

Environmental Health & Engineering



Ebola virus (EV) Associated Waste Management December 03, 2014

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(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



(EV) Associated Waste Management



- Waste contaminated with (EV)
- USDOT Hazardous Materials Regulations (HMR)
- 49 CFR, Parts 171-180



(EV) Associated Waste Management



- Off-site commercial transport

- Variance from HMR

- 49 CFR 107.105

- Alternative packaging must meet minimum safety requirements



(EV) Associated Waste Management



- 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



(EV) Associated Waste Management



- 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 hlth depts. To transport waste



(EV) Associated Waste Management



- 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



(EV) Associated Waste Management



- In August 2014, EPA and the CDC provided hospitals with guidance on how to select effective disinfectants that work against Ebola

<http://www.cdc.gov/vhf/ebola/hcp/environmentalinfection-control-in-hospitals.html>

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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.”

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- EPA has posted a list of EPA-registered disinfectants surfaces. <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>

(EV) Associated Waste Management



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.

<http://www.cdc.gov/vhf/ebola/hcp/environmental-infection-control-in-hospitals.html>

(EV) Associated Waste Management



- Hospitals and utilities are requiring pre-treatment
- Bleach or quaternary ammonium compound
- Camping toilet with solidifier



(EV) Associated Waste Management



- 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



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- CDC - [Interim Guidance for Environmental Infection Control in Hospitals for Ebola Virus](#)
- DOT - [Guidance for Transporting Ebola Contaminated Items, a Category A Infectious Substance](#)
- DOT - [Hazardous Materials Regulations \[49 CFR Parts 100-1999; 49 CFR 172.700; 49 CFR 173.134\(a\)\(5\)\]](#)

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- 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>

(EV) Associated Waste Management



- 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).