
Eyes - flash burns

Summary

- Flash burns are like sunburn in the eye and can affect both your eyes.
 - A flash burn occurs when you are exposed to bright UV light.
 - With the right care, your cornea will usually heal itself without leaving a scar.
-

A flash burn is a painful inflammation of the cornea, which is the clear tissue that covers the front of the eye. A flash burn occurs when you are exposed to bright ultraviolet (UV) light. It can be caused by all types of UV light, but welding torches are the most common source. That's why it is sometimes called 'welder's flash' or 'arc eye'.

Flash burns are like sunburn in the eye and can affect both your eyes. Your cornea can repair itself in one to two days, and usually heals without leaving a scar. However, if the flash burn is not treated, an infection may start. This can be serious and may lead to some loss of vision.

Symptoms of flash burn

The symptoms of flash burn include:

- pain that may be mild to very severe, usually starting a few hours after the incident
- bloodshot eyes
- light sensitivity
- watery eyes
- blurred vision
- the feeling of having something in your eye.

Causes of flash burn

You can receive a flash burn after being exposed to UV (ultra violet) light. Sources include:

- welding torch
- direct sunlight
- reflection of the sun off water or snow
- sunlamp in a tanning salon
- some types of lamps, such as halogen or a photographer's flood lamp.

Diagnosis of flash burn

Diagnosis requires an eye examination, which may include:

- anaesthetic drops – the doctor may use eye drops to numb your eyes. These drops work long enough to examine your eyes and should not be used regularly as they delay healing
- inspection – the eyes are checked for damage
- dye – the doctor may put orange dye in your eyes. This shows up any damage when a special blue light is used. The dye is harmless and washes out with your tears.

Treatment for flash burn

Treatment for flash burns may include:

- dilating drops – these are sometimes used to relax the eye muscles, which in turn eases pain and allows your eyes to rest and heal. Your pupils (the black part of the eye) will look bigger than normal. This effect lasts several hours to a few days.
- dressing – your eyes may be covered with a padded dressing to rest them and allow them to heal.
- do not drive with an eye patch on.
- antibiotics – you may be advised to use antibiotic drops or ointment at home to stop infection. Follow your doctor's advice as to how often to use the prescribed eye drops or ointment. You may also be given a mild steroid-based anti-inflammatory drop
- review – you will be reviewed in 24 to 48 hours to make sure that your eyes are healing. Some problems, such as infection, don't show up right away. If there are any serious problems, you will be sent to an ophthalmologist (specialist eye doctor).

Eye drops and ointments for flash burn

General suggestions for using eye drops and ointments include:

- Wash your hands before touching your eyes.
- Rest your finger on your cheek and pull down the lower eyelid.
- Tilt your head back and drop the liquid in behind your lower eyelid.
- For ointment, smear a small amount along the inside of the lower eyelid. Make sure that the nozzle doesn't touch the eye.
- Continue with the treatment until your eyes have healed.
- Keep all drops and ointment in the fridge and out of reach of children.

Taking care of yourself at home after a flash burn

Suggestions include:

- Take pain-relieving medication such as paracetamol, ibuprofen or codeine. Check the packet for the right dose. The pain is likely to last about a day.
- Don't wear contact lenses until your eyes have healed.
- Wear sunglasses if your eyes are sensitive to light.
- Use artificial tears or lubricants to help any discomfort in your eyes. You can buy these products over the counter at most pharmacies.
- It is important to return for a check-up when your doctor advises.

Seek urgent medical help for flash burn

You should see your doctor or go to the nearest hospital emergency department if you are concerned about your eyes for any reason, or if you have symptoms including:

- blurred vision that is not due to eye drops or ointment
- worsening glare
- worsening pain.

Prevention of flash burn

Prevention is best. Suggestions for preventing flash burn include:

- Protect the cornea from UV light by wearing coated safety goggles, or wearing a welder's mask when welding.
- Make sure the goggles are made to Australian Standards and cover the eyes completely.
- If wearing sunglasses for preventing flash burn, they should protect against both UVA and UVB radiation. Check the label when buying sunglasses.

Where to get help

- In an emergency, call triple zero (**000**)
- Emergency department of your nearest hospital

- Your **GP** (doctor)
- **Ophthalmologist**
- **Pharmacist**
- **Optometrist**
- **WorkSafe Victoria**. Tel. **(03) 9641 1555** or **1800 136 089** (toll free) – for general enquiries
- WorkSafe Victoria Emergency Response Line Tel. **13 23 60** – to report serious workplace emergencies, seven days, 24 hours

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

Royal Australian New Zealand College of Ophthalmologists (RANZCO)

Content on this website is provided for information purposes only. Information about a therapy, service, product or treatment does not in any way endorse or support such therapy, service, product or treatment and is not intended to replace advice from your doctor or other registered health professional. The information and materials contained on this website are not intended to constitute a comprehensive guide concerning all aspects of the therapy, product or treatment described on the website. All users are urged to always seek advice from a registered health care professional for diagnosis and answers to their medical questions and to ascertain whether the particular therapy, service, product or treatment described on the website is suitable in their circumstances. The State of Victoria and the Department of Health & Human Services shall not bear any liability for reliance by any user on the materials contained on this website.

For the latest updates and more information, visit www.betterhealth.vic.gov.au

Copyright © 1999/2019 State of Victoria. Reproduced from the Better Health Channel (www.betterhealth.vic.gov.au) at no cost with permission of the Victorian Minister for Health. Unauthorised reproduction and other uses comprised in the copyright are prohibited without permission.