



Blue Ridge EMS Ebola Plan

Guidelines for EMS

BREMS Council
12/2/2014

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Ebola Virus Disease Triage Guidelines

Ebola guidelines for EMS personnel in the event they encounter a patient that meets the criteria for potential Ebola exposure.

Signs and symptoms of Ebola Virus Disease include:

- Fever
- Severe headache
- Muscle pain test
- Weakness
- Diarrhea
- Vomiting
- Abdominal (stomach) pain
- Unexplained hemorrhage (bleeding or bruising)

If you have a patient with any of these symptoms:

Ask the patient if they, or anyone they have had regular contact with, has traveled outside of the U.S. in the last 30 days.

If yes:

Ask the patient if they have traveled through or from Guinea, Sierra Leone, Liberia, or Mali, or have had physical contact with someone who did. (These locations may be updated. Check the OEMS website frequently for new information.)

If yes to each category above:

- Immediately notify the receiving Emergency Department Charge Nurse of a potential Ebola patient. Use the terminology "High Risk Isolation Patient."
- Place a surgical mask on the patient.

- Limit the number of crew members involved in patient care to the minimum necessary.
- All crew members don full PPE* for droplet precautions, to include **at minimum:**
 - Double gloves
 - Fluid resistant or impermeable gown
 - Head cover
 - N95/P100 mask
 - Face shield
 - Leg/shoe covers

*If at all possible, PPE should be donned **prior to arrival on scene** based on information received from PSAP.

- Ensure that **no skin is exposed** without protection. Utilize a “buddy” to ensure that PPE is properly donned prior to patient contact.

Providers and agencies should refer to “[Guidance on Personal Protective Equipment To Be Used by Healthcare Workers During Management of Patients with Ebola Virus Disease in U.S. Hospitals, Including Procedures for Putting On \(Donning\) and Removing \(Doffing\).](#)”

- Where possible, keep patient separated from others as much as practical.
- If possible, avoid performing invasive procedures such as IV therapy, intubation, suctioning, nebulizer, or any other procedure that may increase the risk of contamination. However, *do not withhold lifesaving interventions* that must be performed.
- Do not allow any crew member who has had direct patient contact to leave the patient compartment to drive to the hospital. Contact dispatch or an agency supervisor for a driver if necessary.
- Upon arrival at the receiving hospital, the crew should wait in the ambulance for hospital staff to supervise patient transfer. If they aren’t waiting upon your arrival, contact them via phone or radio and advise that you have arrived.
- Crew members involved with patient care should follow the direction of emergency department staff regarding location for patient turnover. When patient turnover is complete, crew members should doff PPE and decontaminate themselves at the emergency department in a supervised and controlled manner in the location directed by emergency department staff, following posted CDC guidelines.

- Crew members should notify hospital infectious control personnel, agency supervisors and agency infectious control officer as soon as practical to do so.

If any provider is exposed to blood, bodily fluids, secretions or excretions from a patient with suspected or confirmed Ebola:

- Stop working immediately and wash the affected skin surfaces with soap and water. Mucous membranes should be irrigated with a large amount of water or eyewash solution.
- Contact Designated Infection Control Officer and supervisor for assessment and access to post-exposure management services, and
- Receive medical evaluation and follow-up care, including fever monitoring twice daily for 21 days. Follow agency and local health department direction regarding working status and isolation policies and procedures.

- Ambulance cleaning should take place after transport of a suspected Ebola patient following [CDC Guidelines](#).

If a patient meeting the above criteria refuses transport, the ambulance crew should report patient information to the local health department for follow-up.

Central Virginia Lynchburg Health District (434)947 2692

After regular working hours and on weekends, call (866) 531-3068. Ask for the Epidemiology Investigator on call.

Transportation:

Agencies transporting suspected Ebola patients should follow established local/regional protocols for transporting patients based on patient's chief complaint.

Communication:

- EMS staff should immediately verify any information provided by the PSAPS dispatcher. Travel from one of the affected countries, date of arrival in the US and presence of fever and other symptoms should be documented.
- EMS responders should notify the receiving healthcare facility in advance when they are bringing a patient with suspected Ebola, so that proper infection control precautions can be taken at the healthcare facility before EMS arrives with the patient.

Donning PPE, PAPR Option

This donning procedure assumes the agency has elected to use PAPRs. Use a trained observer to verify successful compliance with the protocol, if available.

1. **Engage Trained Observer:** The donning process should be conducted under the guidance and supervision of a trained observer, who confirms visually that all PPE is serviceable and has been donned successfully. The trained observer uses a written checklist to confirm each step in donning PPE and can assist with ensuring and verifying the integrity of the ensemble. No exposed skin or hair of the EMS provider should be visible at the conclusion of the donning process.
2. **Remove Personal Clothing and Items:** Change into surgical scrubs (or disposable garments) and dedicated washable (plastic or rubber) footwear in a suitable clean area. No personal items (e.g., jewelry, watches, cell phones, pagers, pens) should be brought into patient 's area (house/ambulance/room).
3. **Inspect PPE Prior to Donning:** Visually inspect the PPE ensemble to be worn to ensure that it is in serviceable condition, that all required PPE and supplies are available, and that the sizes selected are correct.
4. **Perform Hand Hygiene:** Perform hand hygiene with ABHR. When using ABHR, allow hands to dry before moving to next step.
5. **Put on Inner Gloves:** Put on first pair of gloves.
6. **Put on Boot or Shoe Covers.**
7. **Put on Gown or Coverall:** Put on gown *or* coverall. Ensure gown or coverall is large enough to allow unrestricted freedom of movement. Ensure cuffs of inner gloves are tucked under the sleeve of the gown *or* coverall
 - a. If a PAPR with a self-contained filter and blower unit that is integrated inside the helmet is used, then the belt and battery unit must be put on prior to donning the impermeable gown *or* coverall so that the belt and battery unit are contained under the gown *or* coverall.
 - b. If a PAPR with external belt-mounted blower is used, then the blower and tubing must be on the outside of gown *or* coverall to ensure proper airflow.
8. **Put on Outer Gloves:** Put on second pair of gloves (with extended cuffs). Ensure the cuffs are pulled over the sleeves of the gown *or* coverall
9. **Put on Respirator:** Put on PAPR with a full face-shield, helmet, or headpiece
 - a. If a PAPR with a self-contained filter and blower unit integrated inside the helmet is used, then a single-use (disposable) hood that extends to the shoulders and fully covers the neck must also be used. Be sure that the hood covers all of the hair and the ears, and that it extends past the neck to the shoulders.
 - b. If a PAPR with external belt-mounted blower unit and attached reusable headpiece is used, then a single-use (disposable) hood that extends to the shoulders and fully covers the neck must also be used. Be sure that the hood covers all of the hair and the ears, and that it extends past the neck to the shoulders.
10. **Put on Outer Apron (if used):** Put on full-body apron to provide additional protection to the front of the body against exposure to body fluids or excrement from the patient.
11. **Verify:** After completing the donning process, the integrity of the ensemble is verified by a trained observer. The EMS provider should be comfortable and able to extend

the arms, bend at the waist, and go through a range of motions to ensure there is sufficient range of movement while all areas of the body remain covered.

12. **Disinfect Outer Gloves:** Disinfect outer-gloved hands with ABHR. Allow to dry prior to patient contact.



Donning PPE, N95 Respirator Option

This donning procedure assumes the agency has elected to use N95 respirators. Use a trained observer to verify successful compliance with the protocol, if available.

Engage Trained Observer: The donning process is conducted under the guidance and supervision of a trained observer (buddy system) who confirms visually that all PPE is serviceable and has been donned successfully. The trained observer will use a written checklist to confirm each step in donning PPE and can assist with ensuring and verifying the integrity of the ensemble. No exposed skin or hair of the EMS provider should be visible at the conclusion of the donning process.

1. **Remove Personal Clothing and Items:** Change into surgical scrubs (or disposable garments) and dedicated washable (plastic or rubber) footwear in a suitable, clean area. No personal items (e.g., jewelry, watches, cell phones, pagers, pens) should be brought into patient 's area (house/ambulance/room).
2. **Inspect PPE Prior to Donning:** Visually inspect the PPE ensemble to be worn to ensure it is in serviceable condition, all required PPE and supplies are available, and that the sizes selected are correct for the EMS provider. The trained observer reviews the donning sequence with the EMS provider before the EMS provider begins and reads it to the EMS provider in a step-by-step fashion.
3. **Perform Hand Hygiene:** Perform hand hygiene with ABHR. When using ABHR, allow hands to dry before moving to next step.
4. **Put on Inner Gloves:** Put on first pair of gloves.
5. **Put on Boot or Shoe Covers.**
6. **Put on Gown or Coverall:** Put on gown or coverall. Ensure gown or coverall is large enough to allow unrestricted freedom of movement. Ensure cuffs of inner gloves are tucked under the sleeve of the gown or coverall.
7. **Put on N95 Respirator:** Put on N95 respirator. Complete a user seal check.
8. **Put on Surgical Hood:** Over the N95 respirator, place a surgical hood that covers all of the hair and the ears, and ensure that it extends past the neck to the shoulders. Be certain that hood completely covers the ears and neck.
9. **Put on Outer Apron (if used):** Put on full-body apron to provide additional protection to the front of the body against exposure to body fluids or excrement from the patient.
10. **Put on Outer Gloves:** Put on second pair of gloves (with extended cuffs). Ensure the cuffs are pulled over the sleeves of the gown or coverall.
11. **Put on Face Shield:** Put on full face shield over the N95 respirator and surgical hood to provide additional protection to the front and sides of the face, including skin and eyes.
12. **Verify:** After completing the donning process, the integrity of the ensemble is verified by the trained observer. The EMS provider should be comfortable and able to extend the arms, bend at the waist and go through a range of motions to ensure there is sufficient range of movement while all areas of the body remain covered. A mirror in the room can be useful for the EMS provider while donning PPE.
13. **Disinfect Outer Gloves:** Disinfect outer-gloved hands with ABHR. Allow to dry prior to patient contact.



Doffing PPE, PAPR Option

PPE doffing should be performed in the designated PPE removal area. Place all PPE waste in a [leak-proof infectious waste container](#).

1. **Engage Trained Observer:** The doffing process is conducted under the supervision of a trained observer, who reads aloud each step of the procedure and confirms visually that the PPE is removed properly. Prior to doffing PPE, the trained observer must remind the EMS provider to avoid reflexive actions that may put them at risk, such as touching their face. Post this instruction and repeat it verbally during doffing. Although the trained observer should minimize touching the EMS provider or the EMS provider's PPE during the doffing process, the trained observer may assist with removal of specific components of PPE, as outlined below. The trained observer disinfects the outer-gloved hands immediately after handling any EMS provider PPE.
2. **Inspect:** Inspect the PPE to assess for visible contamination, cuts, or tears before starting to remove. If any PPE is potentially contaminated, then disinfect using an *EPA-registered disinfectant wipe. If the facility conditions permit and appropriate regulations are followed, an *EPA-registered disinfectant spray can be used, particularly on contaminated areas.
3. **Disinfect Outer Gloves:** Disinfect outer-gloved hands with either an *EPA-registered disinfectant wipe or ABHR, and allow to dry.
4. **Remove Apron (if used):** Remove and discard apron taking care to avoid contaminating gloves by rolling the apron from inside to outside.
5. **Inspect:** Following apron removal, inspect the PPE ensemble to assess for visible contamination or cuts or tears. If visibly contaminated, then disinfect affected PPE using an *EPA-registered disinfectant wipe.
6. **Disinfect Outer Gloves:** Disinfect outer-gloved hands with either an *EPA-registered disinfectant wipe or ABHR.
7. **Remove Boot or Shoe Covers:** While sitting down, remove and discard boot or shoe covers.
8. **Disinfect and Remove Outer Gloves:** Disinfect outer-gloved hands with either an *EPA-registered disinfectant wipe or ABHR. Remove and discard outer gloves, taking care not to contaminate inner glove during removal process.
9. **Inspect and Disinfect Inner Gloves:** Inspect the inner gloves' outer surfaces for visible contamination, cuts, or tears. If an inner glove is visibly soiled, cut, or torn, then disinfect the glove with either an *EPA-registered disinfectant wipe or ABHR. Then remove the inner gloves, perform hand hygiene with ABHR on bare hands, and don a clean pair of gloves. If no visible contamination, cuts, or tears are identified on the inner gloves, then disinfect the inner-gloved hands with either an *EPA-registered disinfectant wipe or ABHR.
10. **Remove Respirator (PAPR)***:**
 - a. If a PAPR with a self-contained filter and blower unit integrated inside the helmet is used, then wait until Step 15 for removal and go to Step 11.
 - b. If a PAPR with an external belt-mounted blower unit is used, then all components must be removed at this step.
 - i. Remove and discard disposable hood.
 - ii. Disinfect inner gloves with either an *EPA-registered disinfectant wipe or ABHR.

- iii. Remove headpiece, blower, tubing, and the belt and battery unit. This step might require assistance from the trained observer.
 - iv. Disinfect inner gloves with either an *EPA-registered disinfectant wipe or ABHR.
 - v. Place all reusable PAPR components in an area or container designated for the collection of PAPR components for disinfection.
11. **Remove Gown or Coverall:** Remove and discard.
 - a. Depending on gown design and location of fasteners, the EMS provider can either untie fasteners, receive assistance by the trained observer to unfasten the gown, or gently break fasteners. Avoid contact of scrubs or disposable garments with outer surface of gown during removal. Pull gown away from body, rolling inside out and touching only the inside of the gown.
 - b. To remove coverall, tilt head back and reach under the PAPR hood to reach zipper or fasteners. Use a mirror to help avoid touching the skin. Unzip or unfasten coverall completely before rolling down and turning inside out. Avoid contact of scrubs with outer surface of coverall during removal, touching only the inside of the coverall.
 12. **Disinfect Inner Gloves:** Disinfect inner gloves with either an *EPA-registered disinfectant wipe or ABHR
 13. **Disinfect Washable Shoes:** Sitting on a new clean surface (e.g., second clean chair, clean side of a bench) use an *EPA-registered disinfectant wipe to wipe down every external surface of the washable shoes.
 14. **Disinfect Inner Gloves:** Disinfect inner gloves with either an *EPA-registered disinfectant wipe or ABHR.
 15. **Remove Respirator (if not already removed):** If a PAPR with a self-contained filter and blower unit that is integrated inside helmet is used, then remove all components.
 - a. Remove and discard disposable hood
 - b. Disinfect inner gloves with either an *EPA-registered disinfectant wipe or ABHR
 - c. Remove and discard inner gloves taking care not to contaminate bare hands during removal process
 - d. Perform hand hygiene with ABHR
 - e. Don a new pair of inner gloves
 - f. Remove helmet and the belt and battery unit. This step might require assistance from the trained observer.
 16. **Disinfect and Remove Inner Gloves:** Disinfect inner-gloved hands with either an *EPA-registered disinfectant wipe or ABHR. Remove and discard gloves taking care not to contaminate bare hands during removal process.
 17. **Perform Hand Hygiene:** Perform hand hygiene with ABHR.
 18. **Inspect:** Perform a final inspection of EMS provider for any indication of contamination of the surgical scrubs or disposable garments. If contamination is identified, immediately inform infection preventionist or occupational safety and health coordinator or their designee before exiting PPE removal area.
 19. **Scrubs:** EMS provider can leave PPE removal area wearing dedicated washable footwear and surgical scrubs or disposable garments.
 20. **Shower:** Showers are recommended at each shift's end for EMS providers performing high-risk patient care (e.g., exposed to large quantities of blood, body

fluids, or excreta). Showers are also suggested for EMS providers spending extended periods of time in the Ebola patient room.

21. **Protocol Evaluation/Medical Assessment:** Either the infection preventionist or occupational safety and health coordinator or their designee on the unit at the time should meet with the EMS provider to review the patient care activities performed to identify any concerns about care protocols and to record EMS provider's level of fatigue.



Doffing PPE, N95 Respirator Option

PPE doffing is performed in the designated PPE removal area. Place all PPE waste in a [leak-proof infectious waste container](#).

1. **Engage Trained Observer:** The doffing process is conducted under the supervision of a trained observer, who reads aloud each step of the procedure and confirms visually that the PPE has been removed properly. Prior to doffing PPE, the trained observer must remind healthcare workers to avoid reflexive actions that may put them at risk, such as touching their face. Post this instruction and repeat it verbally during doffing. Although the trained observer should minimize touching healthcare workers or their PPE during the doffing process, the trained observer may assist with removal of specific components of PPE as outlined below. The trained observer disinfects the outer-gloved hands immediately after handling any EMS provider PPE.
2. **Inspect:** Inspect the PPE to assess for visible contamination, cuts, or tears before starting to remove. If any PPE is visibly contaminated, then disinfect using an *EPA-registered disinfectant wipe. If the facility conditions permit and appropriate regulations are followed, an *EPA-registered disinfectant spray can be used, particularly on contaminated areas.
3. **Disinfect Outer Gloves:** Disinfect outer-gloved hands with either an *EPA-registered disinfectant wipe or ABHR.
4. **Remove Apron (if used):** Remove and discard apron taking care to avoid contaminating gloves by rolling the apron from inside to outside.
5. **Inspect:** Following apron removal, inspect the PPE ensemble to assess for visible contamination or cuts or tears. If visibly contaminated, then disinfect affected PPE using an *EPA-registered disinfectant wipe.
6. **Disinfect Outer Gloves:** Disinfect outer-gloved hands with either an *EPA-registered disinfectant wipe or ABHR.
7. **Remove Boot or Shoe Covers:** While sitting down, remove and discard boot or shoe covers.
8. **Disinfect and Remove Outer Gloves:** Disinfect outer-gloved hands with either an *EPA-registered disinfectant wipe or ABHR. Remove and discard outer gloves taking care not to contaminate inner gloves during removal process.
9. **Inspect and Disinfect Inner Gloves:** Inspect the inner gloves' outer surfaces for visible contamination, cuts, or tears. If an inner glove is visibly soiled, cut, or torn,

then disinfect the glove with either an *EPA-registered disinfectant wipe or ABHR. Then remove the inner gloves, perform hand hygiene with ABHR on bare hands, and don a clean pair of gloves. If no visible contamination, cuts, or tears are identified on the inner gloves, then disinfect the inner-gloved hands with either an *EPA-registered disinfectant wipe or ABHR.

10. **Remove Face Shield:** Remove the full face shield by tilting the head slightly forward, grabbing the rear strap and pulling it over the head, gently allowing the face shield to fall forward and discard. Avoid touching the front surface of the face shield.
11. **Disinfect Inner Gloves:** Disinfect inner gloves with either an *EPA-registered disinfectant wipe or ABHR.
12. **Remove Surgical Hood:** Unfasten (if applicable) surgical hood, gently remove, and discard. The trained observer may assist with unfastening hood.
13. **Disinfect Inner Gloves:** Disinfect inner gloves with either an *EPA-registered disinfectant wipe or ABHR.
14. **Remove Gown or Coverall:** Remove and discard.
 - a. Depending on gown design and location of fasteners, the EMS provider can either untie fasteners, receive assistance by the trained observer to unfasten to gown, or gently break fasteners. Avoid contact of scrubs or disposable garments with outer surface of gown during removal. Pull gown away from body, rolling inside out and touching only the inside of the gown.
 - b. To remove coverall, tilt head back to reach zipper or fasteners. Unzip or unfasten coverall completely before rolling down and turning inside out. Avoid contact of scrubs with outer surface of coverall during removal, touching only the inside of the coverall.
15. **Disinfect and Change Inner Gloves:** Disinfect inner gloves with either an *EPA-registered disinfectant wipe or ABHR. Remove and discard gloves taking care not to contaminate bare hands during removal process. Perform hand hygiene with ABHR. Don a new pair of inner gloves.
16. **Remove N95 Respirator:** Remove the N95 respirator by tilting the head slightly forward, grasping first the bottom tie or elastic strap, then the top tie or elastic strap, and remove without touching the front of the N95 respirator. Discard N95 respirator.
17. **Disinfect Inner Gloves:** Disinfect inner gloves with either an *EPA-registered disinfectant wipe or ABHR

18. **Disinfect Washable Shoes:** Sitting on a new clean surface (e.g., second clean chair, clean side of a bench) use an *EPA-registered disinfectant wipe to wipe down every external surface of the washable shoes.
19. **Disinfect and Remove Inner Gloves:** Disinfect inner-gloved hands with either an *EPA-registered disinfectant wipe or ABHR. Remove and discard gloves taking care not to contaminate bare hands during removal process.
20. **Perform Hand Hygiene:** Perform hand hygiene with ABHR.
21. **Inspect:** Perform a final inspection of EMS provider for any indication of contamination of the surgical scrubs or disposable garments. If contamination is identified, immediately inform infection preventionist or occupational safety and health coordinator or their designee before exiting PPE removal area.
22. **Scrubs:** EMS provider can leave PPE removal area wearing dedicated washable footwear and surgical scrubs or disposable garments.
23. **Shower:** Showers are recommended at each shift's end for EMS providers performing high risk patient care (e.g., exposed to large quantities of blood, body fluids, or excreta). Showers are also suggested for EMS providers spending extended periods of time in the Ebola patient room.
24. **Protocol Evaluation/Medical Assessment:** Either the infection preventionist or occupational health safety and health coordinator or their designee on the unit at the time should meet with the EMS provider to review the patient care activities performed to identify any concerns about care protocols and to record EMS provider's level of fatigue.

PASAPs / 911 Centers

Guidance for 9-1-1 Public Safety Answering Points (PSAPs) for Management of Patients Who Present With Possible Ebola Virus Disease.

Key Points:

- The likelihood of contracting Ebola in the United States is extremely low unless a person has direct contact with the blood or body fluids (like urine, saliva, vomit, sweat, and diarrhea) of a person who is infected with Ebola virus.
- It is important for PSAPs to question callers about:
 - Residence in, or travel to, a [country or area with widespread Ebola virus transmission](http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/distribution-map.html) or uncertain control measures or having had contact with an individual with confirmed Ebola Virus Disease within the previous 21 days; AND
 - Signs and symptoms of Ebola (such as fever, severe headache, muscle pain, weakness, fatigue, diarrhea, vomiting, abdominal pain, and unexplained hemorrhage.)
- Managers of 9-1-1 PSAPs, EMS Agencies, EMS systems, agencies with medical first responders (such as fire and law enforcement) should collaborate with local public health authorities to develop coordinated plans for responding to a person with possible Ebola in a given jurisdiction, including the possibility of designating certain teams for this response.
- All personnel should be trained regarding Ebola response protocols. Those who may respond to a person with possible Ebola should also be trained in the use of the appropriate personal protective equipment (PPE) consistent with their response role.
- If PSAP call takers have information alerting them to a person with possible Ebola, they should make sure any first responders and EMS providers are made aware of the potential for a patient with possible exposure/signs and symptoms of Ebola **before the responders arrive on scene**. This will enable EMS providers to select and correctly put on PPE following the principles described in CDC's guidance documents.

Recommendations for 9-1-1 PSAPs

State and local EMS authorities should coordinate with state and local public health, PSAPs, and other emergency call centers to use modified caller queries about Ebola, outlined below, when they consider the risk of Ebola to be higher in their community. This should be decided from information provided by local, state, and federal public health authorities, including the city or county health department(s), state health department(s), and CDC.

Modified Caller Queries

It will be important for PSAPs to question callers and determine the possibility of anyone having Ebola. This information should be communicated immediately to EMS providers before arrival in order to assign the appropriate EMS resources. Local or state public health officials should also be notified. PSAPs should utilize medical dispatch

procedures that are coordinated with their EMS medical director and with the local public health department.

- If PSAP call-takers suspect a caller is reporting symptoms of Ebola, they should screen callers for risk factors within the past 3 weeks (21 days):
 - Residence in, or travel to, a country or area [with widespread Ebola transmission](http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/index.html)(<http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/index.html>) or uncertain control measures; (a list of countries can be accessed at the following link: [2014 Ebola Outbreak in West Africa - Outbreak Distribution Map](http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/distribution-map.html)(<http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/distribution-map.html>)).
 - Contact with blood or body fluids (including but not limited to urine, saliva, vomit, sweat, and diarrhea) of a patient known to have or suspected to have Ebola.
- If PSAP call takers have information alerting them to a person with possible Ebola, they should make sure any first responders and EMS providers are made aware of the potential for a patient with possible exposure/signs and symptoms of Ebola **before the responders arrive on scene.**
- If responding to a report of an ill traveler at an airport or other port of entry to the United States, the PSAP or EMS unit should notify the CDC Quarantine Station for the port of entry. Click here for contact information for CDC [Quarantine Station](#) or the PSAP or EMS unit can call the CDC's Emergency Operations Center at 770-488-7100 to be connected with the appropriate quarantine station.

These guidelines are based on current Virginia Department of Health and CDC recommendations at the time published. Please monitor BREMS web-site or the OEMS website (www.vdh.virginia.gov/OEMS) frequently for changing conditions and join the OEMS Facebook and Twitter feeds for immediate notification of changing guidance and recommendations.

Suspected Ebola

Immediate Concern:

Travelers from an area with an Ebola outbreak can arrive in the BREMS region prior to exhibiting symptoms and become ill here.

Evolving Protocol:

This protocol should be considered an evolving protocol that can change as outbreak locations change. All EMS personnel should carefully monitor this protocol for updates.

Patient Travel History

1. Within the past 21 days before the onset of symptoms, residence in, or travel within an infected region(s) of:

West Africa (Sierra Leone, Guinea, Nigeria, Senegal or Liberia)

Patient Signs & Symptoms

- Fever
- Headache
- Joint and muscle aches
- Weakness
- Fatigue
- Vomiting and diarrhea
- Stomach pain
- Lack of appetite
- In some cases bleeding

A Suspected Ebola Patient

1. Work with your local dispatch center, who can help you identify suspected Ebola patients and the need to limit exposure for EMS providers.
2. Any patient within 21 days before the onset of symptoms, residence in, or travel within, the affected regions of West Africa (Sierra Leone, Guinea, Nigeria, Senegal or Liberia) AND
3. Presents with a fever, headache, joint and muscle aches, weakness, fatigue, vomiting and diarrhea, stomach pains, lack of appetite, or bleeding.

EMS Personnel Recommendations for Personnel Protective Equipment (PPE)

Donning PPE: First, remove all jewelry, valuables, and tie hair back.

1. Appropriate PPE includes: gloves, (double gloving), fluid resistant (impervious) Tyvek- like full length (coveralls), eye protection (goggles), N-95 face mask, if not included with coveralls; fluid resistant (impervious) head covers and shoe/boot covers.
2. PPE must be in place before contact is made with the patient and continued to be worn until personnel are no longer in contact with the patient.

Doffing PPE: Outer surface of PPE is contaminated. Do not touch.

3. PPE must be carefully removed without contaminating one's eyes, mucous membranes, or clothing with potentially infectious materials. Use great care while doffing your PPE so as not to contaminate yourself (e.g. Do not remove your N-95 facemask or eye protection before you remove your coveralls).
4. PPE must be double bagged and placed into a regulated medical waste container and disposed of in an appropriate location.
5. Appropriate PPE must be worn while decontaminating / disinfecting EMS equipment or unit.

Hand Hygiene

1. Hand hygiene should be performed by washing with soap and water with hand friction for a minimum of 20 seconds.
2. Alcohol based hand rubs may be used if soap and water are not available.
3. Even if any alcohol based hand rub is used, wash hands with soap and water as soon as possible. The use of gloves is not a substitute for hand washing with soap and water.

Suspected Ebola

EMS Contact of Suspected Ebola Patient

Remember, particular attention must be paid to protecting mucous membranes of the eyes, nose, and mouth from splashes of infectious material or self inoculation from soiled PPE / gloves. Do not rely solely on EMD personnel to identify a possible Ebola patient, EMS personnel must obtain a travel history and check clinical signs and symptoms once on scene.

1. Don personal protective equipment (PPE) before you enter the patient area.
Donning PPE:
 - a. The responding EMS crew must wear appropriate PPE, which includes:
 - Gloves (double gloving required)
 - Tyvek-Like full length (coveralls), fluid resistant (impervious) that includes head and shoe/ boot covers
 - Eye protection (goggles)
 - N-95 face mask (perform positive pressure fit check prior to use) (PAPR air purifying respirator)
 - Head covers- fluid resistant (impervious)
 - Shoe covers- fluid resistant (impervious)
2. Obtain a travel history and clinical signs and symptoms.
3. If there are no Ebola risk factors, proceed to the appropriate EMS treatment protocols based on clinical status.
4. If travel history and clinical signs and symptoms is positive and Ebola is suspected, a surgical mask (non N-95) should be placed on the patient, (use non-rebreathing mask if oxygen is clinically indicated).
5. If the patient is being transported via stretcher place fluid resistant impervious sheet over cot mattress and patient.
6. Call Medical Control with advance notice of the suspected Ebola patient. Upon arrival at the hospital (LGH), EMS should wait in the ambulance with the patient until hospital staff comes to retrieve the patient. Expect this process to take time, from 2 -3 hours.

No Routine Aerosol Generating Procedures

- Pre-hospital providers should avoid aerosol generating procedures unless absolutely medically necessary.
- These include CPAP, nebulizer treatments, intubation and suctioning.
- If these airway procedures are absolutely medically necessary, control conditions, (e.g. briefly stop vehicle).

No Routine Intravenous (IV) Lines

- Unless absolutely medically necessary do not initiate IV's on suspected Ebola patients in the pre-hospital field.
- If an IV is necessary, it must be performed under controlled conditions (e.g. briefly stop vehicles) to lessen the chance exposure from a contaminated needle.

EMS Personnel Exposure-Immediate Actions

- If EMS personnel are exposed to blood, bodily fluids, secretions, or excretions from a patient with suspected or confirmed Ebola should immediately:
 1. Stop working and wash the affected skin surfaces with soap and water.
 2. Mucous membranes (e.g. conjunctiva) should be irrigated with a large amount of water or eyewash solution.

Alert the Receiving Medical Facility

- As soon as possible, notify the receiving medical facility that you are transporting a potential Ebola patient.

Patient disposition

- Medical personnel from the receiving facility will come to the ambulance to take the patient. This patient transfer process will not be immediate. Expect this process to take time, from 2 -3 hours.

Suspected Ebola

Importance of Decontamination

- Diligent decontamination / disinfection along with safe handling of potentially contaminated materials (objects such as contaminated EMS equipment, supplies, and sharps) is paramount, as blood, sweat, urine, saliva, feces, vomit, tears, and other bodily fluids represent potential contamination.

Key Points/Considerations

- Incubation period 2 – 21 days.
- A patient is only infectious when symptomatic.
- Once ill, a person can spread the virus to others through direct contact with body fluids.
- Limit the use of needles and other sharps as much as possible. All needles and sharps should be handled with extreme care and disposed in puncture-proof, sealed containers. Safety devices must be employed immediately after use.

TO REPORT EMS PATIENTS WHO SCREEN POSITIVE FOR EVD BUT REFUSE TRANSPORT - NSPA REGION

WHICH DISTRICT AM I IN?	
LOCALITY	HEALTH DISTRICT
Alleghany County	Roanoke-Alleghany
Amherst County	Central
Appomattox County	Central
Bedford County	Central
Botetourt County	Roanoke-Alleghany
Campbell County	Central
Covington	Roanoke-Alleghany
Craig County	Roanoke-Alleghany
Danville	Pittsylvania-Danville
Floyd County	New River
Franklin County	West Piedmont
Giles County	New River
Lynchburg	Central
Martinsville	West Piedmont
Montgomery County	New River
Patrick County	West Piedmont
Pittsylvania County	Pittsylvania-Danville
Pulaski County	New River
Radford	New River
Amherst County	Central
Roanoke County	Roanoke-Alleghany
Roanoke City	Roanoke-Alleghany
Salem	Roanoke-Alleghany

DISTRICT EPIDEMIOLOGY CONTACTS			
District	Name	Phone	Backup Phone
West Piedmont	Sharon Ortiz-Garcia	276-638-2311 x129	276-732-8833
West Piedmont	Pamela Rorrer	276-638-2311 x115	
West Piedmont	Tina Oakes	276-638-2311 x136	
New River	Paige Bordwine	540-585-3325	540-357-0701
New River	Reba Hite	540-585-3353	540-320-3785
Roanoke/Alleghany	Hope White	540-283-5032	540-494-1222
Roanoke/Alleghany	Robert Hawkins	540-266-4024	540-204-9959
Pittsylvania-Danville	Verna M. Burnette	434-432-7232 x206	434-250-5844
Pittsylvania-Danville	Rhonda Pruitt	434-476-4863 x127	
Central Virginia	Haley Phillips	434-841-5319	*requests 24-hr notification
Central Virginia	Lindsey Cawood	434-238-5569	
EVENING/NIGHT/ WEEKEND PHONE - All Districts <i>(this number is not to be released to the public)</i>			866.531.3068

NOTE: If you have difficulty reporting to your local health district during regular business hours, call the VDH central epidemiology office at
804-864-8141

To report to the CDC: Call 770-488-7100 or email eocreport@cdc.gov