

Special Pathogens and Emergency Department Response

Patient Management
During Infectious Disease
Outbreaks and Disasters



Special pathogens (SPs) are infections that are both contagious and dangerous to emergency department (ED) personnel, including **novel influenza strains (e.g., H5N1), viral hemorrhagic fevers (e.g., Ebola virus disease/ viral hemorrhagic fever [EVD/VHF]), smallpox, and newly emerging infections.**

Early recognition of patients who may be infected with an SP can help healthcare professionals protect themselves while caring for these patients.

Scan the QR code to find detailed information from the National Emerging Special Pathogens Training and Education Center for EDs.



Dispatch and Triage



- Screen patients for exposures within the past **21 days (sick contacts, international travel)**, especially during known outbreaks.
- Look for evidence of communicable disease (**fever, rash, cough, gastrointestinal symptoms**).
- Patients with a suspected SP should be isolated from other patients and have a **surgical mask placed over the face or oxygen delivery device**, if tolerated and not intubated.
- **Public health notification** of a patient with a suspected SP should occur promptly via the hospital's incident command system or other formal mechanism.



Patient Care

- Screen for exposures to **outbreak areas or sick persons within the past 21 days.**
- If not already done, **notify ED manager and infection prevention** promptly for patients with a suspected SP.
- **Point-of-care ultrasound** can reduce exposure for radiology staff.
- **Videolaryngoscopy** is preferred for intubation.
- Ensure that there is a **surgical mask on the patient** (over the oxygen delivery device, if tolerated).
- Rooms and patient care items such as stethoscopes and blood pressure cuffs must be **decontaminated** after use.
- Consider early **transfer to a dedicated receiving or treatment center** for a patient with a suspected SP: <https://netec.org/about-netec/partners-regional-contacts>

Personal Protective Equipment

- Multiple types exist for different SPs.
- Use **checklists** to ensure safety (especially for EVD/VHF).
- **Understand and drill** in different forms of PPE to ensure your own safety and minimize delays in care.
- Avoid direct contact until **proper PPE** is donned.
- **Hand hygiene with soap and water** is preferred for many SPs, especially if gloves are visibly soiled.
- **Doffing for suspected EVD/VHF is a high-risk activity** and must be done in a dedicated PPE removal area.
- Items marked below with an asterisk (*) may be appropriate in some circumstances but are never wrong to use if uncertain.

Level of precaution	Components		Diseases
Standard	<ul style="list-style-type: none"> • Gloves * Eye protection * Surgical mask 		<ul style="list-style-type: none"> • All patient contact involving body fluids or non-intact skin
Contact	<ul style="list-style-type: none"> • Gloves • Impermeable gown * Eye protection * Surgical mask 		<ul style="list-style-type: none"> • Infectious diarrhea • Draining wounds • Scabies and lice • RSV
Droplet	<ul style="list-style-type: none"> • Surgical mask • Eye protection • Gloves * N95 (optional) 		<ul style="list-style-type: none"> • Meningitis • Most respiratory infections (viruses, pneumonias)
Airborne	<ul style="list-style-type: none"> • N95 or PAPR • Eye protection • Gloves 		<ul style="list-style-type: none"> • Tuberculosis • Chickenpox • Measles
Special respiratory	<ul style="list-style-type: none"> • N95 or PAPR • Impermeable gown • Eye protection • Gloves 		<ul style="list-style-type: none"> • COVID-19 • Novel influenza, e.g., H5N1 • MERS • Mpox • Smallpox
EVD/VHF	<ul style="list-style-type: none"> • N95 or PAPR • Impermeable gown • Eye protection (face shield) • Double gloves • Shoe coverings 		<ul style="list-style-type: none"> • VHF, e.g., Ebola, Marburg