

It is particularly useful where clinical signs appear in animals before the human population, allowing instigation of force protection measures; in simultaneous human/ animal disease, allowing early definitive diagnosis, for example, by post-mortem examination of dead and/or euthanized animals. The temporo-spatial distribution of disease within the animal population may contribute to the identification of the biological agent (BA), and may provide some indication of the persistence of the threat following delivery of the BA.

After an undetected BA attack the first sign of an event may be the appearance of casualties (military, civilian, human or animal). Epidemiological surveillance of both humans and animals would allow early recognition of a disease outbreak, thus allowing protection of troops who have not yet developed symptoms. Specific veterinary considerations that may point to BW attack include: post-munitions disease, time course of disease, spatial distribution of disease, host range, geographical range, predisposing conditions, route of infection, heterogeneity of infection, and background disease incidence. Confirmation of causative agent by etiological diagnosis is essential.

BioMedAC is developing a STANAG on Rapidly Deployable Outbreak Investigation Teams (RDOIT) that may incorporate appropriate specialists such as a veterinarian. The UK is developing a concept of animal surveillance for routine deployment.

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Keywords: animal surveillance; biological agents; Rapidly Deployable Outbreak Investigation Teams (RDOIT)
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Plenary Session

Training of Medical Staff in the Management of Biological/Chemical Warfare Psychological Casualties

Group Captain F.B. McManus

Biological/Chemical Warfare (BCW) agents are weapons of terror. Their psychological impact greatly outweighs their physical effects. Psychological casualties will greatly outnumber physical casualties, so effective triage is essential. The key element of medical management is in the differentiation between acute anxiety symptoms and poisoning from BCW agents. Psychological symptoms will range from low-grade, individual anxiety to mass panic. The best way of minimising psychological casualties is first class preparation and training. This is as true for medical staff as it is for combat troops. The next most important element in managing the psychological environment is the development and analysis of accurate information about the nature of any attack, and the rapid transmission of this information to relevant staff.

Management/treatment elements include: (1) The need for careful triage of casualties to distinguish psychological from physical problems; (2) The rapid transfer of patients with minor psychiatric symptomatology out of the triage arena with appropriate advice and self help material; and (3) The judicious use of appropriate medication when necessary and advice to commanders about the management of anxiety and panic.

Keywords: advice; anxiety; casualties; environment; injuries; management; medication; panic; poisoning; psychiatry; treatment; triage; weapons, biological and chemical
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Medical Counter-measures against Biological Warfare Agents

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A range of medical countermeasures can be used as pre- and post-exposure prophylaxis or as treatment for biological warfare agents, including vaccines, antibiotics, anti-viral agents, and generic therapies designed to enhance the immune response. Vaccines can be given routinely to provide long-term protection, but only smallpox and anthrax vaccines are available widely. The risk of receiving a live vaccine such as smallpox, has to be considered very carefully against the likely threat, and mass vaccination in the absence of an overt threat is unlikely. There is a need for new and safe vaccines against other agents, and modern plague vaccines currently are undergoing trials in the UK and the US. Other vaccines are under development,