

Trachoma

Trachoma is a bacterial infection of the eye that can cause complications including blindness. This preventable disease is linked to poor hygiene and is often associated with poverty. Lack of facial cleanliness is the key factor that causes the spread of the infection that causes trachoma. Trachoma is also sometimes known as sandy blight.

This communicable disease is still common in many outback Aboriginal communities. More than 50 developing countries throughout Africa and Asia are also affected by trachoma, particularly in rural areas where hygiene tends to be poor.

During the 20th century, there was considerable improvement in living conditions. Separate rooms for sleeping, running water and plumbed sewerage meant that trachoma disappeared from all developed countries – except Australia. Australia is the only Western nation still affected by trachoma. In February 2009 the Australian Government made a commitment to eliminate blinding trachoma from Australian Aboriginal communities.

How it is spread

Trachoma is a communicable disease caused by the bacterium *Chlamydia trachomatis*. It is usually transmitted by:

- Direct contact such as touching infected eye secretions
- Other forms of direct contact such as touching infected nasal or throat secretions
- Indirect contact such as touching contaminated items – for example, towels, sheets, blankets or clothing
- Flies that seek out the eyes.

Symptoms

Signs and symptoms begin within five to 12 days following infection and may include:

- Eye irritation, redness and discharge (conjunctivitis)
- Swelling of the eyelids
- Inflammation inside the upper eyelid and lymphoid follicles (lumps caused by an immune system reaction)
- Scarring and distortion of the upper eyelid
- Eye lashes develop later that turn into the upper lid and then rub on the cornea
- Abnormal growth of corneal blood vessels
- Opaque cornea (transparent membrane that covers the eye surface).

People with trachoma may not experience symptoms (asymptomatic) and the condition may go unrecognised unless it is specifically looked for.

Common complications

Without medical treatment, recurrent infections and inflammation can cause corneal scarring and eyelid deformities. A common late complication is eyelid inversion – the lashes turn inwards (trichiasis) and continually rub against the cornea. This irritation can cause vision loss and blindness in the long term.

The incidence is high among Aboriginal populations

Trachoma remains rife in many Aboriginal communities in outback Australia. Depending on the area, infection rates range from two per cent to over 50 per cent.

Risk factors

Trachoma is linked to poor personal and community hygiene and is often associated with poverty. Particular risk factors include:

- Inadequate personal hygiene, especially a dirty face
- Inadequate housing (about 50 per cent of the Northern Territory's Indigenous people don't have proper homes)
- Crowded living conditions, such as having children share the same bed
- Poor water supply (about one Indigenous person in six doesn't have a drinkable water supply in the Northern Territory)
- Living inland, since coastal populations can clean themselves by swimming in the sea
- Flies, which breed in human and animal faeces
- Lack of education about the importance of environmental cleanliness and personal hygiene, especially about facial cleanliness in children
- Young age, since the infection is more common among preschool children.

Diagnosis

Tests used to diagnose trachoma may include:

- Medical history
- Physical examination including an eye examination
- Eye swab for laboratory testing.

Treatment

Treatment depends on the severity of the condition, but may include:

- **Antibiotic medications** – a single oral dose of an antibiotic (azithromycin) is the first line of treatment in uncomplicated cases. The drugs kill off the bacteria so that the body's natural healing processes can repair the eye. Antibiotic must be given to all household members. In areas where there is widespread infection, the whole community may need to be treated. Treatment may need to be repeated every 6 to 12 months.
- **Surgery** – to correct the eyelid deformity and evert the injured eye lashes in older people.

Prevention

A clean face and clean environment are the key prevention strategies to combat trachoma. The Australian guidelines (prepared by Communicable Disease Network Australia) closely follow those outlined in SAFE, the World Health Organization's proposed form of trachoma control. SAFE stands for **S**urgery, **A**ntibiotics, **F**acial cleanliness and **E**nvironmental improvement.

Prevention of trachoma in remote communities is proving to be difficult. During the 1970s, the Australian Government treated nearly 40,000 Australians affected with trachoma. In November 2006, the National Trachoma Surveillance and Reporting Unit (NTSRU) was established to combat trachoma among outback Aboriginal communities. However, the proper implementation of the full SAFE Strategy has significantly reduced trachoma in many communities.

Where to get help

- Your doctor
- Your local ophthalmologist or optometrist
- Indigenous Eye Health Unit, The University of Melbourne Tel. (03) 8344 9320
- Optometrists Association Victoria Tel. (03) 9652 9100
- The Royal Victorian Eye and Ear Hospital Tel. (03) 9929 8666
- Vision Australia, and Low Vision Services Tel. 1300 84 74 66
- Royal Australian and New Zealand College of Ophthalmologists Tel. (02) 9690 1001

Things to remember

- Trachoma is a bacterial infection of the eye that can cause complications including blindness.
- This communicable disease is rife in many outback Aboriginal communities.
- Treatment includes antibiotics to kill the infection and surgery to correct eyelid deformities.

This page has been produced in consultation with, and approved by:

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