



Regional Health & Medical Operations Center
Texas Department of State Health Services • San Antonio Metropolitan Health District • Southwest Texas Regional Advisory Council
City of San Antonio Office of Emergency Management • Bexar County Office of Emergency Management

RHMOC-SA: 014

EMS Field Operational Plan for EVD Alert Response

November 17, 2014

To date there have only been a limited number of confirmed cases of Ebola in the United States. Despite the limited number of cases we must still be prepared for the possibility of a patient with Ebola presenting in our area. EMS Field Operational Plan has been developed through discussion, cooperation and collaboration among the medical and public health leaders in San Antonio, Bexar County, and our region. Leaders from the SAFD Administration, STRAC, San Antonio Metro Health, Texas Department of State Health Services (DSHS Region 8), regional EMS Medical Directors and EMS chiefs/directors, San Antonio and Bexar County Emergency Management, Bexar County Medical Examiner, University Health System, Methodist Healthcare System, and the SAFD Office of the Medical Director have been meeting and collaborating on recommended actions for EMS agencies in our area to mitigate a possible responder exposure to Ebola.

EVD ALERT:

To be consistent with the other regional ALERT response, the RHMOC-SA will refer to Ebola Virus Disease responses as **EVD ALERT**.

Utilizing the **EVD ALERT** term allows PSAP's, Fire/EMS personnel and hospital staff to communicate

The leadership group recognizes that this is a fluid situation and acknowledges that this operational plan will need to be continuously re-evaluated and updated if new or different information becomes available about the virus or the situation. Please check the 'Ebola Virus Info' page on www.strac.org for the latest information.

- *Information in this document is based on current knowledge, science and recommendations from the CDC as of **11/17/2014**.*

Facts about Ebola:

- 1) Ebola is only infectious if the patient is showing symptoms.
- 2) Ebola is only spread through direct contact with bodily fluids - blood, sweat, saliva, urine, feces, vomit, semen, etc.
- 3) The incubation period for symptoms / infectiousness in a patient with a true exposure is usually 8-10 days after exposure, but can range from 2 - 21 days.
- 4) Patients who have come into direct contact with Ebola patients *or* bats/primates from West Africa, *or* have been in West Africa (Guinea, Sierra Leone, Liberia, or Mali) in the previous 21 days prior to symptoms are potential patients.

Symptoms of Ebola:

- 1) Subjective Fever or Measured Fever $\geq 100.4^{\circ}\text{F}$ (38°C)
(To prevent missed potential cases due to patients taking antipyretic medication, ***any fever will be considered a positive finding***)
- 2) Headache
- 3) Myalgias / Muscle Aches / Body Aches
- 4) Abdominal Pain
- 5) Nausea / Vomiting
- 6) Diarrhea
- 7) Unexplained bleeding or bruising

Dispatch Questions and Protocols:

Screening of 911 calls is imperative to recognizing potential Ebola patients, and protecting all responders who may care for those patients.

- 1) ***All dispatchers*** should ask all callers with any medical complaint the following questions:
 - a. Do you or anyone in the house have:
 - Fever
 - Headache
 - Muscle aches or body aches
 - Abdominal pain
 - Nausea / Vomiting
 - Diarrhea
 - Unexplained bleeding or bruising
 - b. If “yes” to any of the symptoms, ask “Have you or anyone in the house been exposed to a patient with Ebola or visited Guinea, Liberia, Sierra Leone, or Mali in the past 21 days?”
- 2) If the answers to both questions are “Yes”, dispatchers should notify all responding personnel (EMS, fire, police) to **“Use *EVD ALERT precautions*”**.
- 3) If the answers to both questions are “Yes”, the following people should be notified: the EMS Director (and supervisor if appropriate), EMS Medical Director and MEDCOM (210) 233-5815.

Actions ALL responding personnel should take to “Use EVD Precautions”:

- 1) Immediately don (see Figure 2) the following personal protective equipment (PPE) for *droplet precautions* (See Figure 1):
 - a. 2 Pairs of Gloves
 - b. Eye protection and face shield that covers the entire face
 - c. Impermeable full body covering garment with sealable cover flaps over seams
 - d. Hood
 - e. N95 Respirator
 - f. Footwear that incorporates viral-penetrating barrier layer
- 2) Upon entering the scene, identify the patient from a minimum of 3 feet (screen from a distance) and move any other persons away from the patient.
- 3) If possible, one Fire or EMS crew member should be designated to record and report all persons on the scene to public health investigators when public health is not able to meet responders on scene. All persons on the scene should be screened for symptoms and reported to public health officials through your chain of command.
- 4) Only the minimal necessary number of responders should have contact with the patient.
- 5) Unless the patient is at risk for aspiration or unable to tolerate it, place a surgical mask on the patient as soon as possible. As able, based on patient condition, consider other efforts to minimize exposure to the patient’s body fluids (yellow blanket wrap, or Tyvek) if compliant.
- 6) If a patient requires aerosolization procedures such as CPR, intubation, suction, nebulization, etc.

OR

If the patient has significant vomiting, bleeding, diarrhea, or large amounts of bodily fluid present, additional PPE should be utilized including, but not limited to:

- a. Full face-piece respirator or hood / helmet-based PAPR
 - b. Splash flaps on sleeves for covering the end of outer gloves or comparable equipment
 - c. Splash flaps on legs for covering the top of footwear or comparable equipment
 - d. Sock-like bootie extension of the coverall legs or comparable equipment
- 7) Follow appropriate doffing procedures for removing PPE after care has been rendered or if PPE becomes compromised (See Figure 3).

- 8) If not already done, alert your supervisor as soon as possible so that they can report up the chain of command and to public health authorities.

Actions all transporting personnel should take:

- 1) Transport any suspected Ebola patient to University Hospital (primary) or Methodist-TexSan (secondary), if the EMS agency regularly transports to SA. If the EMS agency does not regularly transport to SA, transport to closest appropriate facility.
- 2) Notify the hospital as soon as possible (ideally while on scene) about the transport of a possible Ebola patient; EMS agency should declare “EVD ALERT.”
- 3) Upon arrival, wait to off load the patient until the emergency department confirms they are ready to receive.
- 4) EMS personnel should coordinate with their EMS officer and hospital personnel for the appropriate location to decon, doff PPE, and shower/change if needed.
- 5) Make sure to place all disposable equipment, linens, and PPE in double- bagged red biohazard bags, placed in rigid drum (level-A infectious disease drum) and leave with the receiving hospital in the non-trauma ambulance entrance.
- 6) Notify your supervisor of the need to decontaminate your vehicle. Follow your department’s process for decontamination.

FIGURE 1

Definitions of PPE (adapted from CDC guidelines)

(Courtesy of, and used with permission from, UTSW / BioTel EMS System)

The basic PPE components and representative examples, for each isolation category:

<u>PPE Component</u>	<u>Isolation Precautions Category</u>			
	Standard	Contact	Droplet	Airborne
GLOVES: Disposable, Non-Latex	+	+	+	+
GOWN/APRON: Fluid Resistant or Impermeable	As needed	+	+	+
EYE PROTECTION:				
• Face Shield with Eye Shield, OR	As needed	+	+	+
• Wraparound Goggles	As needed	+	+	+
FACE PROTECTION:				
• Face Shield, or	As needed	+	+	+
• Surgical Mask	As needed	+	+	+
RESPIRATORY PROTECTION:				
• Standard Surgical Mask	As needed	+	+	+
• N95 or N100 Respirator ("TB mask")	--	--	+	+
• Air-Purifying Respirator ("APR")	--	--	--	+
Examples of Diseases – Known or Suspected – With Person-to-Person Transmission, For Which This Level of PPE & Isolation Is Required	ALL Patient Contacts	Ebola & most viruses, Diarrhea, Generalized rash, Influenza, Plague, HIV, Hepatitis	Ebola & most viruses, Influenza, Pertussis, Plague	Measles, TB, Chickenpox, Smallpox, Disseminated Herpes

FIGURE 2

Proper PPE Donning Procedures (from CDC guidelines)

While the CDC is currently updating their PPE Donning Poster, please consider this video from Emory Healthcare:

<https://www.youtube.com/watch?v=F2i0P-8fybQ&feature=youtu.be>



FIGURE 3

Proper PPE Doffing (removal) Procedures (from CDC guidelines)

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<https://www.youtube.com/watch?v=mjC3l2ilTmc&feature=youtu.be>

