Interim Guidelines for Environmental Infection Control at Outpatient and Clinical Offices

October 2014

Background:

Ebola viruses are transmitted through direct contact with blood or body fluids/substances (e.g., urine, feces, vomit) of an infected person with symptoms or through exposure to objects (such as needles) that have been contaminated with infected blood or body fluids. The role of the environment in transmission has not been established. Limited laboratory studies under favorable conditions indicate that Ebola virus can remain viable on solid surfaces, with concentrations falling slowly over several days. There is no epidemiologic evidence of Ebola virus transmission via either the environment or fomites that could become contaminated during patient care (e.g., bed rails, door knobs, laundry). However, given the apparent low infectious dose, potential of high virus titers in the blood of ill patients, and disease severity, higher levels of precaution are warranted to reduce the potential risk posed by contaminated surfaces in the patient care environment.

As part of the evaluation of patients for Ebola virus disease (EVD) outpatient and clinical office settings are recommended to:

- **Be sure environmental services staff wear recommended personal protective equipment (PPE) to protect against direct skin and mucous membrane exposure of cleaning chemicals, contamination, and splashes or spatters during environmental cleaning and disinfection activities.** If reusable heavy-duty gloves are used for cleaning and disinfecting, they should be disinfected and kept in the room or anteroom. Be sure staff are trained in the proper use of personal protective equipment including safe removal to prevent contaminating themselves or others in the process, and that contaminated equipment is disposed of appropriately. Consider conducting drills for environmental services staff to ensure PPE is used appropriately.
- **Use a U.S. Environmental Protection Agency (EPA)-registered 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**. Although there are no products with specific label claims against the Ebola

virus, enveloped viruses such as Ebola are susceptible to a broad range of disinfectants used to disinfect hard, non-porous surfaces. In contrast, non-enveloped viruses are more resistant to disinfectants. As a precaution, selection of a disinfectant product with a higher potency than what is normally required for an enveloped virus is being recommended at this time. EPA-registered disinfectants with label claims against non-enveloped viruses (e.g., norovirus, rotavirus, adenovirus, poliovirus) are broadly antiviral and capable of inactivating both enveloped and non-enveloped viruses.

- **Avoid contamination of reusable porous surfaces that cannot be made single use**. Use only a mattress and pillow with plastic or other covering that fluids cannot get through. Do not place patients with suspected or confirmed Ebola virus infection in carpeted rooms and remove all upholstered furniture and decorative curtains from exam rooms before use.
- **To reduce exposure among staff to potentially contaminated textiles (cloth products) while laundering, discard all linens, non-fluid-impermeable pillows or mattresses, and textile privacy curtains into the waste stream and dispose of appropriately.**
- **After evaluation of a patient for suspect EVD clean and disinfect hard, non-porous surfaces (e.g., high-touch surfaces such as hand rails and tables, housekeeping surfaces such as floors and counters).** Before disinfecting a surface, cleaning should be performed. In contrast to disinfection where products with specific claims are used, any cleaning product can be used for cleaning tasks. Use cleaning and disinfecting products according to label instructions. Check the disinfectant's label for specific instructions for inactivation of any of the non-enveloped viruses (e.g., norovirus, rotavirus, adenovirus, poliovirus) follow label instructions for use of the product that are specific for inactivation of that virus. Use disposable cleaning cloths, mop cloths, and wipes and dispose of these in leak-proof bags. Use a rigid waste receptacle designed to support the bag to help minimize contamination of the bag's exterior.
- **Manage spills of blood or other body substances according to the basic principles for blood or body substance spill management are outlined in the United States Occupational Safety and Health Administration (OSHA) Bloodborne Pathogen Standards (29 CFR 1910.1030)**. CDC guidelines recommend removal of bulk spill matter, cleaning the site, and then disinfecting the site. For large spills, a chemical disinfectant with sufficient potency is needed to overcome the tendency of proteins in blood and other body substances to neutralize the disinfectant's active ingredient. An EPA-registered disinfectant with label claims for non-enveloped viruses (e.g., norovirus, rotavirus, adenovirus, poliovirus) and

instructions for cleaning and decontaminating surfaces or objects soiled with blood or body fluids should be used according to those instructions.

- **Dispose of cleaning materials and waste using usual procedures unless otherwise instructed by the Local Health Department.** If there is concern regarding waste disposal, it can be left in the proper receptacle(s) in the room until the Local Health Department is contacted.
- **According to CDC, patients waste can be disposed of safely in sanitary sewers.** Sewage handling processes in the United States (for example, anaerobic digestion, composting, and disinfection) are designed to inactivate infectious agents.