# VIRAL HEMORRHAGIC FEVER EMERGENCY INFORMATION: TRANSMISSION, PREVENTION, & INFECTION CONTROL

## WHAT IS VIRAL HEMORRHAGIC FEVER?
- VHF's are caused by viruses of four distinct families – arenaviruses, filoviruses, bunyaviruses, and flaviruses
- Examples of VHF illness are Ebola, Marburg, Lassa, & Crimean-Congo fevers
- VHF is uncommon in U.S. and one case should be considered a marker for a possible bioterrorist event
- Specific symptoms vary by type of VHF but initial symptoms include marked fever, fatigue, dizziness, muscle aches, loss of strength, exhaustion
- Latter symptoms include maculopapular rash prominent on trunk, nervous system malfunction, renal failure, and bleeding under the skin and from body orifices

## TRANSMISSION & INCUBATION
- VHF viruses are transmitted through contact with urine, fecal matter, saliva, or other body excretions from infected rodents or through contact with infected animals or arthropod vectors
- Person to person spread through droplet transmission, contact with body fluids or contaminated objects
- Risk for person-to-person transmission is highest during latter stages of illness that are characterized by vomiting, diarrhea, shock and hemorrhage
- Incubation period varies depending on causative agent: few days to 3 weeks
- In event of death, corpse should be wrapped in sealed, leak-proof material and cremated or buried promptly in a sealed casket

## HOW LONG CAN VIRUS EXIST IN THE ENVIRONMENT?
- VHF viruses naturally reside in an animal reservoir host or arthropod vector

## DECONTAMINATION
- Yes, if recent aerosol exposure is suspected
- Patient/Companion remove clothes and place in red Biohazard Bag

## POST-EXPOSURE PROPHYLAXIS / IMMUNIZATION
- With the exception of yellow fever and Argentine hemorrhagic fever, for which vaccines have been developed, no vaccines exist that can protect against these diseases

## PRECAUTIONS FOR STAFF WITHOUT PATIENT CONTACT
- No special precautions or prophylaxis are recommended for staff who have no contact with patients, their immediate environment, or materials and equipment associated with their care

## PRECAUTIONS FOR STAFF WITH PATIENT CONTACT
- Airborne precautions if aerosolized infectious secretions may be generated
- N-95 or PAPR if patient has prominent cough, vomiting, diarrhea, or hemorrhage; otherwise surgical mask with goggles or face shield is acceptable
- Gloves
- Long-sleeved gown
- HCW leaves gown, gloves, & mask in red biohazard bag
- Hand-washing or alcohol gel

## PATIENT PRECAUTIONS
- Private room; cohort patients with similar symptoms as needed
- Airborne precautions if aerosolize infectious secretions may be generated;
- Negative air pressure room if patient has prominent cough, vomiting, diarrhea, or hemorrhage
- Do Not Send VHF diagnostic specimens to UCSF Labs
<table>
<thead>
<tr>
<th>ENVIRONMENTAL PRECAUTIONS</th>
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<tbody>
<tr>
<td>Follow routine housekeeping cleaning procedure; preferred germicide agent is 0.5% hypochlorite</td>
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<tr>
<td>Terminal cleaning wearing long-sleeved gown, gloves</td>
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<td>Surgical mask &amp; goggles or face shield</td>
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<td>Room door closed</td>
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<td>Biohazard waste disposal for linens, disposable items, including cleaning supplies &amp; solutions</td>
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<td>Dedicate equipment; sterilize/high level disinfect non-disposable items/equipment</td>
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<td>Disinfect non-disposable items</td>
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