

OSHA & Worker Safety

Dangerous Disposal

OSHA's fact sheet on safe handling of Ebola-contaminated waste

The deadly Ebola virus garnered increased attention from an alarmed public and a concerned community of medical professionals as 2014 drew to a close. The Occupational Safety and Health Administration (OSHA) is focused on fighting fear with facts: specifically, a fact sheet aimed at protecting health care workers, which can be accessed at http://www.osha.gov/Publications/OSHA_FS-3766.pdf.¹

OSHA developed the fact sheet, titled "Safe Handling, Treatment, Transport, and Disposal of Ebola-Contaminated Waste," with the Environmental Protection Agency (EPA) and the National Institute for Occupational Safety and Health (NIOSH).¹ The fact sheet instructs health care organizations on how to safeguard employees whose activities involve waste management—from the first point of waste generation to final disposal of treated waste products. In addition, the document recommends that employers devise a waste management plan and obtain the needed permits and contracts early in the process to sidestep possible exposure threats, storage dilemmas, and security liabilities.

The Ebola virus is transmitted typically via direct contact either with blood or other bodily fluids from someone sick with Ebola or virus-tainted objects. When not handled, treated, or discarded safely and correctly, waste produced from caring for or cleaning up after an Ebola-infected patient could present a serious hazard to staff at health care facilities (*see* the article on page 1 of this issue).

Stopping threats at the source

Dangerous Ebola waste can be produced at the point of origin by engaging in various tasks, including using and throwing away sharps, supplies, and dressings while tending to an Ebola patient; cleaning health care facility rooms, ambulances, or other areas possibly contaminated with the virus; and discarding personal protective equipment (PPE) after working in a potentially contaminated area. To minimize point-of-origin risks, the fact sheet provides multiple tips, including the following:

- Identify a complete chain for waste handling, collection, treatment, transportation, and disposal before waste is created.
- Insert materials in double leak-proof bags.
- Use puncture-proof sharps containers.
- Check that waste container exteriors are not contaminated.
- Implement a waste management plan.

To adequately treat Ebola virus-contaminated surfaces and spills, OSHA cautions that organizations should use EPA-registered disinfectants labeled "for use against non-enveloped viruses" and should refer to an EPA-approved list of registered antimicrobial products that fit Centers for Disease Control and Prevention (CDC) criteria (found at <http://www.epa.gov/oppad001/list-1-ebola-virus.html>).²

No wasted opportunities

When it comes to gathering and transporting waste, OSHA's fact sheet suggests several best practices, including the following:

- Follow strict packaging protocols.
- Place waste containers at low levels when transporting to prevent spillage.
- Use additional/extra PPE.

Hospitals and other facilities that process waste on-site in a treatment or disposal area also need to exercise caution and follow recommended steps, such as securing stacked containers with proper straps, shelves, or other equipment; increasing layers of PPE; and following applicable EPA, state, and local regulations for waste incinerators. Likewise, Ebola virus-contaminated waste should not be shredded.

The fact sheet also covers the final disposal of treated waste, reinforcing the fact that autoclaving, incineration, and use of thermal/heat treatment (via methods like microwaving but avoiding open burning techniques) are safe ways to effectively treat and disinfect infectious waste, so long as the method used decreases potential worker exposure to pathogens like the Ebola virus.

Commonsense measures

The fact sheet stresses using proven infection control practices. Examples include the following:

- The number of waste-handling workers should be limited and should include only essential staff.
- Hands must be thoroughly washed with soap and water or alcohol-based hand rubs anytime PPE is removed.
- Workers should never touch exposed skin while wearing gloves.

Reminders of the importance of complying with OSHA's Bloodborne

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Pathogens Standard 29 CFR 1910.1030 are given throughout the document. The standard requires that each employer with exposed workers review and update its exposure control plan at least annually, or whenever a new hazard is introduced to the workplace or a new process might result in increased exposure potential. Industrial hygiene and infection prevention professionals should be consulted to evaluate any potential change to employee risk.

Finally, the fact sheet emphasizes the

importance of appropriately training and educating staff about Ebola exposure risks and preventive measures, and it encourages employers to take advantage of free and confidential consultation services that OSHA can provide on-site.

For more tips on how your organization can shield staff from the Ebola virus, visit <http://www.osha.gov/SLTC/ebola>.³ 

References

1. Occupational Safety and Health Administration (OSHA), Environmental Protection Agency (EPA), National Institute for Occupational Safety and Health. Safe Handling, Treatment, Transport and Disposal of Ebola-Con-

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2. EPA. Disinfectants for use against the Ebola virus. Accessed Dec 29, 2014. <http://www.epa.gov/oppad001/list-l-ebola-virus.html>.
 3. US Department of Labor, OSHA. Safety and health topics: Ebola. Accessed Dec 29, 2014. <https://www.osha.gov/SLTC/ebola/>.

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