

About Conjunctivitis (source: <http://www.cdc.gov/conjunctivitis/about/index.html>)

Conjunctivitis is a common eye condition worldwide. It causes inflammation (swelling) of the conjunctiva—the thin layer that lines the inside of the eyelid and covers the white part of the eye. Conjunctivitis is often called "pink eye" or "red eye" because it can cause the white of the eye to take on a pink or red color.

The most common causes of conjunctivitis are viruses, bacteria, and allergens. But there are other causes, including chemicals, fungi, certain diseases, and contact lens wear (especially wearing lenses overnight). The conjunctiva can also become irritated by foreign bodies in the eye and by indoor and outdoor air pollution caused, for example, by chemical vapors, fumes, smoke, or dust.

Viral Conjunctivitis

Viral conjunctivitis is caused by infection of the eye with a virus. Viral conjunctivitis

- Can be caused by a number of different viruses, many of which may be associated with an upper respiratory tract infection, cold, or sore throat.
- Usually begins in one eye and may progress to the second eye within days.
- Spreads easily and rapidly between people and can result in epidemics.
- Is typically mild and usually clears up in 7-14 days without treatment and resolves without any long-term effects. In some cases, it can take 2-3 weeks or more for viral conjunctivitis to completely clear up, depending on whether complications develop.

Bacterial Conjunctivitis

Bacterial conjunctivitis is caused by infection of the eye with certain bacteria. Bacterial conjunctivitis

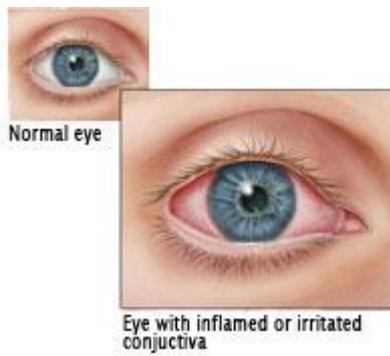
- Usually begins in one eye and may sometimes progress to the second eye.
- Is a leading cause of children being absent from day care or school (Patel, 2007).
- Cases are typically mild and can last as few as 2-3 days or up to 2-3 weeks. Many cases improve in 2-5 days without treatment (Sheikh, 2006). However, topical antibiotics are often prescribed to treat the infection.

Allergic Conjunctivitis

Allergic conjunctivitis is caused by the body's reaction to certain substances to which it is allergic, such as pollen from trees, plants, grasses, and weeds; dust mites; molds; dander from animals; contact lenses and lens solution; and cosmetics. Allergic conjunctivitis

- Occurs more frequently among people with other allergic conditions, such as hay fever, asthma, and eczema.
- Usually occurs in both eyes.
- Can occur seasonally, when allergens such as pollen counts are high.
- Can occur year-round due to indoor allergens, such as dust mites and animal dander.
- May result, in some people, from exposure to certain drugs and cosmetics.
- Clears up once the allergen or irritant is removed or after treatment with allergy medications.
- Can occur when contact lenses are worn too long or not cleaned properly.

It can be hard to determine the exact cause of every case of conjunctivitis. This is because some signs and symptoms of the condition may be similar depending on the cause.



Symptoms of conjunctivitis can include

- Pink or red color in the white of the eye(s) (often one eye for bacterial and often both eyes for viral or allergic conjunctivitis)
- Swelling of the conjunctiva (the thin layer that lines the white part of the eye and the inside of the eyelid) and/or eyelids
- Increased tearing
- Discharge of pus, especially yellow-green (more common in bacterial conjunctivitis)
- Itching, irritation, and/or burning
- Feeling like a foreign body is in the eye(s) or an urge to rub the eye(s)
- Crusting of eyelids or lashes sometimes occurs, especially in the morning
- Symptoms of a cold, flu, or other respiratory infection may also be present
- Sensitivity to bright light sometimes occurs
- Enlargement and/or tenderness, in some cases, of the lymph node in front of the ear. This enlargement may feel like a small lump when touched. (Lymph nodes act as filters in the body, collecting and destroying viruses and bacteria.)
- Symptoms of allergy, such as an itchy nose, sneezing, a scratchy throat, or asthma may be present in cases of allergic conjunctivitis
- Contact lenses that do not stay in place on the eye and/or feel uncomfortable due to bumps that may form under the eyelid

Sometimes there are situations that can help your healthcare provider determine what is causing the conjunctivitis. For example, if a person with allergies develops conjunctivitis when the pollen count increases in the spring, this would be a sign that he or she might have allergic conjunctivitis. And if someone develops conjunctivitis during an outbreak of viral conjunctivitis, this would be a sign that he or she might have viral conjunctivitis.

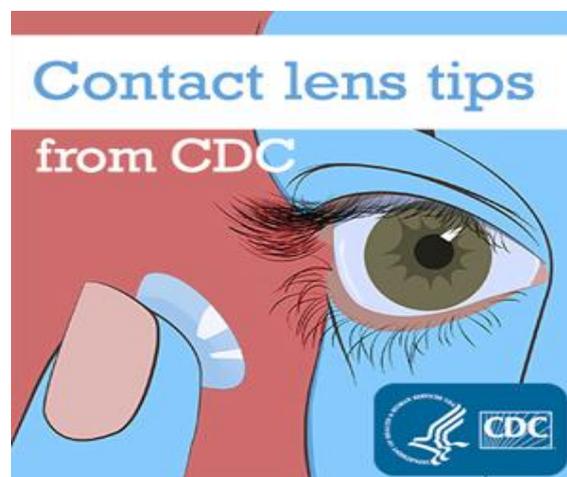
Preventing the Spread of Conjunctivitis

Conjunctivitis caused by allergens is not contagious; however, viral and bacterial conjunctivitis can be easily spread from person to person and can cause epidemics. You can greatly reduce the risk of getting conjunctivitis or of passing it on to someone else by following some simple good hygiene steps.

If you have infectious (viral or bacterial) conjunctivitis, you can help limit its spread to other people by following these steps:



- Wash your hands often with soap and warm water. If soap and water are not available, use an alcohol-based hand sanitizer that contains at least 60% alcohol. (See [CDC's Clean Hands Save Lives!](#) Web site for tips on proper handwashing.)
- Avoid touching or rubbing your eyes.
- Wash any discharge from around the eyes several times a day. Hands should be washed first and then a clean washcloth or fresh cotton ball or tissue can be used to cleanse the eye area. Throw away cotton balls or tissues after use; if a washcloth is used, it should be washed with hot water and detergent. Wash your hands with soap and warm water when done.
- Wash hands after applying eye drops or ointment.
- Do not use the same eye drop dispenser/bottle for infected and non-infected eyes—even for the same person.
- Wash pillowcases, sheets, washcloths, and towels in hot water and detergent; hands should be washed after handling such items.
- Avoid sharing articles like towels, blankets, and pillowcases.
- Clean eyeglasses, being careful not to contaminate items (like towels) that might be shared by other people.
- Do not share eye makeup, face make-up, make-up brushes, contact lenses and containers, or eyeglasses.



- Do not use swimming pools.

If you are around someone with infectious (viral or bacterial) conjunctivitis, you can reduce your risk of infection by following these steps:

- Wash your hands often with soap and warm water. If soap and warm water are not available, use an alcohol-based hand rub. (See [CDC's Clean Hands Save Lives!](#) Web site for tips on proper handwashing.)
- Wash your hands after contact with an infected person or items he or she uses; for example, wash your hands after applying eye drops or ointment to an infected person's eye(s) or after putting their bed linens in the washing machine.
- Avoid touching or rubbing your eyes.
- Do not share items used by an infected person; for example, do not share pillows, washcloths, towels, eye drops, eye or face makeup, and eyeglasses.
- Clean, store, and replace your contact lenses as instructed by your eye doctor.

In addition, if you have infectious conjunctivitis, there are steps you can take to avoid re-infection once the infection goes away:

- Throw away and replace any eye or face makeup you used while infected.
- Throw away contact lens solutions that you used while your eyes were infected.
- Throw away disposable contact lenses and cases that were used while your eyes were infected.
- Clean extended wear lenses as directed.
- Clean eyeglasses and cases that were used while infected.

Treatment

Always prefer to take advice of Eye specialist in such cases

- The treatment for conjunctivitis depends on the cause. It is not always necessary to see a healthcare provider for conjunctivitis. But, as noted below, there are times when it is important to seek medical care.
- **Viral Conjunctivitis**
 - Most cases of viral conjunctivitis are mild. The infection will usually clear up in 7–14 days without treatment and without any long-term consequences. In some cases, viral conjunctivitis can take 2-3 weeks or more to clear up, especially if complications arise.
 - Artificial tears and cold packs may be used to relieve the dryness and inflammation (swelling) caused by conjunctivitis. (Artificial tears can be bought in stores without a doctor's prescription.) Antiviral medication can be prescribed by a physician to treat more serious forms of conjunctivitis, such as those caused by herpes simplex virus or varicella-zoster virus. Antibiotics will not improve viral conjunctivitis—these drugs are not effective against viruses.

Bacterial Conjunctivitis



- Antibiotics can help shorten the illness and reduce the spread of infection to others. Many topical antibiotics (drugs given as eye drops or ointment) are effective for treating bacterial conjunctivitis. Your healthcare provider may prescribe antibiotic eye drops or ointment as conjunctivitis treatment, and the infection should clear within several days. Artificial tears and cold compresses may be used to relieve some of the dryness and inflammation.
- However, mild bacterial conjunctivitis may get better without antibiotic treatment and without any severe complications. The use of antibiotics is associated with increased antibiotic resistance and increased costs, and should be a shared decision between the doctor and the patient (Crounau, 2010).

Allergic Conjunctivitis

- Conjunctivitis caused by an allergy usually improves when the allergen (such as pollen or animal dander) is removed. Allergy medications and certain eye drops (topical antihistamine and vasoconstrictors), including some prescription eye drops, can also provide relief from allergic conjunctivitis. For conjunctivitis caused by contact lenses, an eye doctor may recommend removing lenses and keeping them out for a period of time. In some cases, a combination of drugs may be needed to improve symptoms. Your doctor can help if you have conjunctivitis caused by an allergy