

Early Years Educator

Managing Paediatric Illness, Injuries and Emergencies Unit Two



Introduction

The purpose of this unit is for learners to attain knowledge and practical competences required to deal with the management of paediatric illness, injuries and emergencies.

An understanding of the more common paediatric illnesses and injuries is essential for individuals who work in an early years setting. Children and infants may arrive at the setting in apparent health but develop illness during the course of the day. Other children may already have chronic conditions and may suffer from an acute episode, which must be managed within the setting.

Learners will be required to demonstrate the ability to administer first aid to an infant or child with injuries and conditions such as a suspected fracture, or a head, neck or back injury. The unit also gives learners the knowledge and understanding required to deal with different situations to reduce the distress for children and infants. The unit enables learners to investigate the causes and treatment of avoidable injuries such as poisoning, electric shocks and exposure to extremes of cold and heat. Learners will also understand how to administer first aid to infants and children with acute medical conditions or sudden illnesses, including trauma and foreign bodies affecting the eyes, ears and nose, burns and scalds, and anaphylaxis.

Learners who successfully complete this unit will be equipped to manage emergency situations in a professional and competent manner to the benefit of both staff and children in the setting.

In this development area you will cover the following learning outcomes:

1. Be able to administer first aid to an infant and a child with a suspected fracture
2. Be able to administer first aid to an infant and a child with a head, neck or back injury
3. Understand how to administer first aid to an infant and a child with conditions affecting the eyes, ears and nose
4. Understand how to administer emergency first aid to an infant and a child with an acute medical condition or sudden illness
5. Understand how to administer first aid to an infant and a child who is experiencing the effects of extreme heat and cold
6. Understand how to administer first aid to an infant and a child who has sustained an electric shock
7. Understand how to administer first aid to an infant and a child with burns or scalds
8. Understand how to administer first aid to an infant and a child who has been poisoned
9. Understand how to provide first aid to an infant or child with anaphylaxis

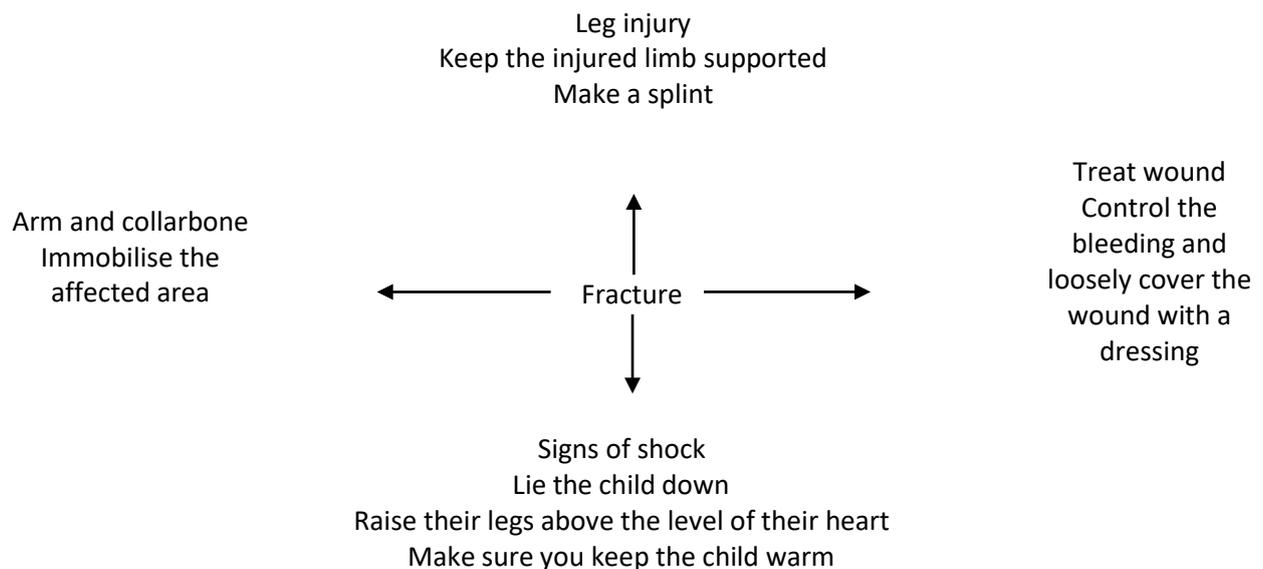
Be able to administer first aid to an infant and a child with a suspected fracture

Common types of fractures include Greenstick fractures, open fractures, closed fractures and hairline fractures:

- Greenstick fractures: the bone bends and splits but does not break (just like a green stick). There is little damage to the surrounding tissues
- Open fractures: the broken end of the bone breaks through the skin and may stick out
- Closed fractures: the bone is broken but does not damage the skin
- Hairline fractures: the bone is only partially fractured. These types of fracture can be difficult to detect on x-rays

How to manage a fracture

- Do NOT attempt to straighten a broken limb
- Do NOT give an injured child anything to eat or drink

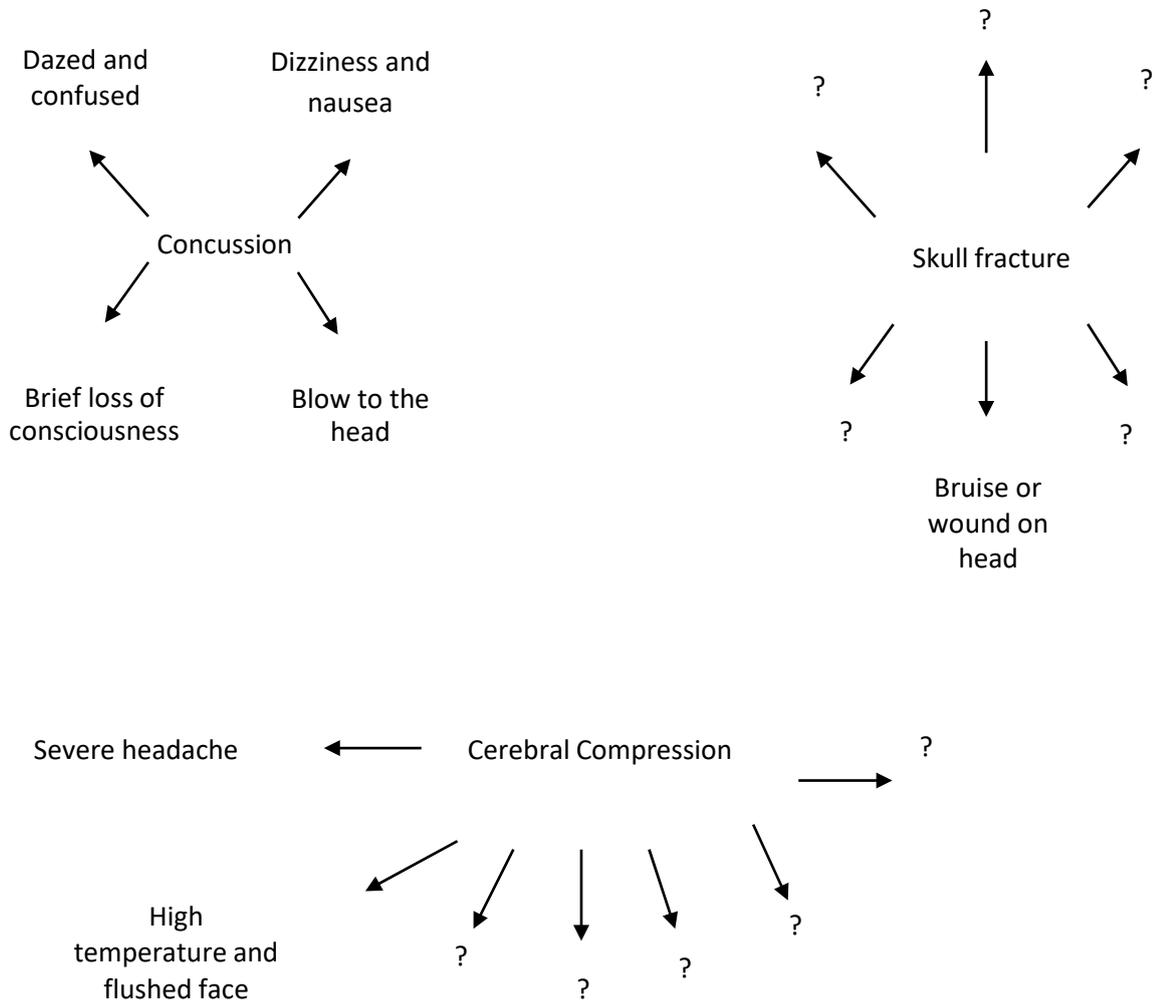


How to manage a dislocation

- The principles of managing a dislocation are the same as managing a fracture
- Get the child to hospital, immobilise and support the affected area

Be able to administer first aid to an infant and a child with a head, neck or back injury

Head Injuries



What are the missing signs or symptoms?

Skull fracture

1. _____
2. _____
3. _____
4. _____
5. _____

Cerebral Compression

1. _____
2. _____
3. _____
4. _____
5. _____

Managing a head injury

<i>If Conscious</i>	<i>If Unconscious</i>
Help to lie down – do not turn head	Open airway and check for breathing
Control any bleeding from scalp	Be prepared to give chest compressions and rescue breaths
Dial 999 for an ambulance	Dial 999 for an ambulance
If there is a discharge from ear, cover with a sterile dressing	Monitor and record vital signs until professional help arrives
Monitor and record vital signs until professional help arrives	

In cases of spinal injury, make sure the child does not move. Professional medical staff will confirm or rule out spinal injury

Understand how to administer first aid to an infant and a child with conditions affecting the eyes, ears and nose

Foreign bodies in eyes, ears and nose

EYES

Try to remove with a swab

Try flushing out

If metal or glass, take to hospital immediately

EARS

If an insect, try flushing out

Do not attempt to remove if object is hard
Take to hospital

NOSE

Do not try to remove take to hospital immediately

Other common eye injuries

Injuries	Signs and symptoms	Treatment
Chemical burn	Red watery eye Pain and difficulty in opening eye	Wash chemical out immediately Cover injured eye Call 999 for ambulance, or take to hospital
Black eye	Bruising of skin around eye bones	Place an eye pack over the eye Consult a doctor if there appears to be serious damage

Understand how to administer emergency first aid to an infant and a child with an acute medical condition or sudden illness

Chronic medical conditions

Condition	Signs and symptoms	Treatment
Sickle cell anaemia	Suddenly becomes unwell Severe abdominal /chest pains Headache / neck stiffness	Contact parents/carers – urgent hospital treatment required
Diabetes – a Hypoglycaemic attack (<i>hypo</i>)	Weakness or hunger Confused/aggressive behaviour Loss of concentration /coordination Rapid shallow breathing Sweating, dizziness, glazed eyes, headache, trembling or shaking	Stay with child Sit them down and reassure them Give sugary drinks and sweet food If no quick recovery, call ambulance and place the child in recovery position
Asthma	Shortness of breath Wheezing Feeling of tightness in the chest	Make the child comfortable and encourage slow breathing Do not let the child lie down Help the child to use their inhaler

Meningitis

Babies under 12 months

Bulging fontanelle

High temperature

Floppy or stiff body

High pitched moaning cry

Red/purple spots that do not fade under pressure (glass test)

Difficult to wake up

Refuses to feed

Older children

Neck stiffness and joint pains

Neck arching backwards

Cannot tolerate light

Red/purple spots that do not fade under pressure

GET MEDICAL HELP IMMEDIATELY

Febrile Convulsions

Signs and Symptoms

- Child may be flushed and sweaty and the forehead will feel very hot to the touch
- Child may stiffen their limbs which will twitch or shake; this can carry on for up to five minutes
- Child may arch their back and clench their fists
- Child may hold their breath, making their face appear blue
- Child may be incontinent of urine or faeces
- Child may become unconscious from the violence of the twitching

Treatment

- Remove any clothing and open the window
- Lay the child down on their side. Provide support with a cushion or a rolled up blanket
- Ask a colleague to call a doctor at once. Call an ambulance if the convulsions last for longer than five minutes
- Use tepid water (slightly warm) to sponge over the child. The convulsion will stop once the child has cooled down sufficiently
- Contact the child's parents or carers to inform them of what has happened
- Once recovered, encourage the child to drink plenty of water and give them the recommended dose of paracetamol-based syrup. This will help to reduce the body temperature and relieve discomfort

Understand how to administer first aid to an infant and a child who is experiencing the effects of extreme heat and cold

Hypothermia

Hypothermia happens when someone's body temperature drops below 35°C (95°F). Normal body temperature is around 37°C (98.6°F).

Hypothermia can become life-threatening quickly, so it's important to treat someone with hypothermia straight away. Severe hypothermia, when the body temperature falls below 30°C (86°F), is often fatal.

Hypothermia is usually caused by being in a cold environment for a long time. This could be from staying outdoors in cold conditions, falling into cold water, or from living in a poorly heated house.

Elderly people, babies, homeless people and anyone who is thin and frail or not able to move around easily are particularly vulnerable.

What to look for - Hypothermia

These are the four key things to look for:

- Shivering, cold, pale, and dry skin
- Tiredness, confusion, and irrational behaviour
- Slow and shallow breathing
- Slow and weakening pulse

What you need to do - Hypothermia

- If you notice any of these symptoms, you need to warm them up.
- If they are outside, get them indoors. Cover them with layers of blankets and warm the room to about 25°C (77°F). Give them something warm to drink, like soup, and high energy food, like chocolate.

- Once they have warmed up, tell them to see a doctor as soon as possible

- If they lose responsiveness at any point, open their airway, check their breathing and prepare to treat someone who's become unresponsive.

- If they are outdoors and you can't move them indoors:
 1. Find something for them to lie on to protect them from the cold ground, like heather or pine branches.
 2. If their clothes are wet, change them into dry clothes, if possible. Put them in a sleeping bag and cover them with blankets, if available. Make sure their head is covered too.
 3. Then call 999 for an ambulance. If possible, don't leave them by themselves but stay with them until help arrives.
 4. While you wait for help to arrive, keep checking their breathing, pulse and level of response.

Heatstroke

Heatstroke is caused by a failure of the thermostat in the brain which regulates the body temperature. If someone has a high fever or has been exposed to heat for a long time, then their body can become dangerously overheated.

Sometimes, people get heatstroke after suffering from heat exhaustion. When someone gets too dehydrated, they stop sweating which means their body can't cool down anymore, so they develop heatstroke.

Heatstroke can develop with very little warning, causing unresponsiveness within minutes of someone feeling unwell. Your priority is to cool them down as quickly as possible and get them to hospital.

These are the six key things to look for:

- Headache, dizziness and discomfort
- Restlessness and confusion
- Hot flushed and dry skin
- A fast deterioration in the level of response
- A full bounding pulse
- Body temperature above 40°C (104°F)

What you need to do - heatstroke

- Quickly move them to a cool place and remove their outer clothing but ensure you maintain their dignity.
- Then call 999/112 for an ambulance.

- Wrap them in a cold wet sheet and keep pouring cold water over it until their temperature falls to at least 38°C (or 100.4°F). Measure this with a thermometer under their tongue or under their armpit.
- If you can't find a sheet, fan them or sponge them down with cold water to keep them cool.
- Once their temperature seems to have gone back to normal, replace the wet sheet with a dry sheet.
- While waiting for help to arrive, keep checking their temperature, as well as their breathing, pulse and level of response.
- If they start getting hot again, repeat the cooling process to lower their temperature.
- If they lose responsiveness at any point, open their airway, check their breathing and prepare to treat someone who's become unresponsive.

Understand how to administer first aid to an infant and a child who has sustained an electric shock

Electric Shock

What You Can Do

- Disconnect the power supply before you touch an injured child who is still receiving current; pull the plug or turn off the main switch.
 - Never touch a live wire with your bare hands. If you have to lift a live wire from a child, use a dry stick, a rolled-up newspaper, thick clothing, or another sturdy, dry, non-metallic object that won't conduct electricity.
 - Move the child as little as possible because severe electric shock may have caused a spinal fracture.
 - If you can't remove the source of the current, try to move the child, but don't use your bare hands. Insulate yourself with rubber or with any of the nonconductive items suggested for lifting a live wire so that the current doesn't pass from the child's body to yours.
 - Once the current is off, quickly check the child's breathing, pulse, skin colour, and alertness. If the child isn't breathing or there is no heartbeat, begin CPR immediately while someone else goes for medical help.
 - Once the child is safely removed from the current, check him for burns and call for an ambulance
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- *A child who has received an electric shock should always be seen by a doctor because shock may cause internal damage that can't be detected without a medical examination.*
 - *Mouth burns (such as from biting an electric cord) are often much deeper than they appear. Practitioners must be alert to the possibility of bleeding from mouth burns hours or even days after the injury. Always inform parents / carers of this. If bleeding occurs, apply a clean pad and call your doctor immediately.*

Understand how to administer first aid to an infant and a child with burns or scalds

Symptoms of burns and scalds

The symptoms of a burn or scald will vary depending on how serious it is. Some minor burns can be very painful, while some major burns may not hurt at all.

Symptoms of a burn may include:

- red skin
- peeling skin
- blisters
- swelling
- white or charred skin

The amount of pain felt is not always related to how serious the burn is.

Superficial epidermal burns

Superficial epidermal burns are where the epidermis is damaged. Your skin will be red, slightly swollen and painful, but not blistered.

Superficial dermal burns

Superficial dermal burns are where the epidermis and part of the dermis are damaged. Your skin will be pale pink and painful, and there may be small blisters.

Deep dermal or partial thickness burns

Deep dermal or partial thickness burns are where the epidermis and the dermis are damaged. This type of burn makes your skin turn red and blotchy. Your skin may also be dry or moist, become swollen and blistered, and it may be very painful or painless.

Full thickness burns

Full thickness burns are where all three layers of skin (the epidermis, dermis and subcutis) are damaged. In this type of burn, the skin is often burnt away, and the tissue underneath may appear pale or blackened. The remaining skin will be dry and white, brown or black with no blisters. The texture of the skin may also be leathery or waxy.

First aid for burns

Stop the burning process as soon as possible. This may mean removing the person from the area, dousing flames with water, or smothering flames with a blanket. Don't put yourself at risk of getting burnt as well.

Remove any clothing or jewellery near the burnt area of skin, including babies' nappies. However, don't try to remove anything that's stuck to the burnt skin as this could cause more damage. Cool the burn with cool or lukewarm running water for 20 minutes, as soon as possible after the injury. Never use ice, iced water, or any creams or greasy substances such as butter.

Keep the person warm. Use a blanket or layers of clothing but avoid putting them on the injured area. Keeping warm will prevent hypothermia, where a person's body temperature drops below 35C (95F). This is a risk if you are cooling a large burnt area, particularly in young children

Understand how to administer first aid to an infant and a child who has been poisoned

A poison is a substance that can be liquid, solid or gaseous.

Poisonous substances can enter a baby or an infant's body in many ways. It may be that they have drunk a toxic liquid or swallowed a solid substance such as pills and other solids. It can also be digested unknowingly through inhaling a gaseous substance such as carbon monoxide.

There are four ways in which poisons can enter the body:

- Eyes
- Nose
- Mouth
- Skin

Swallowed poisons

Poisons are substances that can cause temporary or permanent damage if too much is absorbed by the body.

Swallowed poisons include chemicals, drugs, plants, fungi and berries.

Dangerous chemicals include household products like bleach, which can poison or burn the body if swallowed.

Poisonous plants include foxgloves, wild arum and certain types of mushroom. Eating laburnum seeds can cause seizures.

Drugs, both prescribed or those bought over the counter, can also be harmful if someone takes too many.

What to look for - swallowed poisons

If you think someone may have swallowed poison, these are the five key things to look for:

- Nausea and vomiting (sometimes blood-stained)
- Cramping stomach pains
- A burning sensation
- Partial loss of responsiveness
- Seizures

What you need to do - swallowed poisons

- If the person is conscious, ask them what they have swallowed, how much and when. Look for clues, like plants, berries or empty packaging and containers.
- Call 999 or 112 for medical help and tell them as much information as possible.
- Keep checking their breathing, pulse and level of response.
- If they become unresponsive, open their airway and check breathing. Follow the instructions for treating someone who is unresponsive.

- Never try to make the person vomit, but if they vomit naturally then put some of their vomit into a bag or container and give it to the ambulance. This may help them identify the poison.

Understand how to provide first aid to an infant or child with anaphylaxis

Anaphylaxis is a severe and potentially life-threatening reaction to a trigger such as an allergy.

Some allergies can be contained in:

- Food
- Medicines
- Insect stings
- Anaesthetics

Symptoms of anaphylaxis

Anaphylaxis usually develops suddenly and gets worse very quickly.

The symptoms include:

- feeling lightheaded or faint
- breathing difficulties – such as fast, shallow breathing
- wheezing
- a fast heartbeat
- clammy skin
- confusion and anxiety
- collapsing or losing consciousness

There may also be other allergy symptoms, including an itchy, raised rash (hives), feeling or being sick, swelling (angioedema), or stomach pain.

Anaphylaxis is a medical emergency. It can be very serious if not treated quickly.

If someone has symptoms of anaphylaxis, you should:

- use an adrenaline auto-injector if the person has one – but make sure you know how to use it correctly first
- call 999 for an ambulance immediately (even if they start to feel better) – mention that you think the person has anaphylaxis
- remove any trigger if possible – for example, carefully remove any wasp or bee sting stuck in the skin
- lie the person down flat – unless they're unconscious, or having breathing difficulties
- If they are unconscious, place them in the recovery position
- give another injection after 5-15 minutes if the symptoms don't improve and a second auto-injector is available