

governments, certain regions may have little or no choice in the selection of antidotes.

Hydroxocobalamin appears to best meet the requirements of an "all-hazards" antidote for cyanide.

Key words: Mass casualties, poisoning, antidotes, all-hazards approach, cyanide

79. INTRAOSSEOUS ADMINISTRATION OF ANTIDOTES IN THE CHEMICAL WEAPONS VICTIM - AN ALTERNATIVE TO THE INTRAVENOUS ROUTE? (12)

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Hazardous materials paradigms call for definitive treatment of chemical victims to begin in the "warm zone" during decontamination. This delay may result in lethal outcomes, particularly in the case of multiple victims, where rescue may be delayed due to insufficient numbers of rescue teams.

It is virtually impossible for rescuers in full protective gear to establish intravenous lines. In recent years, significant advances have been made in intraosseous (IO) infusion devices. An IO device developed in our institution, the EZ-IO, is very easily placed by rescuers in typical work uniforms. IO placement takes longer while in protective gear, but is feasible.

The IO is equivalent to an intravenous line, allowing more rapid administration of antidotes in the event of chemical mass casualties. Antidotes not amenable to intramuscular administration and even those often given IM may be more effective given IO.

IO administration has the following possible advantages over intravenous or intramuscular antidote administration:

1. Drugs administered IO reach the vascular system virtually instantaneously.
2. IO administration may be performed in protective clothing and could theoretically be employed while awaiting rescue.
3. IO administration may be preferred over intravenous administration in the warm zone.

In summary, IO administration of antidotes should be further evaluated for use in chemical disasters. The ease and speed of placement, ready access to the vascular tree, and potential for earlier intervention make it a potentially ideal means of vascular access and antidotal administration in the mass casualty situation.

80. RESPONSIBLE CODE OF CONDUCT FOR THE LIFE SCIENCE AND "DUAL-USE" RESEARCH (16)

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The potential threat from misuse of current and future Dual-Use research in the field of NBC Defense is challenge to which scientific community must respond. The rapid advances in the life sciences and the worldwide growth of biotechnology industry only add urgency of this task.

Code of conduct is formal statement of values and professional practices of a group of individuals with a common focus, either an occupation, academic field, or social doctrine. Codes of conduct can help to reduce the risk that scientific research will be misused. "Dual-use" is a term often used in politics and diplomacy to refer to technology which can be used for both peaceful and military aims, usually in regard to the proliferation of nuclear weapons.

Dual-use information and "know-how" in the field of NBC defense are covered under the Export control regimes. Nearly all WMD production equipment is "dual-use" and only very large capacity equipment is export controlled. Research in the life sciences, including NBC defense research must be conducted safely, securely, and ethically.

Development of an international harmonized regime for control of biological and chemical warfare agents within and between laboratories and facilities is very important.

This paper will present very important consideration of the content; promulgation and adoption of codes of conduct for scientists in the field of NBC research, for inducing of discussion between scientists into group of CBMTS members with aim how improve protection of sensitive research results and information in the field of NBC Defense sciences.

Key words: Code of Conduct, NBC Defense, "Dual-Use" Research

81. MILITARY & MILITARY MEDICAL SUPPORT IN HIGHLY PATHOGENIC AVIAN INFLUENZA (HPAI /H5N1) PANDEMIC SCENARIO (2)

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Avian influenza (Bird flu) is a highly contagious viral disease affecting mainly chickens, turkeys, ducks, other birds and mammals. Reservoirs for HPAI /H5N1 virus are shore birds and waterfowl (asymptomatic, excrete virus in feces for a long periods of time), live bird markets and commercial swine facilities. Virus tends to cycle between pigs and birds. HPAI (H5N1) virus is on every 'top ten' list available for potential agricultural bio-weapon agents.

The threat of a HPAI/H5N1 pandemic is a definitively global phenomenon and the response must be global. A number of National plans led to various measures of preventing and dealing with epidemics/pandemics.

Lessons learned form the pandemic history indicated essential role of military & military medical



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