

SOUTH CAROLINA BOARD OF HEALTH AND ENVIRONMENTAL CONTROL

**SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL
CONTROL**

PUBLIC HEALTH ORDER

October 15, 2014

Background and Purpose for Public Health Order

Ebola is a highly infectious and deadly virus with a high mortality rate. As of this date, there are several confirmed cases in the United States, and more than one hundred persons in quarantine who are subject to daily monitoring following exposure to infected individuals.

The Board of Health and Environmental Control (Board) and the South Carolina Department of Health and Environmental Control (DHEC) deem it necessary to enhance the ability of DHEC to maintain open and active communications with essential individuals and facilities, to prevent the spread of Ebola, to avoid imminent peril to the public, and to promote early identification and prevent potential for an outbreak. The Board and DHEC find it necessary to issue this Public Health Order for the protection of the public's health and to identify and establish a defined network of emergency communications.

All individuals and entities listed in this Order must monitor and respond to notifications and requests from DHEC via the means described herein within 24 hours or the timeframe specified in the communication.

This Public Health Order is issued pursuant to SC Code Sections 44-1-80 and 44-1-140. Actions required for compliance are as follows:

I. Email Registration

On or before Monday, October 20, 2014, the following categories of individuals and entities must register with the Health Preparedness Network (Network) by sending an email to the address listed below that applies to you, *unless* you received this Order directly via email from DHEC, in which case you are already registered. This Network allows you to receive one-way communications of public health importance, including but not limited to information, guidance and instruction, from DHEC regarding the Ebola virus.

A. Email to: RESPONDER-join@lists.CIO.SC.GOV

Certified Emergency Medical Technicians

Licensed ambulance services

Licensed emergency medical responder agencies (non-transporting)

911 operators/dispatchers

911 Dispatch Centers

Each Fire Department and individual Fire Chiefs

B. Email to: PROVIDER-join@lists.CIO.SC.GOV

Licensed hospitals and institutional general infirmaries
Licensed facilities that treat individuals for psychoactive substance abuse or dependence
Licensed intermediate care facilities for persons with intellectual disability
Licensed nursing homes
Licensed home health agencies
Licensed hospice services and facilities
Licensed community residential care facilities
Licensed ambulatory surgical facilities
Licensed renal dialysis facilities
Licensed residential treatment facilities for children and adolescents
Licensed in-home care provider agencies
Licensed chiropractors
Licensed medical providers, including physicians, medical examiners, osteopaths, physician assistants, and respiratory care practitioners
All primary care physician offices, including but not limited to free clinics, FQHCs, Rural Health Clinics, pediatrician offices, internal medicine, general practitioners, and urgent care facilities
Licensed nurses, including RNs, LPNs, advanced practice nurses (CRNAs, APRNs)
Licensed pharmacists
Licensed pharmacies and pharmacy-located clinics
Licensed social workers
Licensed veterinarians
Certified athletic trainers
Registered and permitted infectious waste transporters
Licensed long-term health care administrators
Laboratories, including but not limited to independent and those located within health care facilities;

C. Email to: DECEASED-join@lists.CIO.SC.GOV

All persons performing embalming, cremation and funeral services, including but not limited to
cemeterians, funeralists, and morticians
Coroners and deputy coroners

D. Email to: SCHOOL-join@lists.CIO.SC.GOV

Private institutions of higher learning
Private school principals, headmasters, or other persons who operate private, independent, or parochial schools, and school nurses at each of these facilities

II. Designee Registration

In addition to the above registration, on or before October 20, 2014, the following facilities must also register on the DHEC website at www.SCDHEC.gov. Click on "Facility - Health Preparedness Network Registration" to update existing information or subscribe for the first time. This Order requires the designee's name, email address, phone number, facility name, and position at the facility. This category of registration allows DHEC to request and receive information related to Ebola preparedness.

Licensed hospitals and institutional general infirmaries
Licensed ambulance services
Licensed emergency medical responder agencies (non-transporting)
911 Dispatch Centers
All primary care physician offices, including but not limited to free clinics, FQHCs, Rural Health Clinics,
pediatrician offices, internal medicine, general practitioners, and urgent care facilities

Any questions related to required registration or requested information should be sent by email to DHEC
at Ebola@dhec.sc.gov.

Violation of a Public Health Order issued pursuant to SC Code Section 44-1-140 may result in a civil
penalty in accordance with SC Code Section 44-1-150.

AND IT IS SO ORDERED.



Allen Amsler, Chairman
SC Board of Health and Environmental Control

10/15/2014

Date



Catherine Templeton, Director
SC Department of Health and Environmental Control

10/15/2014

Date



Ebola Virus Disease (EVD) Screening

Emergency Department screening criteria for patient isolation/testing are likely to be:

1. Fever, headache, joint and muscle aches, weakness, fatigue, diarrhea, vomiting, stomach pain and lack of appetite, and in some cases bleeding.
- AND**
2. Travel to West Africa (Guinea, Liberia, Nigeria, Senegal, Sierra Leone or other countries where EVD transmission has been reported by WHO) within 21 days (3 weeks) of symptom onset.

If both criteria are met, then the patient should be moved to a private room with a bathroom, and STANDARD, CONTACT, and DROPLET precautions followed during further assessment.

IMMEDIATELY Report Person Under Investigation (PUI) for Ebola to:

- | | | |
|--|-----------------|-----------------|
| 1. Hospital Leadership: Enter Name | Enter Email | Enter Phone |
| 2. Local and State Public Health Authorities: Enter PHA Name | Enter PHA Email | Enter PHA Phone |
| 3. U.S. Centers for Disease Control and Prevention (CDC) by calling the CDC Emergency Operations Center (EOC) at 770-488-7100 or via email at eocreport@cdc.gov . | | |

Sources: <http://www.cdc.gov/vhif/ebola/hcp/case-definition.html>, <http://www.bt.cdc.gov/han/han00364.asp>,
<http://www.cdc.gov/vhif/ebola/hcp/infection-prevention-and-control-recommendations.html>



Ebola Virus Disease (EVD) Screening for EMS

EMS patient assessment criteria for isolation/hospital notification are likely to be:

1. Fever, headache, joint and muscle aches, weakness, fatigue, diarrhea, vomiting, stomach pain and lack of appetite, and in some cases bleeding.

AND

2. Travel to West Africa (Guinea, Liberia, Nigeria, Senegal, Sierra Leone or other countries where EVD transmission has been reported by WHO) within 21 days (3 weeks) of symptom onset.

If both criteria are met:

- A. The patient should be isolated and STANDARD, CONTACT, and DROPLET precautions followed during further assessment, treatment, and transport.
- B. IMMEDIATELY report suspected Ebola cases to receiving facility.

If patient is not transported (refusal, pronouncement, etc.):

- a. Inform Local and State Public Health Authorities: Enter PHA Name Enter PHA Email Enter PHA Phone
- b. Inform the U.S. Centers for Disease Control and Prevention (CDC), available 24/7 at 770-488-7100, or via the CDC Emergency Operations Center (EOC) or via email at eoctrack@cdc.gov.

Sources: <http://www.cdc.gov/vhfr/ebola/hcp/case-definition.html>, <http://www.bt.cdc.gov/han/han00364.asp>,
<http://www.cdc.gov/vhfr/ebola/hcp/infection-prevention-and-control-recommendations.html>



U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention

Checklist for Patients Being Evaluated for Ebola Virus Disease (EVD) in the United States

Upon arrival to clinical setting/triage

- ☐ Assess the patient for a fever (subjective or $\geq 100.4^{\circ}\text{F}$ / 38.0°C)
- ☐ Determine if the patient has symptoms compatible EVD such as headache, weakness, muscle pain, vomiting, diarrhea, abdominal pain or hemorrhage
- ☐ Assess if the patient has a potential exposure from traveling to a country with widespread Ebola transmission* or having contact with an Ebola patient in the 21 days before illness onset

Suspect Ebola if fever or compatible Ebola symptoms and an exposure are present

See next steps in this checklist and the Algorithm for Evaluation of the Returned Traveler for Ebola at http://www.cdc.gov/eid/content/bdbs/bdbs_algor.htm

Upon initial assessment

- ☐ Isolate patient in single room with a private bathroom and with the door to hallway closed
- ☐ Implement standard, contact, & droplet precautions
- ☐ Notify the hospital Infection Control Program at _____

- ☐ Report to the health department at _____

Conduct a risk assessment for:

High-risk exposures

- ☐ Percutaneous (e.g., needle stick) or mucous membrane exposure to blood or body fluids from an EVD patient
- ☐ Direct skin contact with skin, blood or body fluids from an EVD patient
- ☐ Processing blood or body fluids from an EVD patient without appropriate PPE
- ☐ Direct contact with a dead body in an Ebola-affected area without appropriate PPE

Low-risk exposures

- ☐ Household members of an EVD patient or others who had brief direct contact (e.g., shaking hands) with an EVD patient without appropriate PPE
- ☐ Healthcare personnel in facilities with EVD patients who have been in care areas of EVD patients without recommended PPE

Use of personal protective equipment (PPE)

- ☐ Use a buddy system to ensure that PPE is put on and removed safely

Before entering patient room, wear:

- ☐ Gown (fluid resistant or impermeable)
- ☐ Facemask
- ☐ Eye protection (goggles or face shield)
- ☐ Gloves

If likely to be exposed to blood or body fluids, additional PPE may include but isn't limited to:

- ☐ Double gloving
- ☐ Disposable shoe covers
- ☐ Leg coverings

Upon exiting patient room

- ☐ PPE should be carefully removed without contaminating one's eyes, mucous membranes, or clothing with potentially infectious materials
- ☐ Discard disposable PPE
- ☐ Re-useable PPE should be cleaned and disinfected per the manufacturer's reprocessing instructions
- ☐ Hand hygiene should be performed immediately after removal of PPE

During aerosol-generating procedures

- ☐ Limit number of personnel present
- ☐ Conduct in an airborne infection isolation room
- ☐ Don PPE as described above except use a NIOSH certified fit-tested N95 filtering facepiece respirator for respiratory protection or alternative (e.g., PAPR) instead of a facemask

Patient placement and care considerations

- ☐ Maintain log of all persons entering patient's room
- ☐ Use dedicated disposable medical equipment (if possible)
- ☐ Limit the use of needles and other sharps
- ☐ Limit phlebotomy and laboratory testing to those procedures essential for diagnostics and medical care
- ☐ Carefully dispose of all needles and sharps in puncture-proof sealed containers
- ☐ Avoid aerosol-generating procedures if possible
- ☐ Wear PPE (detailed in center box) during environmental cleaning and use an EPA-registered hospital disinfectant with a label claim for non-enveloped viruses**

Initial patient management

- ☐ Consult with health department about diagnostic EVD RT-PCR testing***
- ☐ Consider, test for, and treat (when appropriate) other possible infectious causes of symptoms (e.g., malaria, bacterial infections)
- ☐ Provide aggressive supportive care including aggressive IV fluid resuscitation if warranted
- ☐ Assess for electrolyte abnormalities and replete
- ☐ Evaluate for evidence of bleeding and assess hematologic and coagulation parameters
- ☐ Symptomatic management of fever, nausea, vomiting, diarrhea, and abdominal pain
- ☐ Consult health department regarding other treatment options

This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.

* See 2014 Ebola Outbreak in West Africa—Case Counts or http://www.cdc.gov/eid/content/bdbs/bdbs_outbreak.htm to determine if a country has widespread Ebola transmission

** See Interim Guidance for Environmental Infection Control in Hospitals for Ebola Virus or http://www.cdc.gov/eid/content/bdbs/bdbs_guidance.htm

*** See Interim Guidance for Specimen Collection, Transport, Testing, and Submission for Persons Under Investigation for Ebola Virus Disease in the United States or http://www.cdc.gov/eid/content/bdbs/bdbs_guidance.htm

Ebola Virus Disease (Ebola)

Algorithm for Evaluation of the Returned Traveler



FEVER (subjective or $\geq 100.4^{\circ}\text{F}$ or 38.0°C) or compatible Ebola symptoms* in a patient who has resided in or traveled to a country with wide-spread Ebola transmission** In the 21 days before illness onset

* headache, weakness, muscle pain, vomiting, diarrhea, abdominal pain, or hemorrhage

NO

Report asymptomatic patients with high- or low-risk exposures (see below) in the past 21 days to the health department

YES

1. Isolate patient in single room with a private bathroom and with the door to hallway closed
2. Implement standard, contact, and droplet precautions (gown, facemask, eye protection, and gloves)
3. Notify the hospital Infection Control Program and other appropriate staff
4. Evaluate for any risk exposures for Ebola
5. IMMEDIATELY report to the health department

HIGH-RISK EXPOSURE

Percutaneous (e.g., needle stick) or mucous membrane contact with blood or body fluids from an Ebola patient

OR

Direct skin contact with, or exposure to blood or body fluids of an Ebola patient

OR

Processing blood or body fluids from an Ebola patient without appropriate personal protective equipment (PPE) or biosafety precautions

OR

Direct contact with a dead body (including during funeral rites) in a country with wide-spread Ebola transmission** without appropriate PPE

Household members of an Ebola patient and others who had brief direct contact (e.g., shaking hands) with an Ebola patient without appropriate PPE

OR

Healthcare personnel in facilities with confirmed or probable Ebola patients who have been in the care area for a prolonged period of time while not wearing recommended PPE

- Severity of illness
- Laboratory findings (e.g., platelet counts)
- Alternative diagnoses

NO KNOWN EXPOSURE

Residence in or travel to a country with wide-spread Ebola transmission** without HIGH- or LOW-risk exposure

Ebola suspected

TESTING IS INDICATED

The health department will arrange specimen transport and testing at a Public Health Laboratory and CDC

The health department, in consultation with CDC, will provide guidance to the hospital on all aspects of patient care and management

Ebola not suspected

TESTING IS NOT INDICATED

If patient requires in-hospital management:

- Decisions regarding infection control precautions should be based on the patient's clinical situation and in consultation with hospital infection control and the health department
- If patient's symptoms progress or change, re-assess need for testing with the health department

If patient does not require in-hospital management:

- Alert the health department before discharge to arrange appropriate discharge instructions and to determine if the patient should self-monitor for illness
- Self-monitoring includes taking their temperature twice a day for 21 days after their last exposure to an Ebola patient



U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention

** CDC Website to check current countries with wide-spread transmission:
<http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/case-counts.html>

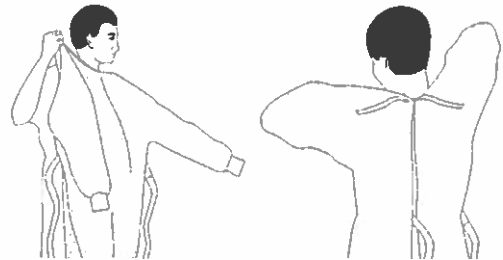
This algorithm is a tool to assist healthcare providers identify and triage patients who may have Ebola. The clinical criteria used in this algorithm (a single symptom consistent with Ebola) differ from the CDC case definition of a Person Under Investigation (PUI) for Ebola, which is more specific. Public health consultation alone does not imply that Ebola testing is necessary. More information on the PUI case definition: <http://www.cdc.gov/vhf/ebola/hcp/case-definition.html>

SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

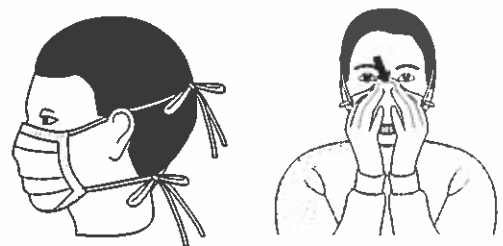
1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator



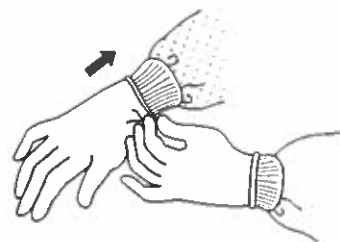
3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit



4. GLOVES

- Extend to cover wrist of isolation gown



USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene



HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE)

EXAMPLE 1

There are a variety of ways to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. Here is one example. **Remove all PPE before exiting the patient room except a respirator, if worn. Remove the respirator after leaving the patient room and closing the door. Remove PPE in the following sequence:**

1. GLOVES

- Outside of gloves are contaminated!
- If your hands get contaminated during glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Using a gloved hand, grasp the palm area of the other gloved hand and peel off first glove
- Hold removed glove in gloved hand
- Slide fingers of ungloved hand under remaining glove at wrist and peel off second glove over first glove
- Discard gloves in a waste container



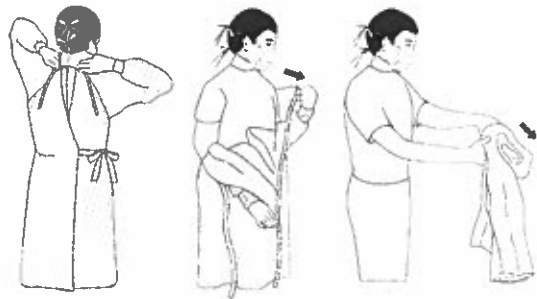
2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band or ear pieces
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container



3. GOWN

- Gown front and sleeves are contaminated!
- If your hands get contaminated during gown removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Unfasten gown ties, taking care that sleeves don't contact your body when reaching for ties
- Pull gown away from neck and shoulders, touching inside of gown only
- Turn gown inside out
- Fold or roll into a bundle and discard in a waste container

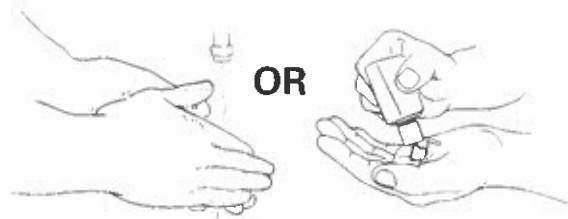


4. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container



5. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE



PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE



Ebola HVF Transmission

Spread through direct
contact with:

- Blood
 - **ANY** Body Fluids
 - Objects/surfaces contaminated with Ebola
 - Infected Animals
-
- No evidence that Ebola HVF is airborne



Ebola HVF Incubation

Symptoms can appear anywhere from 2-21 days following exposure to Ebola HVF

Average: 8 days following exposure

Virus cannot be spread during incubation—
symptoms must be present for transmission to occur

Ebola HVF Symptoms

Symptoms mimic many viruses-even the common flu, until it progresses severely.

- Fever (Greater than 100.4F)
- Severe Headaches
- Muscle Pain
- Weakness
- Diarrhea (Flu generally does not have this)
- Vomiting
- Abdominal Pain
- Unexplained bruising/hemorrhage (internal/external)

Ebola HVF: Screening

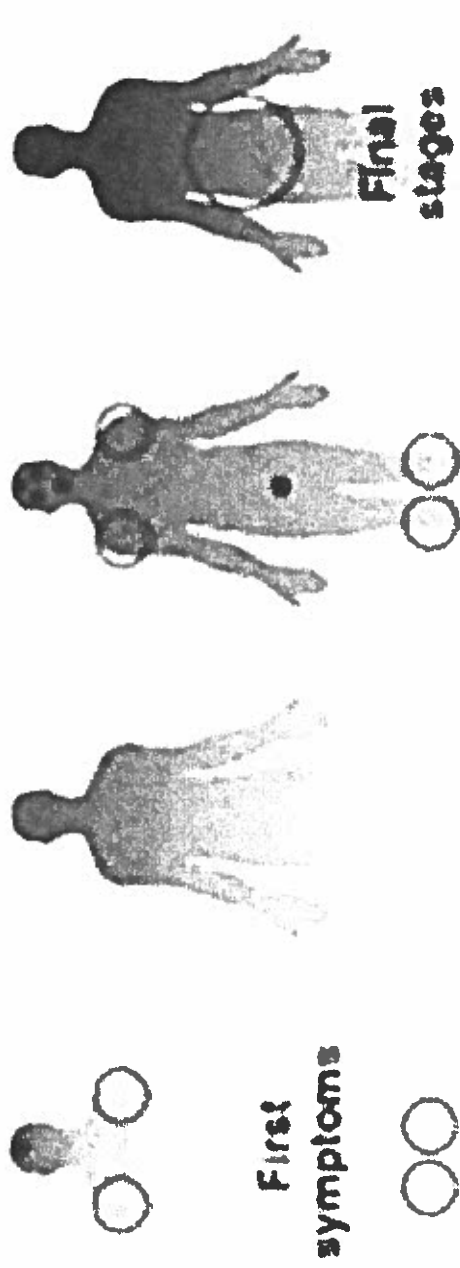
Any patient presenting with symptoms specific to Ebola-HVF should receive a travel screening.

ASK: Have you recently traveled to
Africa/Liberia/Guinea/Sierra
Leone/Congo/Nigeria in the last 3 weeks?

ASSESS: Temperature for +100.4F

Ebola HVF Pathway (Following Exposure)

Ebola virus' typical path through a human being



Day 7-9	Day 10	Day 11	Day 12
Headache, fatigue, fever, muscle soreness	Sudden high fever, vomiting blood, passive behavior	Bruising, brain damage, bleeding from nose, mouth, eyes, anus	Loss of consciousness, seizures, massive internal bleeding, death

© 2014 MCT

Ebola HVF: Precautions

If patient is positive, utilize full universal precautions

Place flu-mask on patient, if they can tolerate it

Put on PPE **in this order:**

- Gown (fluid-impervious, splash resistant)
- Mask
- Respirator (at least N-95)
- Goggles/Face shield
- Double gloved, inserting arms of gown in glove cuff
- Boot Covers or splash resistant leggings



Ebola HVF: Decontamination

Your personal protective equipment shall be doffed immediately including bed sheet upon transferring the patient to hospital bed. Secure in double biohazard bag/tie (perform in antechamber if at SFH-DT)

If the stretcher mattress is wet, and has cracks in it, it MUST be disposed. (double red biohazard bag)

If the stretcher mattress is dry, and has cracks in it, it MUST be disposed. (double red biohazard bag)

A dry, intact mattress can only be reused safely w/o risks of cross-contamination.

Ebola HVF: Decontamination

- Double-glove **AGAIN** before touching stretcher
- Re-Don full personal protective gear
- All stretcher surfaces to be cleaned/soaked with tackle disinfectant or bleach and allowed to sit undisturbed for **20** minutes
- All surfaces in ambulance touched same protocol
- Doff personal protective gear in red bag
- Wash hands **thoroughly** after PPE removal—at least 30 second wash
- Do **NOT** re-enter hospital with PPE on