What is melioidosis?
Melioidosis is a disease caused by the bacteria known as *Burkholderia pseudomallei*. The bacteria live below the soil’s surface during the dry season but after heavy rainfall are found in surface water and mud and may become airborne.

How is it spread?
The bacteria that causes melioidosis usually enters the body via cuts and sores in the skin or via inhalation of dust or droplets and very rarely by ingestion of contaminated water. The disease has been found among some domestic and farm animals. Melioidosis does not usually spread from one person to another or from animals to humans.

Where does melioidosis usually occur?
Melioidosis is found in tropical areas throughout the world, particularly in South East Asia and northern Australia. In Australia cases typically occur in the Top End of the Northern Territory (NT) and in far north Queensland and the Kimberley region of Western Australia. Cases have been found in the NT occasionally as far south as the Tennant Creek region.

What are the symptoms?
The symptoms of melioidosis depend on the site of the infection and this can vary. Often it starts as a chest infection with shortness of breath, productive cough and fever. Other possible presentations include fever with headache and confusion, or pain and/or difficulty passing urine. People can become ill from 1 to 21 days after being infected with either a sudden or gradual onset of symptoms. Melioidosis requires urgent medical attention and treatment with specific antibiotics as this infection can be fatal. In some cases the illness may come on much more slowly with weight loss, intermittent fever, chest pain and a cough. People may also present with skin ulcers, boils or joint or bone infections. There have also been cases where the disease has caused illness many years after the initial infection. In these cases, the bacteria have been carried by the person and have become active due to a weakening of the immune system.

The diagnosis of melioidosis is made by growing the bacteria with laboratory testing of blood, sputum, urine or a swab from an abscess or non-healing ulcer.

Who is at risk?
People most at risk are those with conditions such as diabetes, heavy alcohol consumption, kidney disease, lung disease, cancer and those on immunosuppressive therapy including steroids. Healthy people can also get the disease if they work in muddy soil without good hand and foot protection. Children are at a lower risk for acquiring melioidosis compared with adults. However, it is still possible for children to acquire melioidosis during the wet season, particularly those with chronic diseases or weakened immune systems.

What is the treatment?
All patients should be admitted to hospital initially. They are treated with antibiotics,
which usually have to be continued for at least 3 months. If treatment is started early, a full recovery is usually possible. It is important to complete all antibiotics to prevent a relapse.

**How can melioidosis be prevented?**
There is currently no vaccine against melioidosis and people who have previously had the disease can get a new infection. Preventive measures to avoid contact with the bacteria are the key to avoiding infection particularly for those with any of the following risk factors:
- diabetes
- heavy alcohol consumption (>20 standard drinks a week or binge drinking)
- kidney disease
- lung disease
- cancer
- receiving immunosuppressive therapy, including steroids
- cuts or sores in your skin, particularly on the hands and feet.

The following are key preventive measures to avoid melioidosis:
- Wear waterproof shoes or boots to protect your feet when you walk in wet soil where there is pooled water, or you work in muddy conditions, including when gardening or working in excavations. Open footwear such as sandals are not good protection.
- Wear protective gloves when handling soil, particularly during the wet season.
- Wash cuts and wounds promptly and thoroughly and keep covered.
- If necessary, use pumping equipment to control water when working in excavations.
- Due to the potential for *Burkholderia pseudomallei* to become airborne, people with risk factors such as diabetes, heavy alcohol consumption, kidney disease, lung disease and cancer and those on immunosuppressive therapy are advised to stay indoors during periods of heavy wind and rain in the Top End.
- People using high pressure hoses around soil should cover their mouths and noses with a mask to avoid inhalation of bacteria.
- Children should avoid playing in muddy, boggy areas, wet sandpits and places where water has pooled in grassy areas. Sandpits which are dry or dry enough to comfortably play in are low risk.
- People with risk factors for melioidosis should ensure water is disinfected before domestic use (drinking and showering). Either access a town water supply, disinfect their water or use a combination of rain water and bottled/boiled water for domestic purposes.

**For more information contact the Centre for Disease Control in your region**
- Alice Springs 8951 7540
- Darwin 8922 8044
- Katherine 8973 9049
- Nhulunbuy 8987 0357
- Tennant Creek 8962 4259