

Bushfires, smoke and your eyes

The number of people acutely and/or chronically exposed to bushfire smoke, ash and dust storms is increasing across NSW and Australia and is likely to remain a feature of our environment for some time.

How can bushfires and smoke affect my eyes?

An environmental form of conjunctivitis can be caused by exposure to smoke, ash, and dust from bushfires, which also exacerbate allergic conjunctivitis.

This manifests as watery (or dry), irritated eyes, often accompanied by symptoms of burning, stinging or itching.

Bushfire smoke contains chemicals and particulate matter (PM10 and PM2.5) which are **a major risk factor for environmental and allergic conjunctivitis**. Refer to the NSW government factsheet for more on [particulate matter](#).

How to decrease risk to my eyes?

Lubricate and cool your eyes. Eye irritation from smoke can be relieved with cold compresses applied on your closed eyes and use of over-the-counter lubricant eye drops such as those used by people who suffer from dry eyes.

Over-the-counter antibacterial preparations are NOT required unless there is a clear infection. **See an optometrist or a doctor** if you have **painful** irritated eyes.

Don't rub your eyes. Although rubbing eyes may seem harmless, doing this with dirty or unwashed hands can transfer germs to your eyes and/or scratch the cornea. It is more

effective to keep your eyes comfortable using eye lubricants.

Avoid tap water in your eyes. Bushfires have the potential to degrade water quality significantly. Flush your eyes with sterile saline. Rinsing your eyes with tap water has risks and should be avoided unless there are no other options. Contact lenses should never be exposed to tap water.

Stay indoors. Keep windows and doors shut and well-sealed, and make sure to air once smoke has cleared. Use air purifiers with a high efficiency particle (HEPA) filter if available. Refer to the NSW government factsheet for more on how to [protect yourself from bushfire smoke](#).

Should I wear my contact lenses?

Contact lenses can provide a barrier to polluted air in the short-term but can trap smoke and dust particles in the lens and on the surface of the eye, exacerbating their effect. **Avoid contact lens wear when air quality is poor.**

Can I use glasses or goggles to protect my eyes from bushfire smoke?

People who are involved in front line firefighting should use goggles complying with the [AFAC Guideline](#). Otherwise, sealed goggles are the best solution but are uncomfortable. Spectacles and sunglasses are not sufficient. Indirect ventilated goggles or close-fitting, wraparound protective glasses or goggles can help to reduce exposure to smoke in the short-term. However, unsealed goggles will not prevent longer-term exposure to ongoing smoke.

Who is most at risk?

- **People with pre-existing eye conditions** like dry eye, blepharitis and eye allergies
- **Contact lens wearers**, because small smoke and dust particles may become trapped by the contact lens
- **Older adults** who are more likely to have poor tear film quality.
- **Those exposed to more smoke and/or for a longer time.**



Will the smoke permanently damage my eyes?

Eye irritation should clear with time once air quality improves. **Consult your optometrist or doctor for advice if symptoms persist or worsen.**

What if I have an emergency?

In emergency situations i.e. if you get dust, chemicals or a foreign body stuck in your eye, or if you suspect a burn to your eyes or eyelids, start first aid (i.e. flush eyes for 10-15 minutes with sterile saline or if unavailable, with tap water) and see a health practitioner **immediately.**