



Center for the Study of Traumatic Stress

DISASTER RELATED DEATHS AND INFECTION: TRUTH, MYTH, OR IN-BETWEEN

HEALTH CONSIDERATIONS OF HUMAN REMAINS IN THE DISASTER SETTING

Death is an expectable part of disaster. In some disasters such as earthquakes in which history shows that deaths can be in the hundred's of thousands, management of the remains of the dead are a major concern. For disaster victims as well as professional first responders who will recover and take care of remains this aspect of a disaster is especially distressing. Learning to not look at the faces and hands of the dead, can decrease ones identification with the victims ("It could have been me. It could have been my spouse/child.") and protect to some extent from the distress. However the number of dead, their condition, child deaths and loss of ones own friends and relatives adds to the stress burden of exposure to death and the dead. Posttraumatic Stress Disorder can be one outcomes of extensive exposure to grotesque death.

Often there are also health concerns associated with the exposure to remains. Knowledge about the facts of risk and of best practices that help minimize difficulties on site, may help reduce the distress of those who are recovering remains, volunteers who may be disaster victims as well as professional first responders are at risk and need knowledge, training, education and leadership as well as compassion, concern, rest and respite..

Health Considerations

Many believe that human and animal corpses pose a major public health risk. This belief is often accompanied with fears of infection and contamination among survivors and disaster responders. As a result body disposal may be prioritized in appropriately, using scarce resources (such as fuel or disinfectant), and sacrificing the proper identification of the dead and local death rituals and ceremonies. However, the risk of infection or contamination from dead bodies is actually very low. Educating about the true low risk can reduce unnecessary fears and associated behavior.

Reasons for this low risk are many. In general, the dead were not sick prior to the disaster. Therefore, the bodies are no more likely than the general population to have an infection. Also,

after death, the temperature of the body drops. Most bacteria and viruses cannot survive in this cooler environment. Finally, dead bodies do not “interact” with survivors (e.g. speak, touch, cough), so transmission from a corpse is much less likely than, say, transmission from another survivor.

Workers who actually handle bodies should be take universal precautions including wearing gloves, washing hands and disinfecting equipment, just as they would if caring for a live person. Decomposing bodies before and after burial should be kept an appropriate distance from a water supply.

Practices to Facilitate Responder Health and Well-Being

- **Limit exposure:** In spite of pressure to work quickly, supervisors should limit the time of exposure of workers to the dead and to the scene.
- **Rest:** Require rest periods as well as regular work shifts.
- **Vary tasks:** Allow people to vary their tasks so they can change their attention and individuals can titrate their own exposure.
- **Buddy Work:** Pairing workers with a buddy can facilitate normal talk, and support and help combat overwork and internalizing worries, fantasies and concerns.
- **Water and Food:** Provide a rest area with fluids and food and protection from news media and onlookers away from the remains areas as much as possible.
- **Sit and Sleep:** Get people off their feet during breaks.
- **Clothes:** If possible, provide immediate change of clothing, such as socks, t-shirts, and underwear. The smells and reminders of remains can continue distress beyond the actual exposure.
- **Talk About Life:** Engage workers in conversation of their choosing – not necessarily about their feelings or the scene. Talking about the events of usual life is part of health.
- **Personal Effects:** Dealing with personal effects is one of the most difficult aspects of body recovery. Discourage identification with the dead by not looking at faces and hands and reminding each other of usual life situations.

References

- Ursano, RJ, Fullerton CS, Weisaeth L, Raphael B. *Textbook of Disaster Psychiatry*, Cambridge University Press. Cambridge, UK, 2007
- Western K. (2004). Chapter 3. Health Considerations in Cases of Mass Fatalities. In *Management of Dead Bodies in Disaster Situations. Disaster Manuals and Guidelines Series No. 5*. Washington, DC. Pan American Health Organization and World Health Organization.
- Morgan O. Infectious disease risks from dead bodies following natural disasters. *Rev Panam Salud Publica*. 2004;15(5):307–12.

**Center for the Study of Traumatic Stress
Uniformed Services University School of Medicine**

www.usuhs.mil/csts

301 295-3293

CSTS is the academic arm and a partnering Center of the Defense Centers of Excellence (DCoE) for Psychological Health and Traumatic Brain Injury.