WHO helps countries prepare for bioterror attacks

In the wake of the 11 September suicide attacks on the US World Trade Center and the Pentagon, anxiety has mounted over the possibility of a deliberate release of deadly germs as weapons of mass destruction. Such a bioterrorist attack with, say, smallpox virus or anthrax bacteria deployed over densely populated areas could kill hundreds of thousands of people. At this writing (in mid-October), nine cases of anthrax in the USA - although of unknown origin have elevated bioterrorism from science fiction imaginings into a real-world threat. What's more, some experts fear, many countries are ill-equipped to respond to this threat.

To confront this situation, and in response to requests from several governments, WHO has rushed out a draft revised version of its 1970 technical guidelines on *Health aspects of biological and chemical weapons* some three months before its official release date. "We know that bioterrorism is of concern to our member countries and we are trying as best we can to help them address these concerns," says Dr David Heymann, who heads WHO's communicable disease activities.

The guidelines, which were co-authored by more than 60 bioweapons experts around the world, will provide a list of the 11 most likely biological warfare agents — including smallpox, anthrax, botulinum toxin, plague and tularaemia — as well as detailed descriptions of the pathogens and the symptoms they cause, estimates of casualty risks, and recommended public health responses to threats of bioterror attacks with these organisms.

The WHO guidelines, Heymann says, are not meant to "ring the alarm bell — at WHO we don't know how high the risk [of a bioterror attack] really is. Risk assessment is not our job." Nonetheless, he adds, the guidelines are a call for action for governments to be ready for a possible biological or chemical attack. "The key is a strong public health care system that would detect a disease outbreak globally early on and effectively contain that outbreak," Heymann says.

WHO's contribution to that key is a "global outbreak alert and response network", a cross-linked system of 72 existing networks involving laboratories, public health experts and Internet-based information systems, which continuously monitors reports and rumours of disease events around the world. Formally launched in April 2000, the network has thus far verified

578 outbreaks in 132 countries. This tool, Heymann says, will pick up "any infectious diseases, wherever they are, whether they are caused by a deliberate release of pathogens or whether they are natural outbreaks."

Heymann admits, however, that "the magnitude of an outbreak caused by bioweapons might be greater than that of natural epidemics and, as a consequence, there might not be enough vaccines or drugs available. Past estimates came up with 60-to-90 million doses [of smallpox vaccine] worldwide outside the military," he says, adding that WHO has just started a "vaccine need survey" based on several model scenarios of hypothetical smallpox attacks.

Meanwhile in late September, US Secretary of Health and Human Services Mr Tommy Thompson announced that his government had just awarded a contract of over US\$ 340 million to a British biotech company to develop a new smallpox vaccine by mid- to late 2002. Up to mid-2004 some 40 million doses of the new vaccine should be delivered to replenish the national stockpile. Other countries, among them Japan and the UK, are believed to be making similar preparations.

In 1980, WHO officially declared smallpox eradicated and vaccination campaigns stopped soon after. However, more than 500 specimens of the smallpox virus have been kept, mainly for research purposes, at two places: the US Centers for Disease Control and Prevention (CDC) in Atlanta and the Russian State Research Centre of Virology and Biotechnology in Koltsovo, Novosibirsk. Due to lax security measures and dwindling financial support for laboratories in Russia, some bioterror experts fear that smallpox virus samples, as well as expertise and equipment for its mass production and deployment, may well have fallen into the hands of terrorists.

Michael Hagmann, Zurich, Switzerland

WHO finds governments "remiss" on mental disorders

On 4 October, WHO launched its annual World Health Report, this year devoted to mental health. The report culminates a series of WHO-sponsored activities on the topic — including meetings of experts, the World Health Assembly, and World Health Day — in what has been the organization's first "thematic" year in its 55-year history.

Subtitled *Mental health: New understanding, new hope*, the report calls governments to task for not using the available "means and scientific knowledge to help people with mental disorders".

Speaking to the press at the launch of the report, WHO director-general Dr Gro Harlem Brundtland said it should help "break the vicious cycle of neglect and lack of funding and raise awareness of mental health issues at the highest level of decision-and policy-making". The data in the report, she said, presented a "staggering" toll: 450 million people currently afflicted with a mental or neurological disorder — 121 million of them with depression and 50 million with epilepsy — plus a million successful and 10–20 million attempted suicides a year.

Much of this suffering is unnecessary, Brundtland said. For example, more than half the people with depression in the world — in both industrialized and developing countries — could recover if treated, but because of stigma, scarcity of resources, lack of skilled care, and inadequate public health policies, only 25% of sufferers actually receive treatment.

Referring to the September 11 terrorist attacks in the US and their aftermath, she noted that "the background of widespread horror, insecurity and grief around the world" is likely to have "long-term mental effects" in some of the people directly exposed to the events. On the positive side, though, the crisis has "reaffirmed and strengthened the circle of caring between people and within communities".

The World Health Report 2001 can be accessed on the Web at <www.who.int/whr> or can be ordered from

book-orders@who.int> for 15 Swiss francs (10.50 Swiss francs for readers living in developing countries). ■

John Maurice, Bulletin