
Executive summary

Health Council of the Netherlands. Bioterrorism: follow-up report. The Hague: Health Council of the Netherlands, 2002, publication no. 2002/11

In June of last year the Health Council published an advisory report entitled *Defence against Bioterrorism* (publication no. 2001/16). In the present advisory report to the Minister of Health, Welfare and Sport, a Health Council committee responds to three further questions on the same topic.

First of all, the Minister wishes to know whether, on account of the attacks in the USA, certain sections of the previous advisory report perhaps need to be modified or supplemented. The thrust of that report was that the defence system must make the fullest possible use of arrangements that are already in place. Continuing this line of argument, the committee goes on to make several more specific recommendations:

- Our expertise in the field of infectious diseases must be increased.
- There is room for improvement in the way existing knowledge in this area is exchanged. More particularly, certain experts must be granted access – albeit conditional – to military intelligence.
- The corresponding knowledge infrastructure needs to be reinforced so that, for example, diagnostic tasks can be performed relatively easily on a larger scale.
- It is necessary to decide exactly who would be in charge of defence measures in the various scenarios. The committee has the impression that insufficient scope is offered on this point by current legislation – *i.e.* the Infectious Diseases Act, the Disasters and Serious Accidents Act (WRZO) and the Public Health Act (WCPV).

In accordance with last year's advisory report, the committee also attaches great importance to international cooperation and the division of responsibilities in the development and production of vaccines and antimicrobial agents. It therefore advises the Dutch government to intensify its activities in this area.

The two remaining questions posed by the Minister relate to smallpox vaccination. Before addressing these questions, the committee recalls another statement made in the earlier advisory report to the effect that, although the smallpox virus surely ranks among the major threats, the defence plans must not be focused too strongly on one or more microbial agents, since to do so would create the illusion of safety.

What is the best vaccine against the smallpox virus? The committee believes that new products based on attenuated *vaccinia* strains and on cell culture systems should take precedence over the classical smallpox vaccines. In its opinion the new vaccines, which have reached an advanced stage of industrial development, have fewer side-effects and should be regarded as being ready for use as soon as they are registered.

What is the appropriate vaccination strategy? Following the example of the US Centers of Disease Control, the committee opts for ring vaccination, that is to say isolation of confirmed and suspected cases of smallpox, plus tracing, vaccination and monitoring of a "ring" of people who have come into contact with the infected individuals (i.e. within less than two metres). Depending on the extent of the epidemic and on what means of defence are available (e.g. quarantine possibilities and personnel support), the ring can be made larger or smaller. The committee identifies those individuals who, from a medical standpoint, need to be prioritized as far as vaccination is concerned and those for whom contraindications apply. At present, it does not consider vaccination of certain health-care workers to be necessary. The Smallpox Contingency Plan (*Draaiboek Pokken*) must therefore contain detailed procedures for those cases in which there are, in fact, grounds for vaccinating health-care workers.

Model calculations have been performed to simulate the effect of a terrorist attack that utilizes the smallpox virus. From this modelling exercise it appears that the outcomes (i.e. the respective numbers of casualties and vaccinees) are many orders of magnitude apart, depending on what parameters are applied. Taking into account the current state of knowledge – i.e. considering the enormous uncertainties that come into play – the committee sees no reason to adopt the worst-case scenario as the benchmark. Especially since there is far more certainty over the side-effects of vaccination. From a health standpoint, the committee prefers to focus on an "intermediate" scenario, with a maximum of around 1 million vaccinees.

Finally, the committee argues for effective dissemination of information to the members of the emergency response team and – should the need arise – to the population as a whole, both in the preventive phase and in the implementation phase.