



Disposing of Dead Bodies after Disasters

In disaster-affected areas, the presence of dead bodies is alarming and may raise concern of disease outbreaks. However, there is evidence that they do not pose a health risk for epidemics after natural disaster. Still, first responders may have to handle dead bodies and there are risks of exposure to viruses and or bacteria.

Do dead bodies pose any risks?

It is unlikely that dead bodies are the source of disease outbreaks as most infectious agents do not survive long in the human body after death. The source of infectious agents are more likely to come from the survivors due to displacement, crowding, proximity of safe water, functioning bathrooms, and nutrition. When individuals die from a natural disaster they do not pose a risk for outbreaks. However, dead bodies do pose wide spread health risk and require specific precaution if death is a result of cholera or hemorrhagic fevers (Ebola, etc.). Those health risks are not likely in this area.

What about for individuals who must have direct contact with human remains?

For recovery personnel and individuals identifying remains, these individuals must be aware of potential exposures to viruses and bacteria. Human remains may contain blood-borne viruses (hepatitis viruses, HIV, etc.) and bacteria that cause diarrheal diseases, such as but not limited to shigella and salmonella. These viruses and bacteria do not pose a risk to someone walking nearby, but they are a known risk for workers who routinely handle dead bodies. Response workers must be aware that exposure can result when there is direct contact with open wounds, injury from bone fragments and needles, and mucous membrane exposure from splashes of blood or body fluid to the eyes, nose, or mouth.

What are the precautions to take for workers who handle human remains? (Source: CDC)

1. It is important to protect your face from splashes of body fluids and fecal material. Use a plastic face-shield or a combination of eye protection (indirectly vented safety goggles are a good choice if available; safety glasses will only provide limited protection) and a N95 respiratory mask.
2. Protect your hands from direct contact with body fluids and from cuts, puncture wounds, or other injuries that break the skin. A combination of a cut-proof inner layer glove and an impervious outer layer glove, such as nitrile gloves, is preferable to protect against sharp environmental debris or bone fragments. Footwear should similarly protect against sharp debris.
3. Maintain hand hygiene to prevent transmission of diarrheal and other diseases from fecal materials on your hands. Wash your hands with soap and water or with an alcohol-based hand

cleaner immediately after you remove your gloves. However, soap and water with vigorous hand cleaning is the best option.

4. To any wound sustained during work with human remains, provide prompt care--including immediate cleansing with soap and clean water.
5. Participate in available programs to provide psychological and emotional support for workers handling human remains. The IAFF peer support program has deployed teams in the affected area to provide this support and encourages its members to participate.

What are other considerations?

Dead bodies do not pose a risk of possible widespread infectious disease outbreak and for this reason there is no requirement for mass burials or cremations. However, it is important to prevent inappropriate disposal of bodies. Response workers should assist local communities to identify a safe location for holding remains awaiting identification. If available body bags should be use, if not bodies should be stored in a location out of public view, and protected from scavenging animals. Also, refrigeration can reduce the rate of decay. The sight and smell of decay are unpleasant, but they do not create a public health hazard.

Management of human remains (Source CDC):

- Mass management of human remains is often based on the false belief that they represent and epidemic hazard if not buried or burned immediately
- Burial is preferable to cremation in mass casualty situation, and every effort should be made to identify all bodies
- Families should have the opportunity to conduct culturally appropriate funerals and burials according to social customs
- For first responders:
 - Universal precautions for blood and body fluids
 - Use body bags if available
 - Wash hands with clean water and soap after handling bodies and before eating
 - Use correct disposal of gloves and disinfect vehicles and equipment
 - Bodies do not need disinfection before disposal
 - Make sure you have the Hepatitis B vaccine

Additional Resources

1. Interim Health Recommendations for Workers who Handle Human Remains After a Disaster (<https://www.cdc.gov/disasters/handleremains.html>)
2. Myths and Realities in the Management of Dead Bodies (<http://www1.paho.org/English/DD/PIN/myths.pdf>)
3. Risks posed by dead bodies after a disaster (http://www.who.int/diseasecontrol_emergencies/guidelines/risks/en/)