

First Aid for Eye Injuries



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Course Name : **Basic Emergency Life Support**

Stage : 2 Lecture 6: **First Aid for Eye Injuries**

Lecture: **Dr. Soma Majedi**

Common causes of eye injuries

- ✓ **Punches** in the eye.
- ✓ **Sports** injuries (such as: blows by hands or other objects such as a ball and other sports equipment).
- ✓ Entry of **volatile parts** during **industrial** work or **fireworks**, etc. into the eye.
- ✓ **Infection** of the eye with chemicals.

First Aid For Eyes

1. Introduction

Please take the time to read this guide before you need to use it in an emergency. Eyesight is a valuable and complex sense and your attention should be drawn to the fact that the vast majority of eye injuries are preventable. Once you have read this guide, make sure that you are aware of the types of eye protection and precautions used within your workplace in order that you do not become a victim.



Prevention is better than cure

Many of the injuries featured in this guide benefit greatly from being washed out or irrigated. If your place of work does not have readily available tap water, e.g. sinks in the WC, or kitchen etc.

There should be provisions made to ensure that current Health & Safety regulations are met by means of sealed eye wash bottles as also indicated by the current advice, they should be in date.

2. Examine The Eye

01. Obtain a history - find out what the casualty has been doing i.e. working with chemicals or power tools.

If chemical contamination is suspected go straight to section 4. If the casualty has been over exposed to light (welding) go straight to section 6.

If the casualty states that he/she has received a 'blow' to the eye go straight to section 5.

02. Sit the casualty down and stand behind them.

03. Ask them to lean back slightly and incline towards the side of the injured eye.

04. With your thumb and index finger, gently part the upper and lower eyelids - explain this procedure to the casualty before you start.

05. With the eyelids parted, ask the casualty to look up, down, left and right, at the same time look for any foreign bodies on the eye's surface. It is important to do this; up to 80% of the eye may be hidden within the socket.



Foreign bodies such as insects, dust and grit causing irritation to the eye can be washed out (irrigated) as shown in section 3.

NB! If there is any sign of an embedded foreign body stuck in any part of the eye or there is a foreign body adhered to the coloured part of the eye (iris) or the black centre of the eye (pupil) you must go to section 7.

3. Irrigating The Eye

Place the casualty in a reclined sitting position as in section 2. If issued with sterile eyewash, carry out the following checks:

01. Make sure the bottle is sealed.

02. Ensure the product is within its expiry date.

03. Check that the contents are not cloudy.

If you notice any of the above do not use the product.

If not issued with eyewash, you may use tap water to irrigate the eye using the following steps:

01. Get a small clean container preferably plastic.

02. Turn on any safe cold drinking water tap and allow to run for 5 seconds.

03. Fill the container to 3/4 full.

Irrigation

01. If possible, place a kidney dish or bowl on the casualty's shoulder with a towel to reduce spillage (the casualty can hold it in place).

02. Inform the casualty of what you are doing and allow a small drop of water to drop onto their cheek; this will ensure they are accustomed to the water temperature of the eyewash.

03. Wash the eye out, from the inner corner outward for 10 seconds at a time. Allow the casualty 5 seconds to blink. Carry on until the foreign body has been removed.

04. Examine the dish for any signs of foreign bodies.

05. Seek medical attention and transport for the casualty whilst keeping both of the casualty's eyes immobile if there is pain or difficulty in seeing.



5. Bruised Sockets

01. Ensure the casualty does not have any additional injuries to the head or neck. If they have, these must take priority.

02. The casualty's eye should be examined as shown in section 2. Care not to exert too much force when opening the eye.

03. If any sign of blood is seen leaking into the eye a medical opinion should be sought immediately.

04. To reduce swelling and bruising, a cold compress may be lightly applied to injury.

05. The casualty should also be referred to medical aid if he or she experiences difficulty in focusing etc.



6. Arc Eye

Background

Over exposure to UV (ultra violet) light sources. Most commonly 'arc welding' can cause a painful condition known as 'arc eye' or 'welders flash'.

Signs and symptoms

The casualty may complain that he/she has a severe headache. They may also complain that their eyes feel gritty and will not be keen to have their eyes exposed to any form of light. Sometimes the casualty sees black spots in centre of vision.

Treatment

01. Darken the room.
02. Lightly pad both eyes.
03. Refer to hospital.

NB! - The condition may also become apparent after exposure to strong sunlight from surfaces such as snow, water or shiny reflective surfaces.



7. Dressings

In general, eyes are padded in order to immobilise them and reduce further damage. The eyes have a sympathetic movement system and therefore move as one unit and as such it is not possible to pad one eye to prevent movement.

Embedded foreign bodies major

01. Leave the object (foreign body) in place.
02. Lie the casualty down.
03. If the object is protruding, immobilise with rolled dressings and hold in place until Emergency Services arrive. Instruct the casualty to close the other eye / pad other eye.

Embedded foreign bodies minor

01. Place a light pad over the affected eye.
02. Gently bandage over both eyes.
03. Send the casualty to hospital with an escort.



4. Chemical Contamination

01. Beware of danger.

02. Quickly place the casualty in the reclined tilting position shown in section 2. If supplied, put on gloves.

03. Immediately begin to irrigate the eye with eyewash or tap water. Unless COSHH (Control of Substance Hazardous to Health) Data Sheet instructs differently, wash for usually 20 mins.

04. Send a colleague to identify the chemical that has caused the injury (it may have First Aid advice on the label).

05. Consult your company's COSHH Data sheet for information.

06. Cover the eye as shown in section 7.

07. Seek immediate medical aid.

Do not:

- Wash the eye out and send the casualty back to work without a medical opinion.
- Discard any chemical containers etc. They may have valuable information.
- Attempt to neutralise the chemical with other chemicals such as acids and alkalis.



8. Getting Help

Call for help

Dial 999 / 112. The operator will ask you which service you require. Once you have stated 'Ambulance' you will be connected to ambulance control. The operator will ask you a set list of questions.

Be prepared to:

01. Confirm your telephone number.
02. Give an accurate description of the incident and casualty's condition.
03. Give your exact location.

Do not hang up at any stage of the conversation. The operator will terminate the call when appropriate.



First Aid Information

Location of nearest eye wash station	
Location of nearest first aid box or facility	
Name and contact number for duty first aider or occupational health nurse	
Telephone Extension	

When any eye injury occurs, a **doctor should be consulted** immediately, **even** if the injury is **minor**, as it is often not possible to determine whether the injury is **mild** or **serious**.

Some **problems** can only be **identified** by a **doctor** such as

- ✓ **Retinal** detachment
- ✓ Some injuries can lead to **high eye pressure**
- ✓ Slight **hemorrhage**

that can only be identified after severe eye damage leading to vision loss.

Eye scratches:

It is most often caused by a **child**, **pet**, or during **exercise**, and a person can feel symptoms right away or get worse hours after infection.

Symptoms

When any of these **signs** after an eye injury notice, **should go to the doctor immediately**, because they **indicate a serious eye injury**:

- Continuous **pain** in the eye.
- **Vision** problem.
- **Cut or lacerated eyelid**.
- One eye does not **move** like the other.
- One eye **protruded** from its place.
- A difference in the **size** or **shape** of the **pupil** of the eye from normal.
- Presence of **blood** in the clear part of the eye.
- Presence of a **foreign** object in the eye that cannot be removed.

What to do

First aid in case of eye scratches:

- ✓ The eye should be **washed** with **clean water** or **saline** solution.
- ✓ **Blinking** several times, as this may help **remove small particles** of **sand** or **dirt** from the eye.
- ✓ The eyes should **not be touched** with anything, rubbed with hands, or trying to remove the foreign body, because this **will harm** the eye.
- ✓ Contact **lenses** should **not be worn** until complete recovery, because wearing them will **slow down** healing and may **cause complications**.
- ✓ If the eye becomes **sensitive** to **light** after the scratch, **sunglasses** should be **worn** to feel comfortable.

What to do

First aid for most eye injuries

In the event of a blow on the eye:

- Gently apply **cool compresses** to **relieve pain** and **swelling** and **avoid** using **frozen food bags** to prevent bacterial eye infection.
- **Avoid** exerting any **pressure** on the eyes.
- ❖ In the event of **darkening** of the eye, **severe pain**, or **disturbance of vision**, you **must go** to the **emergency room** directly.
- ❖ A **blow** on the eye must **not** be **underestimated**, because a light blow can lead to **retinal detachment** and **vision loss**.

What to do

First aid for Eye cut or hole

- The eye must be **covered** with a **clean protective cover** until receiving a doctor.
- **Avoid pressing** on the eye lid.
- **Avoid rinsing** the eyes with **water**.
- **Avoid removing** anything stuck in the eye.
- **Avoid rubbing** or pressing the eye.
- **Do not take aspirin** or any other **anti-inflammatory** medication, as it will **increase bleeding**.
- You must **go** to the **emergency** room or the **doctor** immediately.



What to do

First aid for Chemical burns of the eye

- Immediately **wash** the eye with **clean water**.
- You must **know** the type of **chemical** that caused the injury and **inform** the **doctor** about it, because some substances harm the eye more than others.
- **Go** to the **doctor** directly for an eye examination.

What not to do

First aid for all other eye injuries

- ⊘ Do **not touch, rub** or **press** on the eye.
- ⊘ Do **not** try to **remove** any object stuck in the eye.
- ⊘ **Avoid** applying **ointment** or eye **medication** without a **prescription**.
- ⊘ **Avoid** using eye **drops** without a **prescription**, as they may **increase pain** or **lead to complications**.



FIRST AID TREATMENT FOR MAJOR EYE INJURIES



**DRS
ABCD**

Follow DRS ABCD
Call 000



Rest casualty in a
semi-sitting position
and reassure



Ask the casualty to keep
the injured eye closed



Place a cool damp cloth
onto the injured eye



Cover the injured eye
with a sterile eye pad
and gently secure it into
place using a bandage
or hypoallergenic tape



Monitor casualty until
the arrival of medical
personnel

References

- ✓ <https://cprfirstaid.com.au/eye-injuries-and-ear-injuries>
- ✓ <https://www.aao.org/eye-health/tips-prevention/first-aid-combat-wartime-eye-injury-military-blast>
- ✓ <https://www.healthnewswebsite.com/injury-to-eye-requires-immediate-care/>