



Trachoma

What is trachoma?

Trachoma is an eye infection affecting both eyes. It is the world's leading cause of infectious blindness. A bacterium called *Chlamydia trachomatis* causes trachoma. According to the World Health Organization (WHO), trachoma has caused the visual impairment of 1.8 million people. Of those people, 450 thousand are irreversibly blind.

In its early stages, trachoma causes **conjunctivitis (pink eye)**. Early symptoms begin to appear within five to 12 days of exposure to the bacterium. These symptoms can include:

- mild itching and irritation of the eyes and eyelids, and
- a discharge from the eyes

As the infection progresses, it causes eye pain and blurred vision. If the infection is untreated, scarring occurs inside the eyelid. This leads to the eyelashes turning inward toward the eye. This condition is called trichiasis. The eyelashes brush and scratch against the cornea, the clear covering at the front of the eye. This continual irritation turns the cornea cloudy. It can lead to the development of corneal ulcers and vision loss.

Having one episode of trachoma rarely causes problems. Ophthalmologists think that repeated infections lead to the scarring and blinding complications. Generally, it takes years before trachoma can cause vision loss.



A trachoma infection of the "tarsal" conjunctiva (inside of the eyelid)

Eye Words to Know

Conjunctiva: Clear tissue covering the white part of your eye and the inside of your eyelids.

Cornea: Clear, dome-shaped window of the front of your eye. It focuses light into your eye.

Conjunctivitis: When the conjunctiva is irritated by an infection or allergies, causing red, itchy, and watery eyes.

Who is at risk for trachoma?

Trachoma is rare in the United States and Europe. It is commonly found in developing nations. Poverty, crowded living conditions, and poor sanitation help spread the disease. Most of the people infected are women and children. Trachoma is very contagious. It is spread by direct contact with:

- someone infected with the bacteria
- through insects, especially flies, or
- contaminated objects, such as towels

What are the symptoms of trachoma?

Trachoma symptoms include:

- itching and irritation of the eyes and eyelids
- discharge from the eyes
- eye pain
- light sensitivity, and
- blurred vision

As the infection progresses, there is scarring of the inner lining of the eyelid. The eyelashes turn inward, scratching the cornea. This condition is called trichiasis. If trichiasis is not treated, the cornea becomes cloudy. This can lead to corneal ulcers.

How is trachoma diagnosed?

Your ophthalmologist can diagnose most cases of conjunctivitis through an eye exam. He or she may take a sample (culture) if you visited a country where trachoma is common. To do this, he or she will numb your eye and swab the

surface. The laboratory test will show if trachoma is the source of the eye infection.

In more severe cases of trachoma, an eye exam will reveal:

- scarring on the inside of the upper eyelid
- new blood vessel growth in the cornea, and
- eyelashes turned inward

How is trachoma treated?

Antibiotics are effective in treating early cases of trachoma. Early treatment can prevent long-term complications.

More advanced cases may need surgery. The surgery repositions eyelashes that are growing inward toward the eye. This can help limit further scarring of the cornea and prevent further loss of vision.

An ophthalmologist can also treat severe scarring from trachoma with corneal transplantation. A corneal transplant can help if the cornea is so clouded that vision is significantly impaired.

Good hygiene, such as hand washing and face washing, can help prevent the spread of trachoma.

In order to eliminate trachoma as a public health problem, there is a WHO-recommended "S.A.F.E." strategy which includes:

- Surgery for trichiasis
- Antibiotics to clear *Chlamydia trachomatis* infection
- Facial cleanliness, and
- Environmental improvement to reduce transmission.

Summary

Trachoma is an eye infection affecting both eyes. It is the world's leading cause of infectious blindness.

If the infection is untreated, scarring occurs inside the eyelid. This leads to the eyelashes turning inward toward the eye. The eyelashes brush and scratch against the cornea. This continual irritation turns the cornea cloudy. It can lead to the development of corneal ulcers and vision loss.

Trachoma is rare in the United States and Europe. It is commonly found in developing nations. Poverty, crowded living conditions and poor sanitation help spread the disease. Trachoma is very contagious. Good hygiene, such as hand washing and face washing, can help prevent the spread of trachoma.

Antibiotics are effective in treating early cases of trachoma. Early treatment can prevent long-term complications. More advanced cases may need surgery.

If you have any questions about your vision, speak with your ophthalmologist. He or she is committed to protecting your sight.

Get more information about trachoma from EyeSmart—provided by the American Academy of Ophthalmology— at aao.org/trachoma-link.

COMPLIMENTS OF:

