



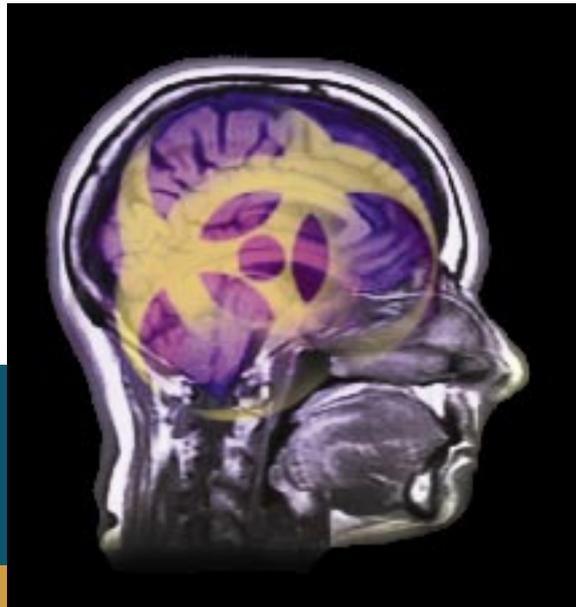
BIOTECHNOLOGY, WEAPONS AND HUMANITY



ICRC

Information from governments, United Nations and industry provides a long list of existing and advances. These include:

-  deliberate spread of diseases such as typhoid, anthrax and smallpox in order to cause fear, injury and death;
-  alteration of existing disease agents to render them more harmful;
-  creation of viruses from synthetic materials, demonstrated by the reconstitution of polio virus (the results of which were published in July 2002) using a recipe available on the internet and gene sequencers from a mail-order supplier;
-  possible future development of ethnically or racially specific biological agents;



agencies, scientific circles, medical associations

emerging capabilities for misuse of scientific

- 🦠 creation of novel biological agents for use in conjunction with corresponding vaccines for one's troops or population;
- 🦠 new methods to covertly spread naturally occurring biological agents in order to alter physiological processes of target populations such as consciousness, behaviour and fertility, in some cases over a period of years;
- 🦠 production of biological agents to attack agricultural or industrial infrastructure. (Even unintended release of such agents could have uncontrollable and unknown effects on the natural environment.)



Developments such as these will make biological weapons more attractive, more effective and more difficult to detect.

Falling sick from invisible germs is universally feared. Individuals, families and whole societies go to great lengths to protect their health.

Today, advances in biotechnology carry enormous promise. Humanity may benefit in myriad ways if current research leads, for instance, to ways of safely breaking down toxic waste, tailoring life-saving drugs or vaccines to individuals, and improving food production in impoverished areas of the world.

But these advances will also pose acute risks to humanity and our environment if they are inadequately controlled or employed as a means of warfare or spreading terror, or otherwise misused.

Since the end of the Cold War it has become apparent that some countries have continued biological weapons programmes in violation of international law. Governments have not been alone in this: the world now also faces the threat of direct attacks against civilians by non-state organizations.



In addition, scientists in academic, industrial or military laboratories may be operating in ignorance of, or willful disregard for, the uses to which their work could be put. They also risk eroding rules established against the use of poison in warfare and the deliberate spread of disease.

Poisoning and germ warfare have for many centuries been the subject of public abhorrence; they are proscribed in diverse cultures, religions and military traditions. Governments banned the use of biological and chemical weapons in the 1925 Geneva Protocol. The world then had to wait decades before development, production, stockpiling and transfer of these agents were also prohibited by the 1972 Biological Weapons Convention and the 1993 Chemical Weapons Convention.



These risks are amplified by the failure in 2001 of the States party to the 1972 Biological Weapons Convention to agree on measures to ensure compliance with the Convention's provisions.

Given its mandate to protect and assist the victims of armed conflict, the International Committee of the Red Cross (ICRC) is alarmed by the increasing potential for misuse for hostile purposes of biotechnology developments.

As advances in biotechnology begin to find their way into everyday life and related knowledge becomes more widely available, the need to regulate certain scientific endeavours in this field and to monitor potentially dangerous technologies is becoming ever more urgent.

T H E T H E I C R C ' S A P P E A L E A L

The risks described here prompted the ICRC to issue a public appeal in September 2002 entitled "Biotechnology, Weapons and Humanity". This appeal was addressed to governments, scientists, the biotechnology industry and civil society. It:

- 🚫 identified the growing danger of advances in biotechnology being misused;
- 🚫 highlighted the threat which inaction poses to rules – ancient and modern – prohibiting the use of poison and the deliberate spread of disease;
- 🚫 called for reaffirmation of these rules by governments, scientists, industry and civil society, and for a range of practical preventive measures to be taken.

THE WEB OF PREVENTION

Those in a position to help prevent biotechnology being used for hostile purposes too often focus on only one aspect of the solution, such as the Biological Weapons Convention, bio-safety rules, disease surveillance or countering “bio-terrorism”. Seldom is synergy of action achieved between the different entities concerned.

At the core of the ICRC’s appeal is a “web of prevention” that should serve to prevent advances in biotechnology being used for poisoning or the deliberate spread of disease. This web is formed by the broad and integrative approach that should be taken by all those concerned to minimize the risk.

THE ICRC APPEAL ALSO:

-  encourages greater awareness and closer consideration of the risks, rules and responsibilities associated with the potential misuse of biotechnology, and
-  advocates contact and concerted action between concerned individuals involved in different but related domains, including disease surveillance, criminal law, industrial control, public health preparedness, international law, scientific codes of conduct and education.

A web of prevention is the only effective approach to detecting and preventing poisoning and the deliberate spread of disease.

YOU ARE CONCERNED, YOU CAN HELP

Whether a politician, soldier, policy-maker, scientist, doctor, biotech executive or parent, you have an important stake in preventing the misuse of biotechnology. There are many things that you can do in your official capacity and as a concerned citizen. The ICRC suggests the following actions:

-  encouraging your government to become party (without formulating any reservation) to both the 1925 Geneva Protocol and the 1972 Biological Weapons Convention, and to adopt any stringent national legislation needed to ensure that prohibited acts are punished and biological agents with potential for hostile use are controlled;

- ⚠️ scrutinizing all research with potentially dangerous consequences and ensuring that it is submitted to rigorous and independent peer review;
- ⚠️ encouraging adoption of professional and industrial codes of conduct aimed at preventing the misuse of biological agents;
- ⚠️ ensuring effective regulation of research programmes, facilities and biological agents which may lend themselves to misuse, and supervision of individuals with access to sensitive technologies;
- ⚠️ supporting enhanced national and international programmes to prevent and respond to the spread of infectious disease.



W A N T T O K N O W M O R E ? R E ?

More information about the ICRC's Biotechnology, Weapons and Humanity appeal is available on our website www.icrc.org/eng/bwh.

You can also contact your nearest ICRC delegation or the organization's Mines-Arms Unit by e-mail (bwh.gva@icrc.org) or by telephone (+41 22 730 26 67).

Or you can write to us at:

ICRC
Mines-Arms Unit
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Mission

The International Committee of the Red Cross (ICRC) is an impartial, neutral and independent organization whose exclusively humanitarian mission is to protect the lives and dignity of victims of war and internal violence and to provide them with assistance. It directs and coordinates the international relief activities conducted by the Movement in situations of conflict. It also endeavours to prevent suffering by promoting and strengthening humanitarian law and universal humanitarian principles. Established in 1863, the ICRC is at the origin of the International Red Cross and Red Crescent Movement.



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