

EXECUTIVE SUMMARY

The development, production and use of biological and chemical weapons are prohibited by international treaties to which most WHO Member States have subscribed, namely the 1925 Geneva Protocol, the 1972 Biological and Toxin Weapons Convention, and the 1993 Chemical Weapons Convention. Not all have done so, however, and valid concerns remain that some may yet use such weapons. Moreover, non-state entities may try to obtain them for terrorist or other criminal purposes.

In fact, biological and chemical weapons have only rarely been used. Their development, production and use entail numerous difficulties and pose serious hazards to those who would seek to use them. This applies particularly to biological weapons. Even so, the magnitude of the possible effects on civilian populations of their use or threatened use obliges governments both to seek to prevent such use and to prepare response plans, which can and should be developed as an integral part of existing national-emergency and public-health plans.

New technology can contribute substantially to such plans, as is evident, for example, from the increasing availability of robust and relatively simple methods of rapid and specific laboratory diagnosis by DNA-based and other molecular methods. Such methods are widely used in the surveillance, prevention and treatment of natural disease.

The extent to which specialist personnel, equipment and medical stockpiles may be needed for protective preparation is a matter for national judgement in the light of the prevailing circumstances, including national assessments of the likelihood of attacks using biological or chemical weapons and consideration of existing demands on health and emergency services generally.

The danger should not be disregarded that overoptimistic evaluation of protective preparation may distract attention from the continuing importance of prevention, e.g. by the full implementation of the 1972 and 1993 Conventions.

The two Conventions include provision for assistance in the event of attack or threat of attack. The Organisation for the Prohibition of Chemical Weapons (OPCW), which is the international authority for the 1993 Convention, is making practical arrangements for providing such assistance if chemical weapons are used or threatened. As yet, however, there is no similar organization for biological weapons, but WHO, among others, can provide some assistance to its Member States.

Each of these matters is discussed in detail in the main body of the present report, which makes the following practical recommendations.

- 1) Public health authorities, in close cooperation with other government bodies, should draw up contingency plans for dealing with a deliberate release of biological or chemical agents intended to harm civilian populations. These plans should be consistent or integral with existing plans for outbreaks of disease, natural disasters, large-scale industrial or transportation accidents, and terrorist incidents. In accordance with World Health Assembly resolution WHA55.16 adopted in May 2002, technical support is available to Member States from WHO in developing or strengthening preparedness for, and response to, the deliberate use of biological and chemical agents to cause harm.
- 2) Preparedness for deliberate releases of biological or chemical agents should be based on standard risk-analysis principles, starting with risk and threat assessment in order to determine the relative priority that should be accorded to such releases in comparison with other dangers to public health in the country concerned. Considerations for deliberate releases should be incorporated into existing public health infrastructures, rather than developing separate infrastructures.
- 3) Preparedness for deliberate releases of biological or chemical agents can be markedly increased in most countries by strengthening the

public health infrastructure, and particularly public health surveillance and response, and measures should be taken to this end.

- 4) Managing the consequences of a deliberate release of biological or chemical agents may demand more resources than are available, and international assistance would then be essential. Sources of such assistance are available and should be identified.
- 5) Attention is drawn to the international assistance and support available to all countries that are Member States of specialized organizations such as OPCW (e.g. in cases of the use or threat of use of chemical weapons, and for preparedness planning), and to States Parties to the 1972 Biological and Toxin Weapons Convention (e.g. in cases of violation of the treaty). Countries should actively participate in these multilateral regimes.
- 6) With the entry into force of the 1972 and 1993 Conventions and the increasing number of states that have joined them, great strides have been made towards “outlawing the development and use in all circumstances of chemical and biological agents as weapons of war”, as called for in the 1970 edition of the present report. However, as the world advances still further into the new age of biotechnology, Member States are reminded that every major new technology of the past has come to be intensively exploited, not only for peaceful purposes, but also for hostile ones. Prevention of the hostile exploitation of biotechnology therefore rises above the security interests of individual states and poses a challenge to humanity generally. All Member States should therefore implement the two Conventions fully and transparently; propagate in education and professional training the ethical principles that underlie the Conventions; and support measures that would build on their implementation.

The statement by the World Health Assembly in resolution WHA20.54 of 25 May 1967 that “scientific achievements, and particularly in the field of biology and medicine – that most humane science – should be used only for mankind’s benefit, but never to do it any harm” remains as valid today as it was then.