

Module 3

Bleeds, Burns & Wounds



Online Module Overview

This document has been provided for participants completing a Revive2Survive First Aid Training course.

Please use this material to complete the Course Pack and answer the online multiple-choice theory assessment.

There are no assessments in these module packs, 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

Embedded Objects

Sprains and Strains

Fractures and Slings

Head injuries & Concussion

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

Burns can have their severity classified by depth of the burn;

Superficial burns (first degree)

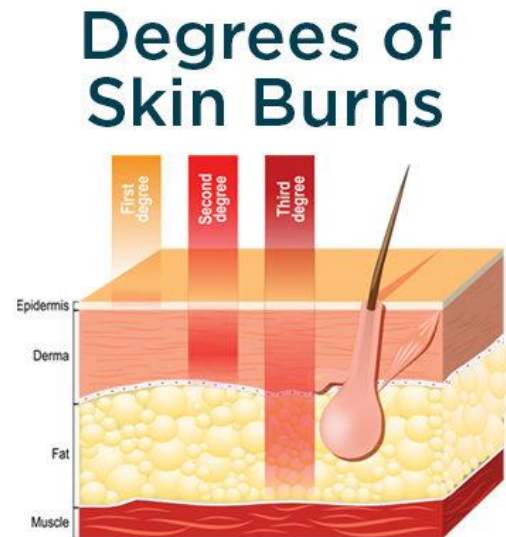
- Red and painful

Partial thickness burn (second degree)

- Severe pain, redness, blistering

Deep/full thickness burn (third degree)

- Charred or translucent, may be painless



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



Thermal Burn Treatment

- Cool the burnt area – run under cold running water for 20 minutes or more
- Remove any clothing around burnt area, do not remove any clothing that is stuck to skin
- Cover with sterile non-stick dressing or cling wrap
- Assess for shock
- Warm the patient if other areas of body are cold
- Seek medical assistance and monitor
- Remove jewellery to area as needed, before swelling increases



Radiation Burn Treatment

- Move casualty away from the source of radiation
- Cool the burnt area – run under cold running water for 20 minutes
- Rehydrate with frequent small sips of clear fluids
- Seek medical assistance as needed and monitor



Chemical Burn Treatment

- Remove the casualty from any danger and follow DRSABCD
- Immediately irrigate the area with cold running water for 20-30mins
- Use appropriate PPE to remove any clothing off the casualty
- Gently remove any loose clothing by cutting
- Cover with sterile non-stick dressing or cling wrap

For chemical burns, it is important to refer to Safety Data Sheet (SDS) and seek advice from local Poisons Information Line (13 11 26).

Treatment for burn to the eye-

- 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



Electrical Burn Treatment

- Must switch off power source before touching casualty
- If source cannot be switched off, do not risk injury to yourself by touching casualty

If conscious-

- Once source is switched off, call 000, cool the burn under running water for 20mins
- Cover burn with sterile non-stick dressing or cling wrap

If unconscious-

- Make area safe from dangers
- Follow DRSABCD

For high voltage power lines-

- If in dry conditions, stay at least 6 metres away
- If in wet conditions, stay at least 9 metres away
- Keep bystanders clear
- Contact electrical company



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 & **R**estrict 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 Basic Bleeding

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
- Seek medical attention for head injuries and assess for abnormal symptoms or signs of concussion



Treatment of Amputations

Rest & **R**estrict 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
- Place (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 tooth is not whole and the casualty **is** conscious, have the casualty spit their blood and saliva into cup or zip lock bag with the tooth, this will promote viability until medical help is sought.
- If the casualty is unconscious or unable to spit blood & saliva, the tooth can be preserved in cow's 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.



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



Treatment of Sprains and Strains

R

- Rest

I

- Ice – apply ice on top of bandage

C

- Compress – apply compression bandage

E

- Elevate

R

- Refer/Report



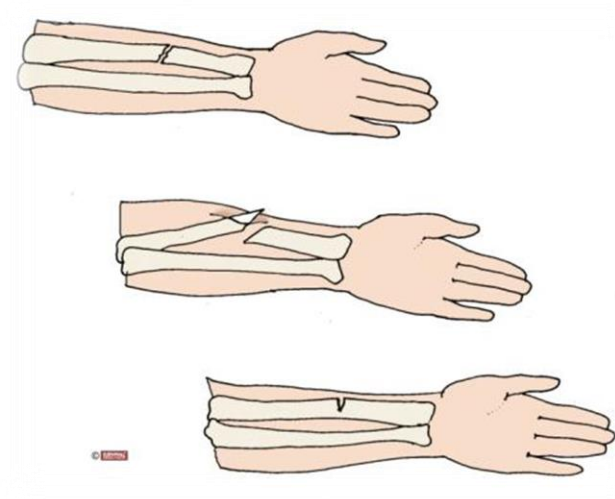
Treatment of Fractures

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, collarbone

Head Injuries & Concussion

Concussion is a mild traumatic brain injury that happens when the brain moves quickly within the skull and the brain hits against the hard, bony surface of the skull. This results in altered brain function.

Head injuries are classified as: **mild** (no concussion or possible concussion), **moderate** or **severe**

Signs & Symptoms:

- Unconsciousness
- Headache
- Loss of coordination
- Neck pain
- Confusion
- Visual disturbances
- Fogginess, slower thinking or memory issues
- Loss of memory
- Nausea
- Anxiety
- Fatigue
- Dizziness
- Sleep disturbances
- Blurred Vision
- Nausea/Vomiting
- Irritability/mood changes
- Light or noise sensitivity
- Concentration and balance difficulties



Head Injuries & Concussion

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)



Head Injuries- Mild

Mild Head Injury (No Concussion)

- May display altered level of consciousness at the time of the injury
- Is alert and interacts with you
- Has not vomited
- May have bruises or cuts on their head
- Is otherwise appearing their normal selves

Medical advice should be sought if new symptoms of head injury develop, or you are worried about them.

Mild Head Injury (Possible Concussion)

A mild head injury with possible concussion is when a person:

- May display altered level of consciousness at the time of the injury
- May be showing concussion symptoms including physical symptoms, altered level of consciousness, emotional changes, altered thought processing (previous slide)

Medical advice is needed if any concussion symptoms are present.



Head Injuries- Moderate & Severe

Moderate to severe

If the person has a moderate or severe head injury, they may:

- Loss of consciousness
- Be drowsy and not respond to your voice
- Be dazed or shocked
- Not cry straight after the knock to the head (younger children)

Seek help immediately by calling triple zero (000) if:

- Casualty loses consciousness (passes out)
- Has a seizure, fit or convulsion
- Severe or increasing headache
- Vomits more than once
- Increasing agitation, restlessness or combativeness
- Injury caused by high speed/heights greater than 1 metre



Potential Spinal Injuries

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, neck or back
- Difficulty breathing
- Loss of bladder and/or bowel control



Airways takes precedence over any suspected spinal injury!



Abdominal Injuries

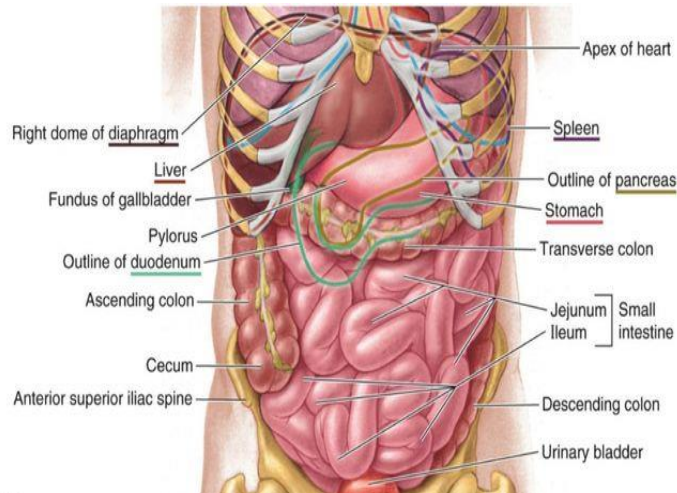
Abdominal pain is pain felt anywhere from below your ribs to your pelvis. The abdomen houses many organs, including your stomach, liver, pancreas, small and large bowel, and reproductive organs.

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

