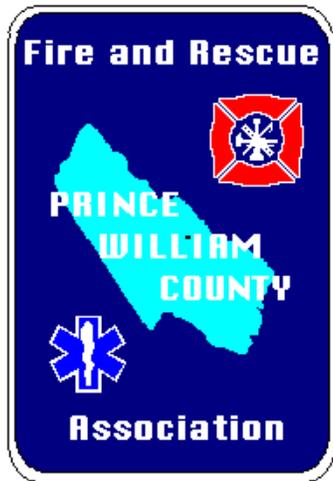


PRINCE WILLIAM COUNTY  
FIRE AND RESCUE ASSOCIATION  
EBOLA RESPONSE PLAN



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CHAIRMAN

OCTOBER 22, 2014

2ND EDITION

**Prince William County Fire and Rescue Association**  
**Emergency Medical Services, Ebola Response Plan**

*This plan is designed to remain flexible and will be adapted and modified as necessary to respond to changing risks and threat assessments.*

**Risk Assessment**

EMS OPS will work closely with State and Local Public Health Officials to monitor and evaluate community risk potential.

- EMS OPS will conference with VDH as needed
- EMS OPS will communicate with the Regional Health District regularly and as needed
- EMS OPS will monitor CDC Ebola Homepage daily

EMS OPS will modify response plan as appropriate according to threat level and changes to community risk.

**Public Safety Answering Point- 9-1-1 Call Taking and Dispatch**

EMS OPS has developed modifications to 911 caller interrogations to identify persons with an elevated risk for Ebola

PSCC will incorporate modified 911 interrogation into all EMS call types (See “Ebola Caller Interrogation” flow chart)

- Call takers will follow normal procedures to interrogate, call type, and forward EMS calls to dispatcher
- PSCC will dispatch appropriate level of EMS units as identified
- PSCC call takers should identify those patients exhibiting signs and symptoms associated with Ebola
  - Fever  $\geq$  100.4 degrees Fahrenheit
  - Headache
  - Vomiting
  - Diarrhea
  - Abdominal pain
  - Unexplained hemorrhage (bleeding or bruising)
  - Other Symptoms associated with Ebola
    - Joint and muscle aches
    - Weakness
    - Lack of appetite
    - Rash (Bumpy red rash on the face, torso, neck and extremities with/without peeling skin)
    - Red eyes
    - Hiccups
    - Cough

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- Sore throat
- Chest pain
- Difficulty breathing
- Difficulty swallowing
- Call takers will then interrogate those callers with the above signs and symptoms to identify risk factors of Ebola
  - Residence in or travel to a country where an Ebola outbreak is occurring
    - West African Nations
      - Guinea
      - Liberia
      - Nigeria
      - Sierra Leone
    - Contact with a patient known to have or suspected to have Ebola
    - Patient involvement with the handling or preparation of dead human bodies known to have or suspected to have Ebola
    - Direct handling of bats or nonhuman primates from disease-endemic areas
  - An incident would be deemed as “high-risk” if the patient has symptoms consistent with Ebola and has a positive risk factor(s) as identified on the “Ebola Caller Interrogation” flow chart
  - Call taker will confidentially communicate a high-risk incident with a “PPE Alert” entered into the comments field. This will be forwarded to responding field units
  - Dispatcher will verbally confirm the field unit’s receipt of the “PPE Alert” prior to arrival on scene
  - Dispatcher will assure an EMS support unit is dispatched, if not already assigned
  - PSCC personnel will notify PD, the area Battalion Chief, BC591 and the duty Health and Safety Officer through the UFRO of high-risk incidents. The duty Health and Safety Officer will communicate directly with and brief Prince William Health District contacts Dr. Ansher (571-238-9036) and Andrea Young (571-722-2244). The Health District after hours contact phone number is 866-531-3068 (use this number if no response from above numbers).

**Emergency Medical Response**

- Monitor MDC and radio traffic for additional information and updates regarding the incident
- If “PPE alert” is received prior to arrival:
  - Don all appropriate PPE prior to accessing the patient and immediate environment
    - Double gloving
    - Fluid resistant or impermeable gowns or suits
    - Eye protection
    - Face shields
    - Respiratory protection (N95 or N100)
    - Shoe coverings

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- Limit the number of providers and equipment exposed to the patient(s) and immediate environment
- Maintain appropriate distance from patient while conducting initial interview and history
- Assess patient and identify signs, symptoms and risk factors of Ebola infections

***Signs and Symptoms***

- Fever  $\geq 100.4$  degrees Fahrenheit
  - Headache
  - Vomiting
  - Diarrhea
  - Abdominal pain
  - Unexplained hemorrhage (bleeding or bruising)
  - Other Symptoms associated with Ebola
    - Joint and muscle aches
    - Weakness
    - Lack of appetite
    - Rash (Bumpy red rash on the face, torso, neck and extremities with/without peeling skin)
    - Red eyes
    - Hiccups
    - Cough
    - Sore throat
    - Chest pain
    - Difficulty breathing
    - Difficulty swallowing
- If the patient has any of the above symptoms, they should be screened for risk factors listed below

***Risk Factors***

- Residence in or travel to a country where an Ebola outbreak is occurring
  - West African Nations
    - Guinea
    - Liberia
    - Nigeria
    - Sierra Leone

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- Contact with a patient known to have or suspected to have Ebola
- Patient involvement with the handling or preparation of dead human bodies known to have or suspected to have Ebola
- Direct handling of bats or nonhuman primates from disease-endemic areas
- An incident would be deemed as “high-risk” if the patient has symptoms consistent with Ebola and has a positive risk factor(s) as identified above
- During routine calls when no “PPE Alert” has been issued:
  - Limit the number of providers and equipment exposed to patient(s) and immediate environment
  - Maintain appropriate distance from patient while conducting initial interview and history
  - Patients will be assessed for signs, symptoms, and risk factors
  - If a high-risk patient is identified by responders, personnel will immediately don all appropriate PPE prior to accessing the patient and immediate environment to include:
    - Double gloving
    - Fluid resistant or impermeable gowns or suits
    - Eye protection
    - Face shields
    - Respiratory protection (N95 or N100)
    - Shoe coverings
  - If a high-risk patient is identified by responders, notify the UFRO of that fact via MDC or telephone. The UFRO will notify PD, the area Battalion Chief, BC591, and the duty Health and Safety Officer of high-risk incidents. The duty Health and Safety Officer will communicate directly with and brief Prince William Health District contacts Dr. Ansher (571-238-9036) and Andrea Young (571-722-2244). The Health District after hours contact phone number is 866-531-3068 (use this number if no response from above numbers).
- High risk patient practices
  - Keep the patient separated from other persons as much as possible
  - Place a filter mask or NRB with Oxygen on the patient
  - Use caution when approaching a patient with Ebola. Illness can cause delirium, with erratic behavior (flailing, staggering) that can place EMS personnel at risk
  - If necessary have the patient remove contaminated articles of clothing and don a protective gown or suit
  - Use a dedicated, pre-determined transport unit, if available
  - Prepare the unit for transport:
    - Relocate unnecessary equipment to exterior compartments
    - Isolate the cab from the patient compartment, if possible
  - EMS personnel shall initiate “appropriate” care of the patient

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- Medical procedures of patients with elevated risk of Ebola should be limited to those immediately medically necessary.
  - As directed by the OMD, high-risk procedures such as IV therapy, intubation, suctioning of airway, and CPR shall be avoided.
  - Limit treatments during transport to noninvasive low risk
  - Blood sugar tests are only indicated for altered LOC and will not be performed in a moving ambulance
  - Orally Dissolving Tablets (ODT), intra-nasal (IN) or intra-muscular routes are preferred for any medications that can be delivered by these methods. ODT and IN are the preferred routes to minimize the presence of contaminated needles.
  - Administer Zofran for patients with nausea
  - EMS personnel shall make early notification to receiving facility to allow the facility to prepare. Personnel who have not been exposed to the patient will communicate with the receiving facility
  - “Plain language” will be used to confidentially communicate the patient’s high-risk status, specifying the signs/symptoms and risk factors
  - Personnel who have not been exposed to the patient will drive the transport unit to the hospital
  - Transport to hospital will be in non-emergency mode
  - Two providers will accompany the patient in the patient compartment during transport:
    - One provider will be tasked with patient care
    - The second provider will function in a “safety” role to verify that appropriate protective measures are observed at all times and to assist in care as needed
  - No unauthorized family members or civilians will be transported to the receiving facility
  - Patients or other civilians who may have been exposed to the patient will be discouraged from leaving the scene. Potentially exposed civilians should remain on scene until given further direction by the Virginia Dept of Health
  - Ventilate the patient compartment during transport
  - A support unit shall follow the transport unit to receiving facility to assist or provide immediate care to exposed EMS providers, if needed
  - Personnel will consider dispatching HazMat personnel to the receiving facility to assist in doffing and decontamination.
- If a high-risk patient refuses transport, confidentially notify the UFRO. The UFRO will notify PD, the area Battalion Chief, BC591 and the duty Health and Safety Officer of high-risk incidents. The duty Health and Safety Officer will communicate directly with and brief Prince William Health District contacts Dr. Ansher (571-238-9036) and Andrea Young (571-722-2244). The Health District after hours contact phone number is 866-531-3068 (use this number if no response from above numbers).
    - Patients or other civilians who may have been exposed to the patient will be discouraged from leaving the scene. Potentially exposed civilians should remain on scene until given

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further direction by the Virginia Department of Health

- Transfer of Care
  - Personnel will not enter the receiving facility
  - Patient transfer will take place outside the facility in a pre-designated location
  - Personnel will not enter the hospital until (1) they have doffed PPE and undergone decontamination and redress under the direction of appropriate Fire and Rescue personnel, and (2) approval is received

**Decontamination**

Decontamination of Providers

- Personnel will wear PPE until directed
- Personnel will properly doff PPE and place it in red biohazard bags for disposal as directed by Health and Safety
- Personnel will practice appropriate personal hygiene (shower and redress) prior to performing other duties

Decontamination of Transport

- BC591 and the duty Health and Safety Officer will conduct a risk assessment of decontamination procedures
- In cases when a “PPE alert” is not received, personnel should maintain good situational awareness and protect themselves from potential exposures while assessing patients for Ebola signs/symptoms and risk factors.
- Unit decontamination will not begin until direction is given, following the risk assessment
- Cleaning and disinfection of the transport unit will be performed under the supervision of the Health and Safety officer
- Personnel will don unused PPE for disinfection of equipment and transport unit. Additional protection may be required for grossly contaminated equipment or apparatus
- All non-impermeable items will be red bagged and disposed of as directed, (e.g. linens, pillows)
- The transporting unit will not be placed back into service until fully cleaned and disinfected
- All equipment used in the care of the patient will be thoroughly cleaned and disinfected with approved disinfectant(s) (Cetylcide II, available through Fire and Rescue Logistics). Disposable equipment will not be reused
- The transport unit will be cleaned and disinfected with approved disinfectant(s) (Cetylcide II). Cetylcide wet contact time shall be increased to 30 minutes
- Decon personnel will red bag and dispose of used cleaning materials as directed
- Decon personnel will properly doff, red bag, and dispose of PPE as directed
- Decon personnel will practice appropriate personal hygiene as directed, prior to returning to service

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The Ebola virus is a Category A infectious substance regulated by the U.S. Department of Transportation's (DOT) Hazardous Materials Regulations (HMR, 49 C.F.R., Parts 171-180). Any item transported for disposal that is contaminated or suspected of being contaminated with a Category A infectious substance must be packaged and transported in accordance with the HMR. This includes medical equipment, sharps, linens, and used health care products (such as soiled absorbent pads or dressings, kidney-shaped emesis pans, portable toilets, used Personal Protection Equipment [e.g., gowns, masks, gloves, goggles, face shields, respirators, booties] or byproducts of cleaning) contaminated or suspected of being contaminated with a Category A infectious substance.

**Exposure/Exposure Reporting and Employee Monitoring**

- Personnel with percutaneous or mucosal exposures to blood, body fluids, secretions, or excretions from a patient with suspected Ebola HF should:
  - Stop working and immediately wash the affected skin surfaces with soap and water. Mucous membranes (e.g., conjunctiva) should be irrigated with copious amounts of normal saline, water or eyewash solution
  - Immediately confidentially notify the UFRO through Communications. The UFRO will notify the area Battalion Chief, BC591 and the Duty Health and Safety Officer of the exposure. The duty Health and Safety Officer will communicate directly with and brief Prince William Health District contacts Dr. Ansher (571-238-9036) and Andrea Young (571-722-2244). The Health District after hours contact phone number is 866-531-3068 (use this number if no response from above numbers). The duty Health and Safety Officer will arrange for assessment and access to post exposure management.
  - Receive medical evaluation and follow-up care, as indicated
- Personnel who develop sudden onset of fever, intense weakness or muscle pains, vomiting, diarrhea, or any signs of hemorrhage after an exposure to a patient suspected of having or diagnosed with Ebola should:
  - Not report to work or should immediately stop working
  - Isolate themselves from contact with others
  - If medical attention is necessary, notify the medical provider/facility and advise of potential exposure prior to contact with medical personnel.
  - Immediately notify their supervisor and the duty Health and Safety Officer through the UFRO at 703-792-6500. The duty Health and Safety Officer will communicate directly with and brief Prince William Health District contacts Dr. Ansher (571-238-9036) and Andrea Young (571-722-2244). The Health District after hours contact phone number is 866-531-3068 (use this number if no response from above numbers). The Duty Health and Safety Officer will arrange for assessment and access to post exposure management.
- Personnel shall complete all appropriate injury/illness and exposure reports as indicated

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**Logistical and Training Considerations**

**Logistics**

- Review current PPE type and quantities
  - Gowns/splash protection- impervious
  - Eye Protection
  - Face Shields
  - N100 masks and cartridges
  - Shoe protection
  - Red bags
  - Disposal
  
- Review current cleaning/disinfection products
  - Cetylcide II
  - Spray Bottles
  - Towels-Paper
  - Mops/Mop heads
  - Playtex Gloves
  
- Order and distribute equipment and supplies as determined
- Review and determine need for specialized equipment (e.g. Iso-Pod, dedicated transport unit/team)
- Monitor staffing needs and levels
- Add additional response/transport units as needed

**Training**

- Communications
  - Train PSCC personnel on interrogation, dispatch, and notification procedures
  - Make and distribute Ebola Caller Interrogation flowchart, signs and symptoms, and risk details
  
- Operations
  - Ensure field providers are properly training in proper donning and doffing of Personal Protective Equipment (PPE)
    - Double gloving procedures
    - Gowns (fluid resistant or impermeable), suits (meeting ASTM F1670/1671)
    - Eye Protection
    - Face Shields
    - Respiratory protection (N95 or N100)
    - Shoe Coverings

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**References**

<http://www.cdc.gov/vhf/ebola/hcp/interim-guidance-emergency-medical-services-systems-911-public-safety-answering-points-management-patients-known-suspected-united-states.html>

<http://www.cdc.gov/vhf/ebola/pdf/ems-checklist-ebola-preparedness.pdf>

<http://www.cdc.gov/vhf/ebola/pdf/west-africa-outbreak-infographic.pdf>

<http://www.cdc.gov/vhf/ebola/hcp/case-definition.html>

<http://www.cdc.gov/vhf/ebola/pdf/evd-screening-criteria.pdf>

<https://www.cetylite.com/pdf/Cetylcide-II.pdf>

CDC is available 24/7 for consultation by calling the CDC Emergency Operations Center (EOC) at 770-488-7100 or via email at [eocreport@cdc.gov](mailto:eocreport@cdc.gov).

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