

Buruli ulcer

Community information sheet

What is Buruli ulcer?

Buruli ulcer (also known as Bairnsdale ulcer) is an infection of skin and soft tissue caused by the bacterium *Mycobacterium ulcerans*. The toxin made by the bacteria attacks fat cells under the skin, which leads to localised swelling or the formation of a nodule (lump) and then an ulcer. At first, it can be mistaken for an insect or spider bite.

Who is most at risk?

People of any age can get infected. People who live in or visit the affected areas of Victoria (see below) are considered at greatest risk. Buruli ulcer is rare outside these areas.

Buruli ulcer has been reported in 33 countries around the world. Affected areas include rural West Africa, Central Africa, New Guinea, Latin America and tropical regions of Asia.

In Australia, Buruli ulcer most commonly occurs in localised coastal areas of Victoria. It was first recognised in the Bairnsdale area of East Gippsland in the 1930s. Since then a growing number of cases have been reported in the Bellarine Peninsula and since 2012, the Mornington Peninsula. Buruli ulcer also occurs in the Daintree region of Far North Queensland and occasionally in other coastal regions of north Queensland and the Northern Territory

See below for a diagram of affected areas in Victoria.

How do people get Buruli ulcer?

Buruli ulcer is an infection acquired from the environment. It is not yet known exactly how humans become infected with the bacteria, or where in the environment the bacteria prefer to live. It is not thought to be spread person-to-person. The highest risk for infection is during the warmer months, but the disease can be acquired at any time of the year.

What are the symptoms of Buruli ulcer?

Buruli ulcer usually progress slowly over several weeks. Occasionally it can develop more rapidly. An ulcer may not be initially present. It can occur anywhere on the body but it is most common on exposed areas of the limbs, such as ankles, back of calf, around the knee, or forearms or around the elbow.

- Initially, a spot that looks like a mosquito or spider bite forms on the skin. This is usually painless or can be itchy. Some patients do notice pain initially however. Small skin spots and bites are common but a feature of Buruli ulcer is that it doesn't settle with short courses of standard antibiotics and progresses instead of healing naturally.
- The spot usually gets bigger over days or weeks and may form a crusty, non-healing scab.
- Over time, the scab turns into a nodule (lump) then an ulcer that continues to increase in size and is surrounded by a ring of red swelling.
- Sometimes an ulcer does not form, with the infection presenting as persistent localised pain and swelling (cellulitis), thickened or raised flat areas of red skin with pain and fever.

How long does it take for the symptoms of Buruli ulcer to appear?

It is estimated that in Victoria, the average time from exposure to the bacteria to the onset of first symptoms is about four and half months but can range from two to nine months.

How is it diagnosed and treated?

If you have an ulcer, wound or swelling that is not healing or rapidly progressing, you should seek advice from your doctor. You may wish to take this information sheet with you.

Buruli ulcer is usually diagnosed by a doctor, based on:

- where you live – if you live in an area associated with Buruli ulcer
- your travel history – if you have travelled to an area associated with Buruli ulcer, even for a short time.
- physical examination – to identify a slowly enlarging, painless crusty nodule or ulcer.
- swabs or biopsy taken from the ulcer, which are tested in a laboratory with specific tests.

Buruli ulcer can be treated with a course of special oral antibiotics. Surgery is sometimes used in combination with antibiotic therapy. Regular dressings are usually required. Complete healing usually takes between three and six months depending on the size of the ulcer.

As ulcers get bigger over time, early diagnosis and effective treatment are important to minimise tissue loss and reduce the time until the ulcer heals.

How can I protect myself and my family?

- Wear gardening gloves, long-sleeved shirts and trousers when gardening or working outdoors.

- Avoid insect bites by using suitable insect repellents and long clothing, especially during the warmer months.
- Protect cuts or abrasions with sticking plasters.
- Promptly wash and cover any scratches or cuts you receive while working outdoors.
- See your doctor if you have a skin lesion and mention the possibility of Buruli Ulcer.

Further information

For more information about Buruli ulcer visit:

www.betterhealth.vic.gov.au/health/HealthyLiving/Buruli-ulcer

For more information about protecting yourself from mosquito-borne diseases, visit:

www.betterhealth.vic.gov.au/beat-the-bite

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Affected areas of Victoria

