

What is melioidosis?

Melioidosis, also known as Whitmore's disease, is an uncommon bacterial infection caused by *Burkholderia pseudomallei*. The disease affects humans and animals. Individuals acquire the bacteria through direct contact with contaminated soil and surface waters.

Who gets melioidosis?

Melioidosis is a rare disease in the United States, but it is more common in tropical or subtropical areas of the world, including Southeast Asia and Australia. People who get melioidosis include agricultural workers, military personnel, travelers to areas where the disease is common, construction workers, and people who have contact with contaminated soil or water. Individuals with underlying diseases, such as diabetes mellitus, kidney or liver disease, chronic lung disease, thalassemia (a form of anemia), cancer or another immune-compromising condition, are at higher risk for developing the infection.

How is melioidosis spread?

The bacteria that cause melioidosis usually enter the body through inhalation of soil dust or water droplets, contact with contaminated soil through breaks in the skin, or by ingestion of contaminated water. Person-to-person transmission is very rare, but can occur through contact with blood or body fluids of an infected person. Laboratory-acquired infections are also rare, but can occur, especially if procedures produce aerosols.

What are the symptoms of melioidosis?

The bacteria can infect the skin or lungs or can spread throughout the body. The symptoms that a person might develop depend on the location of infection. Some people might not develop any symptoms. Localized infections, such as skin wounds, are characterized by pain or swelling at a particular site, fever, ulceration, or abscess. Symptoms of lung infection include cough, chest pain, fever, headache, or decreased appetite. If the bacteria enter the blood, symptoms include fever, headache, respiratory difficulties, abdominal pain or discomfort, joint pain, or disorientation. If the bacteria spread throughout the body (disseminated infection), symptoms include fever, weight loss, stomach or chest pain, muscle or joint pain, headache, and seizures.

How soon after exposure do symptoms appear?

The time between exposure and development of signs and symptoms varies. Usually, symptoms appear 2-4 weeks after exposure, but can range from one day to many years after exposure.

How is melioidosis diagnosed?

Melioidosis is diagnosed by identifying the bacteria in patient samples (e.g., blood, urine, skin lesions, or throat swab) or identifying increases in antibodies in the blood.

What is the treatment for melioidosis?

Melioidosis can be treated with long courses of antibiotics. Relapses can occur in some patients, especially those who do not complete a full course of the recommended therapy.

How can melioidosis be prevented?

People with underlying conditions, including diabetes mellitus and traumatic wounds, should avoid exposure to soil or standing water in areas where the disease is common. Agricultural workers in these areas should wear boots and gloves. Healthcare workers caring for patients with melioidosis should use standard contact precautions (e.g., mask, gloves, and gown). Laboratory workers handling samples containing the bacteria should follow appropriate safety procedures and use personal protective equipment.

Could melioidosis be used for bioterrorism?

Yes. The bacteria that cause melioidosis are considered possible bioterrorism agents because they could be intentionally released in the air, food, or water. If these bacteria are inhaled or ingested, they could cause severe disease.

How can I get more information about melioidosis?

- If you have concerns about melioidosis, contact your healthcare provider.
- Call your local health department. A directory of local health departments is located at <https://www.vdh.virginia.gov/local-health-districts/>.
- Visit the Centers for Disease Control and Prevention website at <http://www.cdc.gov/melioidosis/index.html>.

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