Boise State University Animal Care Occupational Health and Safety Program

This Guidance is provided to Boise State University field personnel that may come into contact with small mammals and/or birds that may carry fleas that are carriers of the plague (Pestis).

Plague Fact Sheet

Infectious agent: *Yersinia pestis*, the plague bacillus

Prevention:

- Wear gloves and long sleeve shirts if you are handling potentially infected animals to prevent contact between your skin and the plague bacteria.

- Use repellent if you think you could be exposed to rodent fleas during activities such as small mammal/bird trapping, capture, and handling, camping, hiking, or working outdoors. Products containing DEET can be applied to the skin as well as clothing and products containing permethrin can be applied to clothing (always follow instructions on the label).

Symptoms

*By Mayo Clinic staff*

Plague is divided into three main types — bubonic, septicemic and pneumonic — depending on which part of your body is involved. Signs and symptoms vary depending on the type of plague.

**Bubonic plague**

Bubonic plague is the most common variety of the disease. It's named after the buboes — swollen lymph nodes — which typically develop within a week after an infected flea bites you. Buboes may be:

- Located in the groin, armpit or neck
- About the size of a chicken egg
- Tender and warm to the touch

Other signs and symptoms may include:

- Sudden onset of fever and chills
- Headache
- Fatigue or malaise
- Muscle aches
**Septicemic plague**
Septicemic plague occurs when plague bacteria multiply in your bloodstream. Signs and symptoms include:

- Fever and chills
- Abdominal pain, diarrhea and vomiting
- Bleeding from your mouth, nose or rectum, or under your skin
- Shock
- Blackening and death of tissue (gangrene) in your extremities, most commonly your fingers, toes and nose

**Pneumonic plague**
Pneumonic plague affects the lungs. It's the least common variety of plague but the most dangerous, because it can be spread from person to person via cough droplets. Signs and symptoms can begin within a few hours after infection, and may include:

- Cough, with bloody sputum
- Difficulty breathing
- High fever
- Nausea and vomiting
- Weakness

Pneumonic plague progresses rapidly and may cause respiratory failure and shock within two days of infection. If antibiotic treatment isn't initiated within a day after signs and symptoms first appear, the infection is likely to be fatal.

**When to see a doctor**
Seek **immediate** medical attention if you begin to feel ill and have been in an area where plague has been known to occur or if you have handled wild animals that may carry infected fleas. Be sure to inform your provider of possible exposure to plague or other zoonoses. St. Luke’s Occupational Health Services, Boise State University’s Workers Compensation preferred provider, has been notified of potential plague risks to field personnel, and they are located at:

703 Americana Boulevard #130
Boise, ID 83702
(208) 706-7500
http://www.stlukesonline.org/clinic/occupational_health/boise/

Boise State University Risk Management Workers Compensation webpage:
http://rmi.boisestate.edu/workers-compensation/

Students that are receiving course credit for field work are not eligible for Workers Compensation coverage. Options for care include the University Health Services or your private medical provider. University Health Services can provide medical attention for students with
known or suspected cases of the plague, and is located on campus. University Health Services accepts the Student Health Insurance Plan (SHIP), most other insurance plans, and has payment options available for students without insurance. Again, be sure to inform your provider of possible exposure to plague or other diseases carried by animals.

University Health Services location and contact information:

**Location:** 1529 Belmont Street, Boise, Idaho (Located directly behind the Recreation Center, in the Norco Building)

**Medical Services** phone: (208) 426-1459

[http://healthservices.boisestate.edu/](http://healthservices.boisestate.edu/)

**Supervisor Notification:**
Personnel must notify their supervisor of any injury, near miss, or possible exposure.

Note: All incidents that occur in the lab or in the field need to be reported. Please use the attached link [Report an Incident](http://healthservices.boisestate.edu/) to notify campus personnel of incidents as they occur. This link is also available on the following websites: [IACUC](http://www.iacuc.boisestate.edu/), EH&S, Risk Management, Security, and Emergency Management. Please notify your supervisor of any near miss, injury, or incident.

**Additional Information:**

CDC Plague Fact Sheet:

CDC Plague website: [http://www.cdc.gov/plague/](http://www.cdc.gov/plague/)