

## 2.6 Eye infections

### 2.6.1 General

Eye infections can be caused by bacterial, viral or other microbiological agents. Infections can affect the eyelids, the cornea and even the optic nerve. Common examples include:

conjunctivitis — infection or inflammation of the conjunctiva, the thin, transparent tissue that covers the outer surface of the eye

styes — bacterial infections that lead to the obstruction of oil-producing glands around the eyelashes or eyelids, causing small bumps on eyelids

keratitis — an infection of the cornea that can be caused by *Acanthamoeba* (a microscopic, waterborne parasite) or the bacteria *Staphylococcus aureus* and *Pseudomonas aeruginosa*

- toxoplasmosis of the eye — inflammation of the retina and choroid.

People who wear contact lenses may have a higher risk of infection with acanthamoebic keratitis and the incidence of this infection in hard lenses is 9.5 times that of soft. The incidence of the infection is increasing because of the growing use of hard lenses for orthokeratology.

### 2.6.2 Trachoma

Trachoma is one of the leading causes of preventable blindness in the world. It is linked to extreme poverty and poor sanitation and is therefore almost entirely a disease of undeveloped countries. The disease is caused by the bacterium *Chlamydia trachomatis*, and leads to repeated conjunctivitis and a mucous discharge. The eyes are also irritated and the cornea can be damaged by:

a reduction in the amount of tears produced

difficulty in closing close the eyelids (which lubricate the eye and help flush away dust and dirt)

- the triggering of trichiasis, where the eyelid and eyelashes turn in on the eye.

The conjunctivitis clears up after a month or so, but the disease is easily spread, particularly in places where there is little water for people to wash their hands and faces regularly. The discharge from infected eyes attracts flies that then land on other people's skin. People in crowded households or neighbourhoods are particularly vulnerable.

Although the disease is linked to developing countries, where living conditions are crowded and hygiene is poor, it is also found in some remote Aboriginal communities in eastern Australia and the Northern Territory.