

## Module 3

## Bleeds, Burns & Wounds



### Overview

This document has been provided for participants completing a Revive2Survive training course.

Please use this material to complete your course pack and answer your online multiple choice theory assessment. There are no assessments in these modules, please use the link and attachment provided in your course confirmation email.

This information is to be used as a learning tool and while information contained in this online learning is frequently updated, medical advice should be sought from a practitioner in an emergency.

Module 1- CPR Resuscitation & the Airway

Module 2- Medical Emergencies

Module 3- Bleeds, Burns & Wounds

Module 4- Environmental Emergencies

Module 5- Anaphylaxis

Module 6- Asthma

Module 7- Assessment of a Casualty

#### Please note-

- \*\*HLTAID009 Provide CPR is recommended to be renewed every 12 months
- \*\*HLTAID011 Provide First Aid is recommended to be renewed every 3 years



### Module 3 Overview

- Burns
- Bleeding
- Amputations
- Nose bleeds
- Teeth knocked out
- Bandaging
- Joint injuries
- Sprains and Strains
- Fractures
- Slings
- Head injuries & concussion
- Crush injuries
- Potential spinal injury
- Abdominal injuries



## Types of Burns

# Burns to the body can be life threatening and require immediate treatment

### **Types of Burns:**

**Thermal-** Caused by an extreme heat or extreme cold source and sudden increase or decrease in temperature of skin and surrounding tissue, resulting in cell death and charring.

Examples: Hot metals, scalding liquids, steam, flames, frostbite.

**Radiation-** Caused from prolonged exposure to ultraviolet rays.

Examples: From the sun or other sources of radiation including X-ray.

Chemical- That can be absorbed, inhaled, ingested or injected.

Examples: Strong detergents, solvents, acids, alkalis contacting the skin, throat, eyes.

**Electrical-** Caused by an electrical current (either alternating AC or direct current (DC)

Examples: Sources such as electrical cords, power points, wires



## Severity of Burns

#### **Superficial burns (first degree)**

- Red and painful

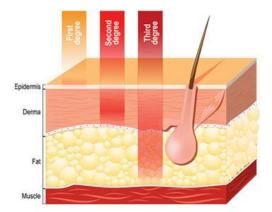
### Partial thickness burn (second degree)

- Severe pain, redness, blistering

### Deep/full thickness burn (third degree)

- Charred or translucent, may be painless

# Degrees of Skin Burns





### **Burn Treatment**

- Cool the burnt area run under cold running water for 20 minutes or more
- Cover the burnt area with <u>non-stick</u> dressing
- Minimise the risk of infection
- Minimise the shock process
- Warm the patient
- Seek medical assistance and monitor

Chemical Burns: it is important to refer to Safety Data Sheet (SDS), remove all clothing affected (cut clothing off rather than pulling off) and follow the above steps and seek advice from local Poisons Information Line (13 11 26)





### **Chemical Burn Treatment**

- Refer to chemical SDS
- Position affected eye down
- Call 000
- Irrigate for 20-30 minutes from the centre of the eye directing away from the body
- Do not wash irritant into uninjured eye
- Reassure and manage shock
- Apply dressing over the affected eye





### **Burn Treatment**

Do not - touch a burn injury

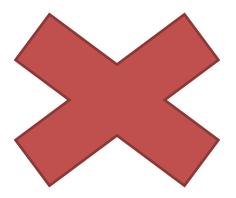
**Do not** - prick or break blisters

Do not - use ice to cool a burn

Do not - apply ointments/lotions

Do not - peel off clothing stuck to the skin

Do not - use adhesive dressing/cotton wool





## Bleeding

Bleeding could result in a medical emergency and must be treated as a priority after breathing is assessed.

#### **Components of Blood-**

**Red** – Produced to help transport more oxygen to cells

**White** – Prevent infection by attacking micro-organisms

**Platelets** – Stop blood loss through clotting

**Plasma** – Straw coloured liquid that is 90% water, that helps transport the above.

#### **Types of Bleeds-**

**Arterial bleeding** – Bright red and spurting

**Venous bleeding** – Darker in colour and oozing from site

**Capillary damage** – Abrasions where skin has been scraped, blood sits on surface

**Internal bleeding** – May not be obvious, symptoms include; signs of shock, pale, cold and clammy skin, tenderness and swelling, pain.



## Treatment of Basic Bleeding

### For any wound follow the RID treatment method:

Rest & Restrict movement – Rest casualty to lower heart rate Immobilise the part

Direct pressure – Apply pressure over the wound with sterile dressing and firm bandage

Tourniquets should only be used for life-threatening bleeding from a limb, where the bleeding cannot be controlled by direct pressure and only if trained to do so or advised by 000.





### **Treatment of Head Wounds**

### Scalp wounds bleed profusely, even when it is minor.

- Use PPE
- Apply direct pressure to wound site
- Sit upright to reduce swelling
- If unconscious, place the casualty in the Recovery Position and seek urgent medical assistance.





### **Treatment of Amputations**

Rest & Restrict movement – Rest casualty to lower heart rate Immobilise the limb

Direct pressure – Apply pressure over the wound with sterile dressing and firm bandage

#### Treat the person first then...

- Place amputated part in an airtight bag
- Float bag with part in iced water
- Transport with casualty
- Do Not place part directly in water
- Do Not place part directly on ice



The bigger the body part, the bigger the bag

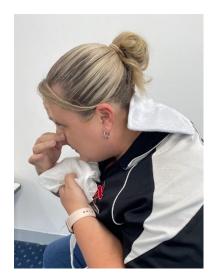


### **Treatment of Nose Bleeds**

A nosebleed can be a minor or significant amount of blood lost. If the nose bleeds consistently for more than 20 minutes, medical assistance is required.

Support the casualty by:

- Sit casualty upright, leaning forward for 10 minutes
- Pinch soft part of nostrils
- Apply a cold compress to forehead or back of neck
- Monitor





### Treatment of Knocked Out Tooth

If a tooth is knocked out, with the root still attached, you can replace the tooth back to its original position in the mouth, if the casualty is conscious and the tooth is whole. If this is not possible:

- Sit casualty upright, head forward
- Control bleeding promptly by biting on a face washer/towel
- If unconscious or the tooth is not whole, have the casualty spit their blood and saliva into cup with the tooth, this will keep the tooth viable until medical help is sought. You can also preserve the tooth in milk.
- Seek dental advice ASAP

**Do Not** place the tooth in the mouth of a drowsy or unconscious person.



### Treatment of Embedded Objects

- Leave the object where it is or leave the casualty in the position they are in. Treat the wound:
- If there is an obvious embedded object causing bleeding, place pressure around the object (donut bandage).
- Do not remove the embedded object because it may be plugging the wound and restricting blood loss.
- Apply padding around or on each side of the protruding object, with pressure over the padding.
- Seek urgent medical attention. Call 000.

Do not remove an embedded object.





### Treatment of Joint Injuries

**Sprain** Overstretched or torn ligament

**Strain** Overstretched or torn muscle or tendon

(soft tissue that connect muscle to bone)

**Fracture** A crack or break in a bone

**Dislocation** A joint is displaced





## **Sprains and Strains**



Rest



• Ice — apply ice on top of bandage



• Compress – apply compression bandage



Elevate



• Refer/Report





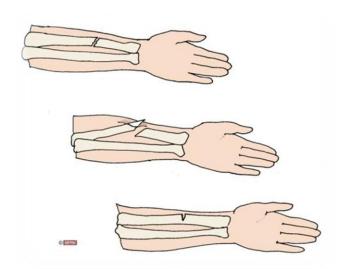
### **Treatment of Fractures**

### **Key steps for a suspected fracture:**

- Rest
- Immobilise
- Support

### Signs and symptoms

- Shock
- Pain at or near the site
- Deformity
- Swelling
- Loss of power to the limb



### For an arm fracture, three major immobilisation techniques:

- Forearm sling Fractured forearm and wrist
- Elevated arm sling Fractured hand, collar bone & dislocated shoulder
- Collar and cuff sling Fractured upper arm



## **Head Injuries**

A blow to the head may cause an injury to the scalp, skull, brain, eyes, ears or spine and can result in concussion.

### Signs & Symptoms:

- Headache Blurred Vision Confusion/disorientation
- Nausea Vomiting Unconsciousness
- Bleeding or clear fluid from ear, nose or mouth

#### **Management:**

#### If conscious-

- Support and immobilise the head and neck
- If bleeding or clear fluid from the nose or ear, lay or sit in a comfortable position, towards injured side
- Seek urgent medical help (call 000) and reassure patient

#### If unconscious-

- Urgent medical assistance (call 000), Check Airways and follow DRSABCD
- Check and control bleeding and cover wounds



### Concussion

A temporary loss of consciousness or altered state of consciousness due to a blow to the head or jaw.

#### **Signs & Symptoms:**

- Unconsciousness Loss of memory Blurred Vision
- Headache Nausea Vomiting
- Loss of coordination

### **Management:**

#### If conscious-

- Support and immobilise the head and neck
- Reassure and rest the person with head and shoulders raised on pillows
- Monitor and seek medical aid if necessary

#### If unconscious-

- Clear Airway
- Check and control bleeding and cover wounds
- Check more thoroughly for possible spinal injury
- Be prepared for possible vomiting which may block the airway, turn into recovery position
- Seek urgent medical assistance (call 000)



## Potential Spinal Injury

#### **Common Causes:**

- A fall from a height
- Diving into shallow water
- Falling awkwardly
- Vehicle accidents
- Heavy object falling onto a casualty
- Sporting incidents

### Signs & Symptoms:

- Numbness, tingling or change in sensation
- Weak or absent movement of limbs
- Tenderness and/or bruising in the skin over the spine
- Pain or pressure in your head, need or back
- Difficulty breathing
- Loss of bladder and/or bowel control







## Crush Injuries

- When part of the body is crushed by a heavy object or prolonged pressure, there is always a serious risk of death.
- All crushing forces must be removed immediately after the incident if physically possible.
- Should there be a delay in releasing a crush force, a complication known as "Crush Syndrome" may develop.
- Crush syndrome can result in death due to heart rhythm disturbances, kidney or liver failure, stroke, chest complications or infection. Irreversible damage may have already been sustained despite all appropriate medical management.
- The likelihood of developing acute crush syndrome is directly related to the compression time, therefore crushed persons should be released as quickly as possible, irrespective of how long they have been trapped.



## **Abdominal Injuries**

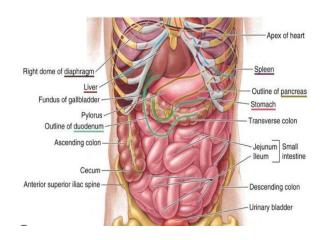
Abdominal pain is pain felt anywhere from below your ribs to your pelvis. The abdomen houses many organs, including your stomach, liver, pancreas, small and large bowel, and reproductive organs.

### Why are abdominal injuries dangerous?

An abdominal injury can cause serious damage to internal organs, and a person could bleed to death, as the area is unprotected. Call 000 for an ambulance if the person is in extremely bad pain or if there is a deep wound.

#### When to seek medical help:

- Severe pain
- Pale and clammy
- Fever and sweats
- Blood in bowel motion or urine
- Pain and vomiting blood





## **Module 3 Complete**

Please continue to Module 4





For first aid supplies visit-

www.firstaidgearaustralia.com.au



