except by natural processes) since the time of primary burial. A disturbed burial is one that has been altered by human intervention after the time of primary burial. All secondary burials are considered to be disturbed; archaeological methods can be used to detect a disturbance in a primary burial;
- (f) Assign an unambiguous number to the burial. If an adequate numbering system is not already in effect, the anthropologist should devise a system;
- (g) Establish a datum point, then block and map the burial site using an appropriate-sized grid and standard archaeological techniques. In some cases, it may be adequate simply to measure the depth of the grave from the surface to the skull and from the surface to the feet. Associated material can then be recorded in terms of their position relative to the skeleton;
- (h) Remove the overburden of earth, screening the dirt for associated materials. Record the level (depth) and relative co-ordinates of any such findings. The type of burial, especially whether primary or secondary, influences the care and attention that needs to be given to this step. Associated materials located at a secondary burial site are unlikely to reveal the circumstances of the primary burial but may provide information on events that have occurred after that burial;
- (i) Search for items such as bullets or jewellery, for which a metal detector can be useful, particularly in the levels immediately above and below the level of the remains;
- (j) Circumscribe the body, when the level of the burial is located, and, when possible, open the burial pit to a minimum of 30 cm on all sides of the body;
- (k) Pedestal the burial by digging on all sides to the lowest level of the body (approximately 30 cm). Also pedestal any associated artifacts;
- (l) Expose the remains with the use of a soft brush or whisk broom. Do not use a brush on fabric, as it may destroy fabric evidence. Examine the soil found around the skull for hair. Place this soil in a bag for laboratory study. Patience is invaluable at this time. The remains may be fragile, and interrelationships of elements are important and may be easily disrupted. Damage can seriously reduce the amount of information available for analysis;
- (m) Photograph and map the remains in situ. All photographs should include an identification number, the date, a scale and an indication of magnetic north;
  - (i) First photograph the entire burial, then focus on significant details so that their relation to the whole can be easily visualized;
  - (ii) Anything that seems unusual or remarkable should be photographed at close range. Careful attention should be given to evidence of trauma or pathological change, either recent or healed;
  - (iii) Photograph and map all associated materials (clothes, hair, coffin, artifacts, bullets, casings etc.). The map should include a rough sketch of the skeleton as well as any associated materials;

## Human remains management

- (n) Before displacing anything, measure the individual:
  - (i) Measure the total length of the remains and record the terminal points of the measurement, e.g. apex to plantar surface of calcaneus (note: This is not a stature measurement);
  - (ii) If the skeleton is so fragile that it may break when lifted, measure as much as possible before removing it from the ground;
- (o) Remove all elements and place them in bags or boxes, taking care to avoid damage. Number, date and initial every container;
- (p) Excavate and screen the level of soil immediately under the burial. A level of "sterile" (artifact-free) soil should be located before ceasing excavation and beginning to backfill.

### 2. Laboratory analysis of skeletal remains

The following protocol should be followed during the laboratory analysis of the skeletal remains:

- (a) Record the date, location, starting and finishing times of the skeletal analysis, and the names of all workers;
- (b) Radiograph all skeletal elements before any further cleaning:
  - (i) Obtain bite-wing, apical and panoramic dental X-rays, if possible;
  - (ii) The entire skeleton should be X-rayed. Special attention should be directed to fractures, developmental anomalies and the effects of surgical procedures. Frontal sinus films should be included for identification purposes;
- (c) Retain some bones in their original state; two lumbar vertebrae should be adequate. Rinse the rest of the bones clean but do not soak or scrub them. Allow the bones to dry;
- (d) Lay out the entire skeleton in a systematic way:
  - (i) Distinguish left from right;
  - (ii) Inventory every bone and record on a skeletal chart;
  - (iii) Inventory the teeth and record on a dental chart. Note broken, carious, restored and missing teeth;
  - (iv) Photograph the entire skeleton in one frame. All photographs should contain an identification number and scale;
- (e) If more than one individual is to be analysed, and especially if there is any chance that comparisons will be made between individuals, number every element with indelible ink before any other work is begun;
- (f) Record the condition of the remains, e.g. fully intact and solid, eroding and friable, charred or cremated;
- (g) Preliminary identification:
  - (i) Determine age, sex, race and stature;
  - (ii) Record the reasons for each conclusion (e.g. sex identity based on skull and femoral head);
  - (iii) Photograph all evidence supporting these conclusions;
- (h) Individual identification:
  - (i) Search for evidence of handedness, pathological change, trauma and developmental anomalies;
  - (ii) Record the reasons for each conclusion;
  - (iii) Photograph all evidence supporting these conclusions;
- (i) Attempt to distinguish injuries resulting from therapeutic measures from those unrelated to medical treatment. Photograph all injuries:
  - (i) Examine the hyoid bone for cracks or breaks;
  - (ii) Examine the thyroid cartilage for damage;
  - (iii) Each bone should be examined for evidence of contact with metal. The superior or inferior edges of the ribs require particular scrutiny. A dissecting microscope is useful;

## Human remains management

- (j) If the remains are to be reburied before obtaining an identification, retain the following samples for further analysis:
  - (i) A mid-shaft cross-section from either femur, 2 cm or more in height;
  - (ii) A mid-shaft cross-section from either fibula, 2 cm or more in height;
  - (iii) A 4-cm section from the sternal end of a rib (sixth, if possible);
  - (v) Sever molar teeth for possible later deoxyribonucleic acid fingerprinting for identification;
  - (vi) A cast of the skull for possible facial reconstruction;
  - (vii) Record what samples have been saved, and label all samples with the identification number, date and name of the person who removed the sample.

### 3. Final report

The following steps should be taken in the preparation of a -final report:

- (a) Prepare a full report of all procedures and results;
- (b) Include a short summary of the conclusions;
- (c) Sign and date the report.

### 4. Repository for evidence

In cases where the body cannot be identified, the exhumed remains or other evidence should be preserved for a reasonable time. A repository should be established to hold the bodies for 5-10 years in case they can be identified at a later time.