

Melioidosis

Melioidosis is a disease caused by a bacterium called *Burkholderia pseudomallei*, a germ which is found in soil. The disease occurs mostly in tropical areas, including north Queensland, but it occasionally occurs in other places including southern parts of Queensland.

Occurrence

During the dry season the bacterium is found in deeper soil layers, but during the wet season it can be found in the surface layers and in muddy surface waters. This is why most cases of melioidosis occur during the wet season following heavy rains and flooding.

The majority of infections occur when skin abrasions or wounds come into contact with wet soil or water contaminated with the bacterium. Very occasionally, it can be acquired through swallowing contaminated water, or through breathing in fine droplets of such water. Person-to-person spread is very rare.

Although many people have contact with wet soil or muddy waters during the wet season, the disease is uncommon with 10 to 30 cases occurring each year in Queensland. This is because despite frequent exposures not everyone is at risk of becoming ill with melioidosis. Adults with certain underlying diseases and conditions – notably diabetes, chronic lung or kidney diseases, excessive alcohol consumption, cancers and treatments (such as steroids) which lower immunity – are at a greatly increased risk of the disease. Melioidosis is very uncommon in healthy adults and is rarely seen in children in Queensland.

Features of the Disease

Melioidosis can present in several different ways.

Most cases have a sudden onset, from a few days to three weeks after an apparent exposure to soil or muddy water. These 'acute' cases can present as pneumonia with fever, cough and difficulty breathing or as blood poisoning with fever, confusion and shock. Acute melioidosis can be very severe, and almost always requires hospital inpatient management. Even with hospital care several melioidosis deaths occur in Queensland each year.

Other cases present more slowly, months or even years after an apparent exposure. These less acute cases can present as superficial skin infections such as ulcers without any other body organs being affected, or as abscesses in organs such as the spleen and prostate. Some of these less acute cases of melioidosis can still be severe, and most require inpatient care.

The treatment of melioidosis initially requires intensive antibiotic therapy as well as management of any lung or kidney failure, shock etc. Therefore admission to an intensive care unit may be required. Antibiotic treatment should be continued for at least 3 months to make sure the disease doesn't come back.

Prevention:

There is no vaccine to prevent melioidosis. During the wet season adults, particularly anyone in north Queensland with an underlying medical condition, should take the following precautions:

- Wear protective footwear when outdoors
- Wear gloves while working in the garden, on the farm etc
- Cover abrasions and sores with waterproof dressings
- Wash thoroughly (preferably shower) after exposure to soil or muddy water, and after working outdoors
- Diabetics should maintain optimal foot care, with help from a podiatrist if necessary.

Help and assistance:

Contact your local Queensland Health [public health unit](#)
(<https://www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units>).