Postexposure Interventions during Bombings & Other Mass-Casualty Events (11/08)


This report outlines recommendations for postexposure interventions to prevent infection with hepatitis B virus (HBV), hepatitis C virus (HCV), or human immunodeficiency virus (HIV), and tetanus in persons wounded during bombings or other events resulting in mass casualties. Persons wounded during such events or in conjunction with the resulting emergency response might be exposed to blood, body fluids, or tissue from other injured persons and thus be at risk for bloodborne infections. This report adapts existing general recommendations on the use of immunization and postexposure prophylaxis for tetanus and for occupational and nonoccupational exposures to bloodborne pathogens to a mass-casualty event. Decisions regarding the implementation of prophylaxis are complex, and drawing parallels from existing guidelines is difficult. Assessment of risk factors commonly used to estimate the need for prophylactic intervention might not be possible in the setting of response to a mass-casualty event because responses to such events might overwhelm local emergency response facilities, and medical response staff will be focused primarily on rendering lifesaving trauma treatments. Because no uniform guidance existed for postexposure interventions to prevent bloodborne infections and tetanus among U.S. civilians or military personnel wounded during mass-casualty events, the Centers for Disease Control and Prevention (CDC) convened a Working Group comprising experts in injury response, immunizations, bloodborne infections, tetanus, and federal-, state-, and local-level public health response to develop such guidance.

The recommendations in this report pertain only to bombings and other mass-casualty events and are not meant to replace existing recommendations for other settings. In a situation involving a substantial number of casualties, the ability to assess medical and vaccination histories or the risks associated with the source of exposures might be limited, as might the supply of biologics. For this reason, in certain instances, the recommendations provided in this report differ from standard published recommendations for vaccination and prophylaxis in other settings. These recommendations are not meant to replace existing recommendations for other settings and apply only to the specific situation of an event involving mass casualties. In addition, the recommendations provided in this report are limited to issues regarding initial postexposure management for bloodborne pathogens and tetanus prophylaxis. Other prophylactic measures that might be appropriate (e.g., use of antibiotics for the prevention of bacterial infection) are not discussed in this report.

Critical review during development of this CDC guidance was provided by representatives of the National Association of County and City Health Officials, the Council of State and Territorial Epidemiologists, and representatives of the acute injury care, trauma and emergency response medical communities participating in CDC's Terrorism Injuries: Information, Dissemination and Exchange (TIIDE) project. The recommendations contained in this report represent the consensus of U.S. federal public health officials and reflect the experience and input of public health officials at all levels of government and the acute injury response community.

DECS Comment: This report is relevant to military personnel because military health-care providers frequently respond to mass-casualty events. The report highlights this by stating that during the period of October 7, 2001–March 1, 2008, of 35,630 casualties incurred by U.S. Department of Defense forces involved in Operation Enduring Freedom (OEF) in Afghanistan and Operation Iraqi Freedom in Iraq (OIF), 27,441 (77%) resulted from mass-casualty events. Explosive devices accounted for 23,277 (65%) of these casualties. Of 27,441 persons wounded during OEF- and OIF-related mass-casualty events, 24,433 (89%) survived (U.S. Department of Defense, unpublished data, 2008).

The CDC report provides guidance on risk assessment, and recommendations for immediate prophylactic interventions. It also provides recommendations for issues that might arise in association with immediate prophylactic intervention (e.g., vaccine supply shortage, counseling). The complete report and recommendations for postexposure interventions to prevent infection with hepatitis B virus, hepatitis C virus, or human immunodeficiency virus, and tetanus in persons wounded during bombings and other mass-casualty events can be downloaded by visiting the CDC Web site at http://www.cdc.gov/MMWR/PDF/rr/rr5706.pdf.

It's important to note that the recommendations in this report pertain only to bombings and other mass-casualty events and are not meant to replace existing recommendations for other settings.