

Special Pathogens and EMS Response

Patient Management During Infectious Disease Outbreaks and Disasters



Special pathogens (SPs) are infections that are both contagious and dangerous to EMS 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 **Administration for Strategic Preparedness & Response EMS Playbook** for Infectious Diseases.



Dispatch

- Screen for exposures within the past **21 days** (sick contacts, international travel), especially during known outbreaks.
- **Relay information to first responders** so that they can prepare themselves and their equipment.
- Recommend **transport to an appropriate facility** equipped to care for a patient with a suspected SP.



Response

- EMS responders should be vigilant for **travel history** and evidence of communicable disease (**fever, rash, cough, gastrointestinal symptoms**).
- Avoid direct contact until **proper PPE** is donned.
- Some patients, such as those with suspected hemorrhagic fevers, may require **specialized vehicles** for transport.



Patient Care

- Place a **surgical mask on the patient** (over the oxygen delivery device, if tolerated).
- Vehicles and patient care items such as stethoscopes and blood pressure cuffs must be **decontaminated** after use.
- **Hand hygiene with soap and water** is preferred for many SPs, especially if gloves are visibly soiled.

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.
- **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