

Melioidosis / Whitmore's Disease

Melioidosis, also called Whitmore's Disease, is an infectious disease that can infect humans or animals.



Learn more about this disease below!

Transmission

People can get melioidosis through direct contact with contaminated soil and water.

Humans and animals are believed to acquire Melioidosis through the **inhalation of contaminated dust or water droplets**, ingestion of **contaminated water**, ingestion of **soil-contaminated food**, or other contact with **contaminated soil**.

Tropical freshwater fish have also been identified as a possible risk for infection.

Many animal species are susceptible to melioidosis, including sheep, goats, swine (e.g. pigs, hogs, boars), horses, cats, dogs, and cattle.



Treatment

Various antimicrobial therapies are used to treat melioidosis. Antimicrobial therapy can be administered through an intravenous course or through an oral course.

Risk of Exposure

Southeast Asia and northern Australia are the areas in which Melioidosis is primarily found. In the United States, the bacteria, *Burkholderia pseudomalii*, has been identified in Mississippi, Puerto Rico, and the U.S. Virgin Islands. Most cases are identified in travelers and immigrants coming from tropical and subtropical regions.

The greatest number of melioidosis cases worldwide are reported in Malaysia, northern Australia, Singapore, and Thailand. Cases are also frequently reported in Brazil, the British Virgin Islands, Cambodia, Guyana, India, Indonesia, Hong Kong, Laos, Mexico, parts of Africa and the Middle East, Panama, Peru, Puerto Rico, Sri Lanka, and Vietnam.

Signs and Symptoms

Melioidosis has a wide range of signs and symptoms and is sometimes mistaken for other diseases, including tuberculosis and pneumonia.

Localized Infection:

- Localized pain or swelling
- Fever
- Ulceration
- Abscess

Pulmonary Infection:

- Cough
- Chest pain
- High Fever
- Headache
- Anorexia

Bloodstream Infection:

- Fever
- Headache
- Respiratory distress
- Abdominal discomfort
- Joint pain
- Disorientation

Disseminated Infection:

- Fever
- Weight loss
- Stomach or chest pain
- Muscle or joint pain
- Headache
- Central nervous system brain infection
- Seizures

For most people, the disease occurs 2-4 weeks after exposure. In some cases, the disease can occur many years after exposure, as seen in war Veterans.

Underlying conditions, such as diabetes, cancer, or COPD, can increase the risk of disease.

Prevention

Contact with contaminated soil or water can put people at risk for melioidosis. People travelling to areas where melioidosis is endemic can minimize their risk of exposure:

- Persons with open skin wounds and those with diabetes or chronic renal disease should avoid contact with soil and standing water.
- Persons who perform agricultural work should wear boots to prevent infection through the feet and lower legs.
- Health care workers can use standard precautions when treating patients with melioidosis.

Additional Resources

CDC: About Melioidosis, <https://www.cdc.gov/melioidosis/about/index.html>
MTDPHHS: Communicable Disease Reporting in Montana, https://dphhs.mt.gov/assets/publichealth/CDEpi/CDCPBResources/ReportableDiseaseList_July2024_DPHHS.pdf

