



Preventing eye injuries in children

There are about 1,000 serious accidental eye injuries in children in the UK every year. Even with the best treatment, these injuries can result in poor vision. This leaflet explains what we know about children's eye injuries to help parents take reasonable and informed precautions.

Laser-pen and laser-toy related injuries

If laser light from a powerful laser pen or laser toy is shone onto the eye, this can cause permanent damage to the retina, the nerve layer at the back of the eye that detects light. If this happens, the central vision, (which we use to read and look at fine details), can be permanently affected.

This type of injury is more common in children and young people and can cause serious and untreatable permanent loss of sight. Although there are lasers with low power, many available in the UK, particularly those sourced outside the UK, can be dangerously powerful and it is not always possible to be certain that the

labelling is accurate. Our advice, therefore, is to never give children laser devices as toys and, if you already have one, to remove the batteries and safely dispose of the device.

Sports-related injuries

Sport and leisure injuries are the biggest single cause of accidental eye injury in children. They are more common in older children and in boys and can nearly always be prevented by wearing properly fitting protective eyewear.

There is often sensible advice on eye safety available from supervising groups connected to the sport in question. The table at the end of the leaflet shows which activities carry the greatest risk of eye injury. It is even more important to protect the eyes in such activities if the vision is poor in one eye, or if there has been any previous eye injury or operation.

Toy guns cause a small percentage of all injuries, but the injuries caused are often severe. It has been shown that most of these injuries happen when

children are not under adult supervision. Particularly dangerous are toy guns which use compressed air to fire a projectile (this includes air rifles, BB guns and paintball guns). These cause around 100 injuries a year in the UK and in 20 of these the eye ruptures (bursts). This nearly always results in blindness.

Chemical injuries

Chemicals in the home can be very harmful to the eye; alkalis are even more dangerous than acids. Toddlers are especially at risk. Particular dangers are kitchen and toilet cleaners, spray oven cleaners and laundry detergent capsules. These should be kept where children can't get hold of them, for example in high cupboards or in cupboards with child-proof locks. If your child gets any chemical into their eyes, the most important thing to do immediately is to wash their eyes out with plenty of water and then get medical advice.

Fireworks

Firework injuries happen as often as air gun injuries and do even more damage- half of all injuries result in blindness. Children should never be allowed to buy or use fireworks unsupervised. Organised firework events are much safer than those done at home.

Driving

Wearing a seat belt saves lives and vision. Since this became a legal requirement, we have seen far fewer

eye and face injuries, which were previously seen very often. When used in the right way, airbags reduce the risk of death and serious injury (including eye injuries) in adults and older teenagers. However, for younger children it is not as clear as to how much protection is given and it is possible for children to get serious eye injuries from an airbag. To help prevent this, make sure you have your children seated in your car as the car manufacturer advises (you may need to turn off your airbags for your children or sit them in rear facing seats). Infants in rear facing child safety seats should never ride in the front seat of a vehicle with a passenger side air bag.

Protective eyewear

For activities which carry a risk of eye injury, such as sports and practical laboratory work, children's kite-marked sports goggles are the only glasses which will give true protection to any recognised standard. This is because the lenses cannot be forced through the back of the frame, due to a raised rim behind the lens in line with EU standards. In addition, the frame of sports goggles is cushioned against the facial bones to prevent frame-related injury.

Sports goggles scratch quite easily (as they must be made with polycarbonate) and so they need to be checked regularly.

Scratched goggles should be replaced to ensure they do not reduce vision.

High risk sports:

- Small fast projectiles, such as air rifles, BB or paintball guns
- Hard projectiles/sticks, such as basketball, rounders and softball
- Cricket
- Lacrosse
- Hockey
- Squash
- Racquetball
- Fencing
- Boxing
- Full-contact martial arts
- Intentional injury

Medium risk sports:

- Tennis
- Badminton
- Football
- Volleyball
- Water polo
- Fishing
- Golf

Low risk sports

- Swimming
- Diving
- Waterskiing
- Skiing
- Non-contact martial arts
- Wrestling
- Cycling
- Javelin
- Discus

Eye safe sports:

- Running
- Gymnastics

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Moorfields Direct telephone helpline

Phone: 020 7566 2345
Monday-Friday, 8.30am-9pm
Saturday, 9am-5pm
Information and advice on eye
conditions and treatments from
experienced ophthalmic-trained nurses.

Patient advice and liaison service (PALS)

Phone: 020 7566 2324/ 020 7566 2325
Email: moorfields.pals@nhs.net
Moorfields' PALS team provides confidential advice and support to help you with any concerns you may have about the care we provide, guiding you through the different services available at Moorfields. The PALS team can also advise you on how to make a complaint.

Your right to treatment within 18 weeks

Under the NHS constitution, all patients have the right to begin consultant-led treatment within 18 weeks of being referred by their GP. Moorfields is



committed to fulfilling this right, but if you feel that we have failed to do so, please contact our patient advice and liaison service (PALS) who will be able to advise you further (see above). For more information about your rights under the NHS constitution, visit www.nhs.uk/choiceinthenhs

