

Biological Agents Information Sheet

Agent	Incubation	Symptoms	Transmission	1 st Responder Protection	Environmental Cleaning/Disinfection
Inhalational Anthrax (<i>Bacillus Anthracis</i>) Bacteria	Usually <1 week; Up to 2 months	Initial: Low-grade fever, nonproductive cough, malaise, fatigue, myalgias, profound sweats, chest discomfort (upper respiratory tract symptoms are rare). Subsequent (1 to 5 days after onset of initial symptoms): may be preceded by 1-3 days of improvement; abrupt onset of high fever and severe respiratory distress (dyspnea, stridor, cyanosis); shock, death within 24-36 hours.	Not person-to-person; inhalation of spores	Standard precautions**	Clean soiled environmental surfaces with soap and water; Disinfect with bleach solution: one part household bleach plus 9 parts water
Botulism (<i>Clostridium Botulinum toxin</i>) Bacterial toxin	12 to 36 hours	Double vision, drooping eyelids, slurred speech, difficulty swallowing, dry mouth, muscle weakness that always descends through the body: first shoulders, then upper arms, lower arms, thighs, calves, etc. Paralysis of breathing muscles can cause a person to stop breathing and die, unless assistance with breathing (mechanical ventilation) is provided.	Not person-to-person; ingestion of toxin	Standard precautions**	Clean soiled environmental surfaces with soap and water.
Flu (<i>Influenza</i>) Virus	24 to 72 hours	Fever, headache, fatigue, cough, sore throat, runny or stuffy nose, body aches, diarrhea and vomiting (more common in children)	Person-to-person via respiratory droplets	Standard precautions**; droplet precautions if patient is coughing**	Clean soiled environmental surfaces with soap and water; use 0.5% hypochlorite solution (one part household bleach to 10 parts water) for disinfection.
Plague (<i>Yersinia Pestis</i>) Bacteria	1 to 7 days	Pneumonic: fever with cough and dyspnea; sometimes with production of bloody, watery, or purulent sputum; may have nausea, vomiting, abdominal pain, and diarrhea.	Person-to-person via respiratory droplets	Standard precautions**; droplet precautions if patient is coughing**	Clean soiled environmental surfaces with soap and water; use 0.5% hypochlorite solution (one part household bleach to 10 parts water) for disinfection.
SARS (<i>SARS-associated coronavirus</i>) Virus	2 to 14 days (typically 2 to 7 days)	High fever, headache, an overall feeling of discomfort, and body aches. May have mild respiratory symptoms at outset. About 10-20% have diarrhea. After 2-7 days, dry cough may develop. Most develop pneumonia.	Person-to-person via respiratory droplets	Standard precautions (with eye protection to prevent droplet exposure)** plus contact and airborne precautions**	Clean soiled environmental surfaces with soap and water; use 0.5% hypochlorite solution (one part household bleach to 10 parts water) for disinfection.
Smallpox (<i>Variola Major</i>) Virus	From 7 to 19 days	Sudden onset with fever, malaise, headache, prostration, severe backache and occasional abdominal pain and vomiting; two to four days later, fever falls and a deep-seated rash forms first on face and extremities and then on trunk.	Person-to-person via aerosolized droplets or via aerosol cloud	Use standard** and airborne precautions** (N 95 mask)	Clean soiled environmental surfaces with soap and water; use 0.5% hypochlorite solution (one part household bleach to 10 parts water) for disinfection.
Tularemia (<i>Francisella Tularensis</i>) Bacteria	1 to 14 days, usually 3 to 5 days	Sudden fever, chills, headache, muscle aches, joint pain, dry cough, progressive weakness, and pneumonia (chest pain and bloody spit, difficulty breathing, respiratory failure).	Not person-to-person; transmitted via direct contact or inhalation of infective materials	Standard precautions**	Clean soiled environmental surfaces with soap and water; use 0.5% hypochlorite solution (one part household bleach to 10 parts water) for disinfection.
Viral hemorrhagic fevers (e.g., Ebola, Marburg, etc.)	2 days to 3 weeks	Marked fever, fatigue, dizziness, muscle aches, loss of strength, exhaustion. Severe cases often show signs of bleeding under the skin, internal organs, or body orifices like the mouth, eyes, or ears, shock, nervous system malfunction, coma, delirium, seizures; some viral hemorrhagic fevers can cause renal (kidney) failure.	Person-to-person	Standard precautions and airborne precautions**	Clean soiled environmental surfaces with soap and water; use 0.5% hypochlorite solution (one part household bleach to 10 parts water) for disinfection.

** For explanation of standard, droplet, and airborne precautions, please see back of this sheet.



Marion County Health Department
3180 Center St. NE
Salem, OR 97301

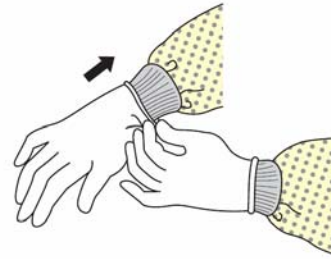
Report event immediately to Marion County

Health Department:

(503) 588-5621

Standard Precautions is the “standard” practice of treating the blood, body fluids, and other wet substances from all other persons as potentially infectious. Engineering and work practice controls and the use of personal protective equipment are used to help maintain Standard Precautions at work. Examples of Standard Precautions at work include:

- ❖ Wearing gloves when touching blood or other potentially infectious materials (OPIM);



- ❖ Wearing a mask, eye protection and gown when anticipating splashes or splatters of blood or OPIM;



- ❖ Washing hands after contact with blood or OPIM, even if gloves are worn.



Droplet Precautions: in addition to standard precautions, droplet precautions include wearing a mask if working within three feet of the patient.

Contact Precautions: in addition to standard precautions, contact precautions include wearing a clean, non-sterile gown if you anticipate that your clothing will have substantial contact with the patient, possibly contaminated environmental surfaces, or the patient’s bodily fluids. Avoid sharing equipment between patients.

Airborne Precautions: in addition to standard precautions, airborne precautions include wearing respiratory protection (N95 respirator) when working with the patient.