Veterinary Services in Africa and the accidental or intentional release of biological agents: time for a wake-up call?

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Summary

Although most animal disease outbreaks and food contamination incidents occur naturally, there is the possibility that disease may be spread following deliberate or accidental release of an infectious agent or toxin. Although the likelihood of such an event is low, the impact may be considerable and cross national boundaries. This paper looks at the vulnerability of African Veterinary Services, and in particular their national veterinary laboratories, to such occurrences. Some terrorist organisations seek to possess stocks of pathogens such as those of bubonic plague and anthrax. This, combined with weak public health and animal health systems in many parts of Africa (as illustrated by the recent outbreaks of Ebola), is cause for concern. According to the OIE's *Performance of Veterinary Services* (PVS) evaluation system, the most severely affected countries in West Africa possessed veterinary laboratories that were, at the time of the Ebola outbreaks, regarded as non- or under-performing. In Africa, 25% of national Veterinary Services almost always conduct diagnosis by clinical means only, without use of or access to a laboratory. Many veterinary laboratories store, handle and produce live vaccines under circumstances which are dangerous for both the laboratory personnel and the environment, with few or no biosafety and biosecurity measures.

Except for a few plant-derived toxins and strictly human pathogens, most of the known biological agents are of animal origin, and many are listed by the OIE. The OIE has entered into partnerships to bolster support from the security sector for programmes such as laboratory twinning, rinderpest post-eradication activities, the renovation of the *World Animal Health Information System* (WAHIS), the PVS Pathway and training for national laboratory focal points: the first training session was held in Zimbabwe in December 2016. The OIE is also working closely with the *United Nations Office of Disarmament Affairs* and with the Committee that supports the implementation of the UN *Security Council Resolution* 1540 (2004). As far as Africa is concerned, it is the African Union Commission that oversees the implementation of UNSCR 1540.

The OIE, in line with the UNSCR 1540 Resolution, and with its partner organisations at international and continental level, is ready to assist veterinary laboratory managers throughout Africa in assessing where they stand in terms of protecting the biological materials that they may stock, including vaccines, from being inadvertently or deliberately released into the environment.

Keywords : Africa – biological – biosafety – laboratory – OIE – terrorism – threat – UNSCR 1540.

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