Environmental Health & Engineering

Ebola virus (EV) Associated Waste Management
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• Samir Elmir, PE, PhD
• Environmental Administrator
• FDOH in Miami-Dade County
• Samir.Elmir@flhealth.gov
• Phone: 305-623-3500
(EV) Associated Waste Management

- Fragile in the environment
- Unlikely to survive long outside its host
- No evidence (EV) via water and food
- Dies faster at high temperatures
- Dies faster at high and low PH
• Waste contaminated with (EV)

• USDOT Hazardous Materials Regulations (HMR)

• 49 CFR, Parts 171-180
• Off-site commercial transport

• Variance from HMR

• 49 CFR 107.105

• Alternative packaging must meet minimum safety requirements
• Treated Ebola associated waste

• Disposal of treated Ebola associated waste

• State, local, and OSHA regulations
(EV) Associated Waste Management

- Survey of BMW Facilities
  - Accept Category A infectious substance

- Clean-up and packaging
- Transport
- Treatment and disposal
Few companies have a Special Permit

Few local companies - cleanup and package waste

MDC has existing contracts to handle emergency spills

No special permit required for health depts. To transport waste
• Hospitals are permitted to treat Ebola contaminated waste

• Access to treatment facilities

• Full load of a 65 foot trailer

• Need for an interim storage facility

• Difficulty in finding disposal facilities
In August 2014, EPA and the CDC provided hospitals with guidance on how to select effective disinfectants that work against Ebola.

CDC guidance states:

“Use a U.S. Environmental Protection Agency (EPA)-registered hospital disinfectant with a label claim for a non-enveloped virus (e.g., norovirus, rotavirus, adenovirus, poliovirus) to disinfect environmental surfaces in rooms of patients with suspected or confirmed Ebola virus infection.”
• EPA has posted a list of EPA-registered disinfectants surfaces. [http://www.epa.gov/oppad001/list-l-ebola-virus.html](http://www.epa.gov/oppad001/list-l-ebola-virus.html)

• EPA has posted guidance to pesticide companies on referring to registered disinfectant products [http://epa.gov/oppad001/ebola-efficacyclaims.html](http://epa.gov/oppad001/ebola-efficacyclaims.html)
Is it safe for Ebola patients to use the bathroom?

Yes. Sanitary sewers may be used for the safe disposal of patient waste (WHO, 2014). Additionally, sewage handling processes in the United States are designed to inactivate infectious agents.

• Hospitals and utilities are requiring pre-treatment

• Bleach or quaternary ammonium compound

• Camping toilet with solidifier
• FDOH’s interim Guidance of handling Ebola contaminated human waste

• CDC Interim Guidance for Managers and Workers Handling Untreated sewage from individuals with Ebola in the US

• New WHO safe and dignified burial protocol - key to reducing Ebola transmission
• CDC - Interim Guidance for Environmental Infection Control in Hospitals for Ebola Virus

• DOT - Guidance for Transporting Ebola Contaminated Items, a Category A Infectious Substance

(EV) Associated Waste Management

• DOT - http://www.phmsa.dot.gov/hazmat/training/requirements

• Hazardous Materials Information Center at 1-800-467-4922, 9am-5pm Eastern time

• http://www.floridahealth.gov/environmental-health/biomedical-waste/index.html
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- OSHA Fact Sheet  Cleaning and Decontamination of Ebola Surfaces  in Non-Healthcare/Non-Laboratory settings

- [OSHA - Ebola Website](#)

- For questions on OSHA guidance, contact 1-800-321-OSHA (6742).