

Management of the Individual in the Home Suspected of Having Exposure to the

EBOLA VIRUS

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The following is an excerpt from a policy in the 'Isolation Precautions' section of the 2015 edition of *Home Care Infection Prevention and Control Program* manual and has been reprinted with permission:

Purpose

To assure that a patient or individual in the home with suspected exposure to the Ebola virus (person under investigation) receives care in the proper healthcare setting and is managed in a manner that minimizes the potential risk for transmission.

Guideline

In the home setting, a home care or hospice staff member may be exposed to the Ebola virus from either the patient or an individual that lives in or visits the home who may have Ebola virus disease (Ebola). An individual present in the home is *likely* to be in the early, mildly symptomatic stage of illness when the virus levels are low and the risk for transmission to a home care or hospice staff member is lower (as the individual has not sought a higher level of healthcare). It is when the individual is *significantly* symptomatic (i.e., has a fever or other Ebola-compatible symptoms as described below in the "Before the Home Visit" section, 2C) that the home care and hospice staff is at higher risk. Because of varying state's guidance, management should ask in





Equipment and supplies with a hard, nonporous surface (that did not have contact with blood or body fluids) brought into the home with an individual present with Ebola-compatible symptoms must be disinfected using a hospital disinfectant registered by the Environmental Protection Agency for use against the Ebola virus.

advance for guidance from the health department as to what actions the staff should take when an individual in the home is identified with Ebola-compatible risk factors and symptoms (i.e., whether the staff member(s) should immediately leave the home, or remain in the home until further instructions are provided by the health department based on the risk factors identified at the time of the home visit).

Equipment and supplies with a hard, nonporous surface (that did not have contact with blood or body fluids) brought into the home with an individual present with Ebola-compatible symptoms must be disinfected using a hospital disinfectant registered by the Environmental Protection Agency (2014) for use against the Ebola virus (located at <http://www.epa.gov/oppad001/list-l-ebola-virus.html>) or with a label claim for use against a nonenveloped virus (e.g., norovirus, rotavirus, adenovirus, poliovirus) according to the manufacturer's instructions. Note that a soft surface (e.g., nursing bag) cannot be disinfected as it is not a hard, nonporous surface.

The home is not a suitable environment for care under routine conditions and care should be provided in an acute care setting. Only in a pandemic situation when care in a facility is not available, and the home healthcare agency or hospice elects to care for a patient in the home, will a patient known to be infected with Ebola be cared for in the home setting. If applicable, care of the patient with Ebola will be performed using the most current guidelines from the Centers for Disease Control and Prevention [CDC] (2014) in effect at the time of the home visit. The following information has been adapted for the home setting from the CDC Web site:

Before the Home Visit

1. In advance, identify which healthcare facilities have been designated by the state public

- health department to receive an individual suspected of having exposure to the Ebola virus (i.e., frontline healthcare facility, Ebola assessment hospital, or Ebola treatment center), and communicate this information to the field staff.
2. During the previsit telephone call, ask the patient or caregiver if the patient or anyone who lives in or has visited the home has had:
 - A. Recent travel to a country where Ebola virus transmission is widespread (e.g., Guinea, Liberia, or Sierra Leone) within the previous 21 days. Check <http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/case-counts.html> for the most current information.
 - B. Contact with a person with confirmed Ebola within the previous 21 days.
 - C. Symptoms suggestive of Ebola that may include fever (the individual feels like they may have a fever or states they had an oral temperature of ≥ 100.4 °F/38.0 °C or greater) or any Ebola-compatible symptoms of fatigue, headache, weakness, muscle pain, vomiting, diarrhea, abdominal pain, or hemorrhage.
 3. If the answer is "no" to questions 2 A, B, and C, proceed with scheduling the home visit.
 4. If the answer is "yes" to questions 2 A and B only, notify the Clinical Manager and proceed with scheduling the home visit, unless otherwise instructed by the Clinical Manager. Instruct the individual meeting criteria 2 A and B to monitor themselves for fever and Ebola-compatible symptoms for 21 days after the last exposure (in consultation with the health department), and to notify the health department *before* seeking medical care at a designated facility.
 5. If the answer is "yes" to questions 2 A, B, and C:
 - A. Do not schedule a home visit.

- B. Instruct the patient or caregiver that a home visit will not be made until the individual with Ebola-compatible symptoms has been diagnosed by a physician and determined to be free from Ebola.
- C. Notify the Clinical Manager. The Clinical Manager will:
 - 1) Inform other key leaders within the organization and immediately notify the health department.
 - 2) Coordinate with the health department the transfer of the individual with Ebola-compatible symptoms to identify: (a) Which healthcare facility(ies) has been designated by the state public health department to evaluate an individual with Ebola-compatible symptoms? (b) Who will notify the receiving facility (e.g., emergency department) about the transfer? (c) Who will make arrangements for the individual's safe transport to the facility that agreed to accept the individual with Ebola-compatible symptoms for evaluation?
 - 3) Activate the emergency medical system (EMS) (e.g., 911) or make other transfer arrangements as agreed upon with the health department.
 - 4) Inform EMS personnel that the individual has Ebola-compatible symptoms (so that EMS personnel can arrive at the location of the individual with the correct personal protective equipment [PPE]).
- D. Instruct the individual with Ebola-compatible symptoms to minimize exposure of body fluids to other members of the household and others near them by not sharing a bathroom and remaining in a private room with the door closed, if possible, prior to transport.
- E. Provide the telephone number to the local health department and instruct the patient or caregiver to notify the health department that there is an individual with Ebola-compatible symptoms in the home (both parties are responsible for informing the health department).

During a Home Visit

1. Ask the patient or caregiver about recent travel and direct exposure history of the patient and others that live in or visit the home, and identify if the patient or anyone in the home has Ebola-compatible signs and symptoms as follows:

- A. Recent travel to a country where Ebola virus transmission is widespread (e.g., Guinea, Liberia, or Sierra Leone) within the previous 21 days. Check <http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/case-counts.html> for the most current information.
 - B. Contact with a person with confirmed Ebola within the previous 21 days.
 - C. Symptoms suggestive of Ebola that may include fever (they feel like they may have a fever or state they have had an oral temperature of ≥ 100.4 °F/38.0 °C or greater) or any Ebola-compatible symptoms of fatigue, headache, weakness, muscle pain, vomiting, diarrhea, abdominal pain, or hemorrhage.
2. If the answer is "no" to questions 1 A, B, and C, proceed with the home visit. If the answer is "yes" to questions 1 A, B, and C:
 - A. Notify the Clinical Manager. The Clinical Manager will:
 - 1) Inform other key leaders within the organization and immediately notify the health department.
 - 2) Coordinate with the health department the transfer of the individual with Ebola-compatible symptoms to identify: (a) Which healthcare facility(ies) has been designated by the health department to evaluate an individual with Ebola-compatible symptoms? (b) Who will notify the receiving designated facility (e.g., emergency department) about the transfer? (c) Who will make arrangements for the safe transport to the facility that agreed to accept the individual with Ebola-compatible symptoms for evaluation?
 - 3) Activate the emergency medical system (EMS) (e.g., 911) or make other transfer arrangements as agreed upon with the health department.
 - 4) Inform EMS personnel that the individual has Ebola-compatible symptoms (so that EMS personnel can arrive at the location of the individual with the correct personal protective equipment [PPE]).
 - 5) Inform the health department and EMS personnel whether there is visible blood and/or fluids present in the home.

- 6) Ask the health department for guidance based on the circumstances in the home at the time of the visit whether the staff member(s) present in the home should: (a) immediately leave the home, or (b) remain in the home, until further instructions are provided by health department.
- B. Ask the individual with Ebola-compatible symptoms to move and/or stay in a private room with a door closed until EMS personnel arrives, and not to share a bathroom with others.
- C. Do not have direct contact with the individual with Ebola-compatible symptoms and do not have contact with their linen, objects, and environmental surfaces contaminated with blood or body fluids unless *all of the criteria* below have been met:
1. Noninvasive care or stabilization and nonaerosol-generating procedures are *urgently* required; *and*
 2. There are two staff members present in the home (*which is not likely*) that have been trained and deemed competent in proper donning and doffing of PPE, as well as trained and deemed competence in guidance for exposure risk reduction in the management of an individual suspected of having Ebola. Only one staff member will be designated to have direct contact with the individual; *and*
 3. All required PPE is present in the home. Minimally, a face shield and surgical face mask, impermeable gown, and two pairs of gloves must be worn by a single designated staff member before direct contact with the individual. Refer to <http://www.cdc.gov/vhf/ebola/hcp/procedures-for-ppe.html>.

Do not perform phlebotomy or any other procedure, especially those involving the use of sharps. If PPE is worn in the home, safely and carefully remove all PPE and discard the PPE in a heavy-duty plastic bag that will remain in the home. Refer to state's Ebola waste management guidelines. If unavailable, refer to <http://www.cdc.gov/vhf/ebola/hcp/index.html> for the

CDC's most up-to-date guidance on Ebola-associated waste management.

- D. If an aerosol-generating procedure (i.e., cardiopulmonary resuscitation [CPR]) is required for the individual with Ebola-compatible symptoms, CPR will not be performed and the emergency medical service (EMS) (e.g., 911) will be activated. Inform EMS personnel that the individual has Ebola-compatible symptoms (so that EMS personnel can arrive at the location of the individual with the correct PPE).
- E. Limit contact with the home environment.
- F. Do not enter or reenter an area in the home where an individual with Ebola-compatible symptoms is bleeding, vomiting, or has copious diarrhea.
- G. Do not contact or clean up any spills of blood and/or body fluids.
- H. Do not remove any equipment or supplies from the home that was brought into the home by the staff member that came into contact with blood and/or body fluids.
- I. Perform hand hygiene, leave the home, and manage the equipment and supplies that were brought into the home as instructed by the Clinical Manager.
- J. Inform the physician that the patient was not admitted for care (i.e., if the patient was not the individual with Ebola-compatible symptoms and transferred to the designated facility) and make alternative arrangements to meet the healthcare needs of the patient. Home care services may be initiated for the patient only after a non-Ebola diagnosis has been made by a physician. ■

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REFERENCES

- Centers for Disease Control and Prevention. (2014). *Ebola virus disease*. Retrieved from <http://www.cdc.gov/vhf/ebola/index.html>
- Environmental Protection Agency. (2014). *Disinfectants for use against the Ebola virus*. Retrieved from <http://www.epa.gov/oppad001/list-l-ebola-virus.html>