# PLATINUM HEALTH



# FIRST AID AND EMERGENCIES

# **CONTACT DETAILS**

Medical emergencies: 082 911

Medical emergencies and Case Management after hours: 082 800 8797

#### CASE MANAGEMENT

The Case Management department are situated in the Old Mutual Building,

171 Beyers Naudé Drive, Rustenburg

Tel: 014 591 6600 or 080 000 6942

After Hours: 082 800 8797

Fax: 086 247 9265 or 086 263 8878 or 086 233 2406

Email: plathealth@angloamerican.com (specialist authorisation)

Hospitalconfirmations@angloamerican.com (hospital pre-authorisation and authorisation)

ZZGP latinum Health Case Management@angloamerican.com (alternative email address for both specialist and hospital add

authorisation)

#### CHRONIC MEDICATION/CLINICAL MOTIVATION

PHMC Pharmacy: 014 590 1900 Fax: 086 577 0274

 ${\bf Email:} \qquad \qquad {\bf ZZGPlatinum Health Chronic Medication@angloamerican.com}$ 

ZZGP latinum Health Clinical Motivation@angloamerican.com



# **CONTACT DETAILS**



# IN CASE OF AN EMERGENCY

In case of a medical emergency, Platinum Health members and dependants may go to the nearest medical facility. Platinum Health is contracted to Netcare 911, South Africa's largest private emergency service. By dialling 082 911 from any cellular phone or landline, you have access to a national network of rapid response vehicles, ambulances and emergency aircraft.

If possible, handle all emergencies through Platinum Health Case Management, 082 800 8727. However, in some cases it may be necessary to call 082 911 directly, or someone else might call it on your behalf when you are unable to do so.

As is the case for all hospital admissions, authorisation is also required. Please obtain authorisation (at the latest) on the first working day following the emergency. Members or dependants who have difficulty obtaining services should call **Case Management at cell no 082 800 8727** (printed on Platinum Health membership cards and licence holders), which is attended at all times, including after hours and on weekends.

It is important to always carry your membership card on hand as it is your gateway to proper and appropriate care. We recommend that you save the Platinum Health emergency number 082 800 8727, under "ICE" (In Case of Emergency) on your cell phone.

In the unfortunate event of a car accident or any other emergency situation, emergency personnel are trained to look for a membership card or check for an ICE number if there is no visible proof of medical cover.

If they do find identification, the patient is transported to the nearest private hospital. Should they find none of these; the patient will probably be transported to the nearest state medical facility.

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## **ABRASIONS**

Abrasions happen so often that they seem unimportant. Good home treatment will reduce scarring and prevent infection.

#### Home treatment

- Abrasions are usually very dirty. Remove
  large pieces of debris with tweezers. Then scrub
  well with soap and water and a facecloth. The injured
  person will probably complain loudly, but thorough cleaning is necessary
  to prevent infection and scarring. Scrubbing may cause some minor
  bleeding. Using a water sprayer from the kitchen sink is a good way to wash
  an abrasion
- Apply steady pressure with a clean bandage or cloth to stop bleeding.
- Apply ice to reduce swelling and bruising.
- If the abrasion is large or in an area that may be rubbed by clothing, apply either an antiseptic lotion or antibiotic ointment to the abrasion and cover it with a non-stick bandage.

## When to Seek Healthcare

- If bleeding continues after 30 minutes of pressure.
- If your tetanus injections are not up to date.
- If you cannot clean the abrasion well because it is too large, deep or painful
  or because dirt and debris are embedded under the skin.

# ANIMAL AND HUMAN BITES

Rabies is endemic in some parts of South Africa, such as the Northern Province, Mpumalanga, KwaZulu Natal, and the Eastern Cape.

After being bitten by an animal, most people want to know if they need a rabies injection.

The main wild animal carriers of rabies are jackals, mongoose, gerbils, meerkats, and other rodents. Pet dogs, cats, and hamsters that have been vaccinated rarely

have rabies. However, many stray animals have not been vaccinated. Rabies is quite rare, but it is fatal if you are not vaccinated soon after exposure. The vaccination is no more painful than a typical injection. Report all wild animal bites to your doctor and the Health department or Animal Control department.

# Signs of infection

Infection can develop after a wound to the skin or mucous membranes, especially if the wound is not cleaned well. Cuts, abrasions, puncture wounds, burns, blisters, stings, bites, and rashes can all become infected.

Bruises, sprains, broken bones, and other conditions can lead to infection under the skin.

#### Signs of infection include:

- Increased pain, swelling, redness, warmth, or tenderness.
- Red streaks extending from the affected area.
- Discharge of pus.
- Swollen lymph nodes in the neck, armpits, or groin.
- Fever of 38°C or higher with no other cause.

Call a health professional if signs of infection develop after a wound or injury. You may need to be treated with antibiotics. Bites that break the skin can cause infections. Cat and human bites are particularly prone to bacterial





# ANIMAL AND HUMAN BITES

infection. You can get tetanus from any bite if your tetanus injections are not up to date.

## Prevention

- Vaccinate all pets against rabies. Do not keep wild animals as pets.
- Do not disturb animals not even your pets while they are eating.
- Teach children not to approach or play with stray animals.
- Do not touch wild animals or provoke them to attack. Do not handle sick or injured animals.

## Home Treatment

- Scrub the bite immediately with soap and water. Treat it as a puncture wound
- If you are bitten by a pet dog, cat, or hamster, find out whether the animal has been vaccinated for rabies.
- A healthy pet that has bitten someone should be confined and observed for 10 days by a veterinarian to see if the pet develops symptoms of rabies. If you cannot locate the pet's owner, contact the Health department.
- If you are bitten by a wild animal, contact your doctor and the Health department. The Health department can tell you whether that animal is a rabies carrier in your area, and whether treatment is needed.

## When to Seek Healthcare

- If the bite is from a bat or other wild animal.
- If the bite is from a human or a cat
- If the bite is from a dog, cat, or hamster that is acting strangely or foaming at the mouth, or if the animal attacked for no apparent reason.
- If the bite is from a pet whose owner cannot be found or cannot confirm that the animal has been vaccinated for rabies.
- If there is a loss of feeling, or function below the bite.
- If the bite is severe and may need stitches or if it is on your face, hand, or foot, or over a joint. If stitches are needed, they usually should be done within 8 hours
- If signs of infection develop.



# **BLOOD UNDER A NAIL**

Fingernails and toenails often get crunched, bashed, or smashed.
These injuries usually aren't too serious, but if there is bleeding under the nail, the pressure can be very painful.



The only way to relieve the throbbing and pain is by making a hole in the nail to drain the blood. Draining is helpful only if you have severe, throbbing pain (you can feel the pulse beating under the nail) that keeps you from sleeping. **This procedure is not necessary or recommended unless you are having severe pain.** 

## **Home Treatment**

- Apply ice and elevate the injured area as soon as possible to minimise swelling and relieve pain. Paracetemol or ibuprofen will also ease discomfort.
- If you have severe, throbbing pain, make a hole in the nail to relieve the
  pressure. (Do not do this unless you are in pain and you are confident
  you can do it without burning yourself. Do not do this if you have
  diabetes or circulation problems.) Follow these steps:
  - Straighten a paper clip and heat the tip in a flame until it is red-hot.
  - Place the tip of the paper clip over the area with blood and let it melt through. You do not need to push. This will not be painful, because the nail has no nerves. Go slowly and reheat the clip as necessary. A thick nail may take several ties.
  - As soon as the hole is complete, blood will escape and the pain will be relieved. Pain and pressure that are not relieved by this procedure may indicate a more serious injury, such as a broken finger or toe or a deep cut. In this case, you should see your doctor.
  - Soak the finger twice a day for 15 minutes in warm, soapy water. Apply an antibiotic ointment and cover the nail with an adhesive bandage.



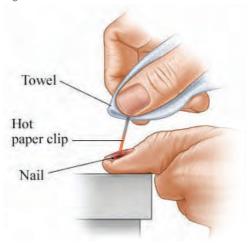


# BLOOD UNDER A NAIL

- If the pressure builds up again in a few days, repeat the procedure, using the same hole.

## When to Seek Healthcare

- If blood under a nail is causing severe pain and you are not willing to drain the blood from the nail yourself.
- If you drained the blood from under the nail, but your fingertip or the tip of your toe still hurts a lot.
- If you smashed your toenail and you have a condition that decreases blood flow to the feet such as diabetes or peripheral vascular disease.
- If signs of infection develop.
- If your nail has torn or separated from the nail bed and you need help removing it.



Use a red-hot paper clip to relieve the pain caused by blood under a fingernail or toenail.

Who needs to be trained to help a person who is having a breathing emergency. You do. If you have children, drive a car, shop at the mall, or go anyplace where a person may be in a life-threatening situation, you need to know how to respond.

An added benefit is the confidence you will have when you know you can help a person when it matters most. **The guidelines presented in this book are not meant to replace formal training from a certified instructor.** They are here for you to use to refresh your memory between trainings or to read aloud to a person who is performing a rescue procedure. Note, however, that your first responsibility as a helper is to call Netcare (082 911), and to make the area safe for the victim and the rescuer.

## **Preventing Choking**

- Don't drink too much alcohol before eating. It may dull your senses, and you might not chew food properly or might try to swallow too large a portion of food.
- Take small bites. Cut meat into small pieces. Chew your food thoroughly.
- Do not give popcorn, nuts, or hard sweets to children younger than 3, and





- supervise older children when they eat these foods. Cut hot dogs and grapes lengthwise.

  Do not allow children younger than 3 to play with small objects or toys that
- Do not allow children younger than 3 to play with small objects or toys that have very small parts that could be swallowed.
- Keep balloons and plastic bags away from any child who may put them in his or her mouth.

#### Choking Rescue Procedure (Heimlich Manoeuvre)

Choking is usually caused by food or an object stuck in the windpipe. A person who is choking cannot talk, cough, or breathe, and may turn blue or dusky. The Heimlich manoeuvre can help dislodge the food or object.

WARNING: Do not begin the choking rescue procedure unless you are certain that the person is choking.

#### Adult or child older than 1 year:

Stand behind the person and wrap your arms around his or her waist. If the
person is standing, place one of your feet between his or her legs so you
can support the person's body if he or she loses consciousness.

 Make a fist with one hand. Place the thumb side of your fist against the navel but well below the breastbone (sternum).

 Grasp your fist with the other hand. Give a quick upward thrust into the abdomen. This may cause the object to pop out. Use less force for a child.

 Repeat thrusts until the object pops out or the person loses consciousness.

 If you choke while you are alone, do abdominal thrust on yourself, or lean over the back of a chair and press forcefully to pop out the object.

Heimlich Manoeuvre: Give quick upward thrusts to dislodge the object.



- If the person loses consciousness, gently lower him or her to the ground.
   Call Netcare 911 emergency services immediately.
- Begin standard CPR (cardiopulmonary resuscitation), including chest compressions.
- Each time the airway is opened during CPR, look for an object in the mouth or throat. If you see an object, remove it.
- Do not perform blind finger sweeps.
- Do not perform abdominal thrusts, such as the Heimlich manoeuvre.
- Continue performing CPR until the person is breathing on his or her own or until an ambulance arrives.

#### Infant (younger than 1 year)

- Put the baby face down on your forearm so the baby's head is lower than his or her chest.
- Support the baby's head in your palm, against your thigh. Don't cover the baby's mouth or twist his or her neck.
- To dislodge the object, use the heel of one hand to give up to 4 back blows between the baby's shoulders.
- If the airway remains blocked, support the infant's head and turn him or her face up on your thigh with his or her head pointing toward the floor.
- Place 2 or 3 fingers on the lower part of the baby's breastbone, and give up to 5 upward thrusts.
- Look for the object in the infant's mouth. If you can see it, remove it with your finger. Then give 2 rescue breaths.
- If the back blows and chest thrusts do not dislodge the object, call Netcare 911 emergency services and begin rescue breathing.

To help a baby who is choking, use the heel of your hand to give back blows between the baby's shoulders.





 Continue with back blows, chest thrusts, looking for the object, and rescue breaths until the infant coughs up the object and starts breathing on his or her own, or until help arrives.

#### Rescue Breathing and CPR

WARNING: Doing CPR (cardiopulmonary resuscitation) the wrong way or on a person whose heart is still beating can cause serious harm.

#### Do not do CPR unless:

- 1. The person is not breathing.
- 2. The person does not breathe or move in response to rescue breaths.
- 3. No one with more training in CPR than you is present.

#### Step 1: Check to see if the person is conscious.

Tap or gently shake the person and shout, "Are you okay?" But do not shake someone who might have a neck or back injury. That could make the injury worse.

#### If the person does not respond, follow these steps.

- For a person 9 years or older, call the local emergency services.
- For a child under 9 years, give 2 breaths and 30 chest compressions, 5 times in a row (this will take about 2 minutes). If the child is still not breathing, call Netcare – 082 911.

#### Step 2: Check for breathing for 5 to 10 seconds

- Kneel next to the person with your head close to his or her head.
- Look to see if the person's chest rises and falls.
- Listen for breathing sounds.
- Put your cheek near the person's mouth and nose to feel whether air is moving out.

If an adult is not breathing normally, or if a child is not breathing at all, roll the person onto his or her back. If you think the person might have a neck or back injury, gently roll the person's head, neck, and shoulders together as a unit.

#### Step 3: Start rescue breaths

- Put your hand on the person's forehead, and pinch the person's nostrils shut with your thumb and finger. Use your other hand to tilt the chin up to keep the airway open.
- Take a normal breath, and place your mouth over the person's mouth, making a tight seal. For a baby, place your mouth over the baby's mouth and nose. Blow into the person's mouth for 1 second, and watch to see if the person's chest rises.
- If the chest does not rise, tilt the person's head again, and give another breath.
- Between rescue breaths, remove your mouth from the person's mouth and take a normal breath. Let his or her chest fall, and feel the air escape.
- Give the person 2 rescue breaths. If the person is still not breathing normally, start chest compressions.

## Step 4: Start chest compressions

Try to give about 100 compressions per minute. This means each compression should take a little less than 1 second.



Airway: Tilt the chin up to open the airway.



Breathing: Give a breath, and watch to see if the chest rises.

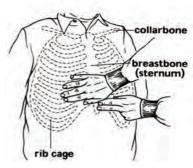






#### For a person 9 years or older:

- Kneel next to the person. Use your fingers to locate the end of the person's breastbone, where the ribs come together. Place two fingers at the tip of the breastbone
- Place the heel of the other hand right above your fingers (on the side closest to the person's face).
- Use both hands to compressions. Stack your other hand on top of the one that you just put in position. Lock the fingers of both hands together, and raise your fingers so they do not touch the chest.
- For smaller children, use the heel of one hand to give compressions.



Place two fingers at the tip of the breastbone. Then put the heel of the other hand right above your fingers.

- Straighten your arms, lock your elbows, and center your shoulders directly over your hands.
- Press down in a steady rhythm, using your body weight. The force from each thrust should go straight down onto the breastbone, pressing it down 4 to 5 cm. Give 30 compressions.
- After 30 compressions, give 2 rescue breaths.
- Keep doing the cycle of 30 compressions and 2 breaths until help arrives or the person is breathing normally.

#### For a child 1 to 8 years:

CPR is the same for children, except that you may only need to use one hand instead of two

Use the heel of one hand for a small child. If you need more force for a larger child, use two hands as you would for an adult.

- Press the chest one-third to one-half of the way down.
- After 30 compressions, give 2 rescue breaths.
- Keep doing the cycle of 30 compressions followed by 3 breaths until help arrives or the child is breathing normally.

## For an infant under 1 year:

CPR is the same for infants, except that you should use two fingers instead of your hands.

- Picture a line connecting the nipples, and place two fingers on the infant's breastbone just below that line. Press gently, pressing the chest one-third to one-half of the way down.
- After 30 compressions, give 2 rescue breaths.
- Keep doing the cycle of 30 compressions followed by 2 breaths until help arrives or the infant is breathing normally.





## **BRUISES**

# Bruises (contusions) occur when small blood vessels under the skin rupture or tear.

Blood seeps into the surrounding tissues, causing the black-and-blue colour of a bruise. Bruises usually develop after a bump or fall. People who take aspirin or blood thinners (anti-coagulants) may bruise easily.

A bruise may also develop after blood is drawn. A black eye is a type of bruise. If you have a black eye, apply home treatment for a bruise and inspect the eye for blood. If there is any loss of vision or change in vision or if you cannot move your eye in all directions, see a doctor.

## **Home Treatment**

- Apply ice or cold packs for 10 minutes several times a day. Do this for the first 48 hours to help blood vessels to constrict and to reduce swelling. The sooner you apply ice, the less bleeding and swelling there will be.
- If possible, elevate the bruised area above the level of your heart. Blood will leave the area and there will be less swelling.
- Rest the injured area so you don't injure it further.
- If the area is still painful after 48 hours, apply heat with warm towels, a hot water bottle, or a heating pad.

## When to Seek Healthcare

- If signs of infection develop. See page 4.
- If pain increases or if your ability to use or move the bruised body part decreases.
- If a blow to the eye causes:
  - Blood in the coloured part of the eye or blood in the white of the eye.
  - Loss of or change in vision.
  - Inability to move the eye normally in all directions.
  - Severe pain.
- If you suddenly begin to bruise easily, or if you have unexplained recurrent or multiple bruises.



Burns are classified as first-, second-, third-, or fourth-degree depending on their depth, not on the amount of pain or the extent of the burn.

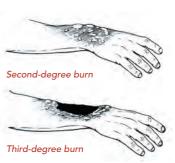
A first-degree burn involves only the outer layer of the skin. The skin is dry, painful, and sensitive to touch. A mild sunburn is an example of a first-degree burn. A second-degree burn involves several layers of skin. The skin becomes swollen, puffy, weepy, or blistered.

A third-degree burn involves all layers of skin and may include any underlying tissue. The skin is dry, pale white or charred black and swollen and sometimes breaks open. Nerves are destroyed or damaged, so there may be little pain except on the edges of the burn, where there may be second-degree burns. A fourth-degree burn extends through the skin to injure muscle and bone.

A second-degree burn will cause skin to swell and blister, and it may also weep fluid. A third- or fourth-degree burn may cause skin to look pale white or charred black.

## Prevention

- Install smoke detectors on each story of your home. Check and replace the batteries regularly.
- Keep a fire extinguisher near the kitchen. Have it inspected yearly.
- Set your water heater at 50°C or lower to avoid burns.
- Supervise children closely, especially in the kitchen.
- Don't smoke in bed.
- Use caution around campfires and hot appliances.





## **BURNS**

#### If your clothing catches fire:

- Do not run, because running will fan the flames. Stop, drop, and roll on the ground to smother the flames, or smother the flames with a blanket, rug, or coat.
- Use water to douse the fire and cool the skin.

#### To avoid kitchen fires:

- Use caution when handling hot foods and beverages.
- Turn pot handles toward the back of the stove.
- Smother burning food or grease with a pot or pot lid.

#### **Home Treatment**

Third-degree and fourth-degree burns require immediate medical treatment. Call a health professional and apply home treatment.

- Make sure the source of the burn has been extinguished.
- Have the person lie down to prevent shock.
- Cover the burned area with a clean sheet.
- Do not apply any ice, ointment, or medication to the burn.

## First- and second-degree burns can be treated at home as follows:

- Run cool tap water over the burn until the pain stops (15 to 30 minutes). Cool water is the best immediate treatment for minor burns. The cold lowers skin temperature and lessens the severity of the burn. Do not use ice or ice water, because it may further damage the injured skin.
- Remove rings, jewellery, or clothing from the burned limb. Swelling may make these items difficult to remove later, and if left on, they may damage nerves or blood vessels
- Clean the burned area with mild soap and water. If the burned skin or blisters have broken open, a bandage is needed. Otherwise, don't cover the burn unless clothing rubs on it. If clothing rubs the burned area, cover the burn with a non-stick gauze pad taped well away from the burn. Do not encircle a hand, arm, or leg with tape. Keep the bandage clean and dry. Change it once a day and anytime it gets wet.
- Apply an antibiotic ointment. Do not put butter, grease, or oil on a burn. They increase the risk of infection and don't help the burn heal.

# **BURNS**

 After 2 to 3 days of healing, apply aloe to soothe minor burns.

• If the burn causes blisters to form, do not break blisters. If blisters break, clean the area by running tap water over it and applying a mild soap. Apply an antibiotic ointment, such as povidone iodine or mupirocin, and cover the burn with a non-stick sterile dressing. Don't touch the burned area with objects. Remove the dressing every day, clean the burned area with mild soap, and cover it with a new dressing.

 Take ibuprofen or paracetamol to help relieve pain. Aspirin is not recommended because it can affect the swelling, and bleeding in the burned area.



## When to Seek Healthcare

- For all third- and fourth-degree burns.
- If you are in doubt about the extent of a burn or aren't sure whether it is a second- or third-degree burn.
- If a second-degree burn involves the face, ears, eyes, hands, feet, genitals, or a joint.
- If the burn encircles an arm or leg, or if it covers more than 25 percent of the body part involved.
- If the pain lasts longer than 48 hours.
- If signs of infection develop.
- If a child younger than 5, an older adult, or a person with a weakened immune system or a chronic health problem (such as cancer, heart disease, or diabetes) is burned.
- If there is a chance the burn was caused on purpose.







# CHEMICAL BURNS

Chemical burns occur when something caustic such as cleaning product, petrol, or turpentine, is splashed into an eye or onto the skin.

The vapours or fumes of strong chemicals can also burn or irritate the eyes, the skin, the respiratory passages, and the lungs. A chemically burned eye becomes red and watery and may be sensitive to light. If the damage is severe, the eye will look whitish. Chemically burned skin may become red, blistered, or blackened, depending on how strong the caustic material is.

## Prevention

Wear safety glasses, goggles, or a face shield when working with chemicals. Know the location of the nearest sink or shower. Store cleaning products out of children's reach.

## **Home Treatment**

- Call Poison Control (0861 555 777) for specific advice. Have the chemical's container or label available.
- Immediately flush your eye or skin with a large amount of water. Use a
  cold shower for skin burns. For eye burns, fill a sink or dishpan with
  water, immerse your face in the water, and open and close your eyelids
  with your fingers to force the water to all parts of the eye. Or flush your
  eye under a running tap or shower. A sink with a sprayer also works
  well.
- Continue flushing for 30 minutes or until the pain stops, whichever takes longer.

## When to Seek Healthcare

## Call the local emergency services:

- If a strong chemical such as acid or lye is splashed into your eye.
- If you have swallowed a chemical that may cause burning or be poisonous.

# CHEMICAL BURNS

#### Call your doctor or Poison Control if any of the following occurs:

- A large area of skin (more than 25 percent of any part of the body) or the face is exposed to a strong acid, such as battery acid, or to a caustic substance, such as Iye.
- A chemically burned eye still hurts after 30 minutes of home treatment.
- A chemically burned eye appears to be damaged. Symptoms include:
  - Pain
  - Persistent redness.
  - Discharge or watering.
  - Any vision problems, such as double vision, blurring, or sensitivity to light.
  - A grey or white discolouration over the coloured part of the eye.
- Your skin shows signs of a chemical burn.





A concussion is a type of traumatic brain injury that is caused by a blow to the head or body, a fall, or another injury that jars or shakes the brain inside the skull.

Although there may be cuts or bruises on the head or face, there may be no other visible signs of a brain injury.

You don't have to pass out (lose consciousness) to have a concussion. Some people will have obvious symptoms of a concussion, such as passing out or forgetting what happened right before the injury. But other people won't. With rest, most people fully recover from a concussion. Some people recover within a few hours. Other people take a few weeks to recover.

It's important to know that after a concussion the brain is more sensitive to damage. So while you are recovering, be sure to avoid activities that might injure you again. In rare cases, concussions cause more serious problems. Repeated concussions or a severe concussion may lead to long-lasting problems with movement, learning, or speaking. Because of the small chance of serious problems, it is important to contact a doctor if you or someone you know has symptoms of a concussion.

#### Symptoms of a concussion fit into four main categories:

## Thinking and remembering

- Not thinking clearly
- Feeling slowed down
- Not being able to concentrate
- Not being able to remember new information

## Physical

- Nausea and vomiting
- Headache
- Fuzzy or blurry vision
- Dizziness
- Sensitivity to light or noise

- Balance problems
- Feeling tired or having no energy

#### Emotional and mood

- Easily upset or angered
- Sad
- Nervous or anxious
- More emotional

#### Sleep

- Sleeping more than usual
- Sleeping less than usual
- Having a hard time falling asleep

Young children can have the same symptoms of a concussion as older children and adults. But sometimes it can be hard to tell if a small child has a concussion.

#### Young children may also have symptoms like:

- Crying more than usual.
- Headache that does not go away.
- Changes in the way they play or act.
- Changes in the way they nurse, eat, or sleep.
- Being upset easily or having more temper tantrums.
- A sad mood.
- · Lack of interest in their usual activities or favorite toys.
- · Loss of new skills, such as toilet training.
- Loss of balance and trouble walking.
- Not being able to pay attention.

#### **Treatment**

**Treat Right away.** After being seen by a doctor, some people have to stay in the hospital to be observed. Others can go home safely. People who go home still need to be watched closely for warning signs or changes in behaviour.



# Call Netcare (082 911) or seek emergency care right away if you are watching a person after a concussion and the person has:

- A headache that gets worse or does not go away.
- Weakness, numbness, or decreased coordination.
- Repeated vomiting or nausea.
- Slurred speech.
- Extreme drowsiness or you cannot wake them.
- One pupil that is larger than the other.
- Convulsions or seizures.
- A problem recognizing people or places.
- Increasing confusion, restlessness, or agitation.
- Loss of consciousness.



Warning signs in children are the same as those listed above for adults. Take your child to the emergency room if he or she has any of the warnings signs listed above or:

- Will not stop crying.
- Will not nurse or eat.

#### In the days or weeks after

Some people feel normal again in a few hours. Others have symptoms for weeks or months. It is very important to allow yourself time to get better and to slowly return to your regular activities. If your symptoms come back when you are doing an activity, stop and rest for a day. This is a sign that you are pushing yourself too hard. It is also important to call your doctor if you are not improving as expected or if you think that you are getting worse instead of better.

Rest is the best way to recover from a concussion. You need to rest your body and your brain. Here are some tips to help you get better:

- Get plenty of sleep at night, and take it easy during the day.
- Avoid alcohol and illegal drugs.
- Do not take any other medicines unless your doctor says it is okay.
- Avoid activities that are physically or mentally demanding (including housework, exercise, schoolwork, video games, text messaging, or using the computer). You may need to change your school or work schedule while you recover.
- Ask your doctor when it's okay for you to drive a car, ride a bike, or operate machinery.
- Use ice or a cold pack on any swelling for 10 to 20 minutes at a time.
   Put a thin cloth between the ice and your skin.
- Use pain medicine as directed. Your doctor may give you a prescription for pain medicine or recommend you use a pain medicine that you can buy without a prescription, such as paracetamol.



## **CUTS**

When you see a cut (laceration), the first steps are to stop the bleeding and determine whether medical evaluation is needed.

If the cut is bleeding heavily or spurting blood, see Stopping Severe Bleeding – page 26.

Bleeding from minor cuts will usually stop on its own or after you apply a little direct pressure.

To decide whether stitches are needed, see Are stitches needed – page 27. If stitches are needed, apply home treatment and seek medical care as soon as possible. Most cuts that need stitches should be sutured within 6 to 8 hours. If stitches are not needed, you can clean and bandage the cut at home.

## **Home Treatment**

- Stop any bleeding by applying direct, continuous pressure over the wound for 15 minutes.
- Wash the cut well with soap and water. Treat an animal bite like a puncture wound
- If you think the cut may need stitches, see a health professional. If the cut does not need stitches, proceed with home treatment.
- Consider bandaging the cut, especially if it is in an area that may get dirty or irritated.
- Apply antibiotic ointment to keep the cut from sticking to the bandage. Do not use surgical spirits, hydrogen peroxide, iodine, or Mercurochrome, which can harm tissue and slow healing.



- Use an adhesive strip to provide continuous pressure and to protect the
  cut from further irritation. Always put an adhesive strip across a cut rather
  than lengthwise. Butterfly bandages can help hold cut skin edges together.
   Small cuts that are not in easily irritated location may be bandaged or left
  uncovered.
- Apply a clean bandage at least once a day, or whenever the old bandage gets wet or dirty.

## When to Seek Healthcare

- If a person has signs of shock, even if bleeding has stopped. See page 54.
- If a cut continues to bleed through bandages after you apply direct pressure for 15 minutes.
- If the skin near the wound is blue, white, or cold; if you have numbness, tingling, or loss of feeling; or if you are unable to move a limb normally below the wound.
- If the cut has removed all the layers of skin.
- If the cut contains, or might contain, foreign objects such as wood, glass, or gravel.
- If the cut needs stitches which usually needs to be done within 8 hours.
- If you have been cut and your tetanus injections are not up to date. If you need
  a tetanus booster, you should have it within 2 days of being injured.
- If signs of infection develop.

## **Stopping Severe Bleeding**

- Elevate the site that is bleeding.
- Wash your hands well with soap and water. Put on medical gloves or place several layers of fabric or plastic bags between your hands and the wound.
- Remove any visible objects from the surface of the wound. Do not attempt to clean out the wound.
- Press firmly on the wound with a clean cloth or the cleanest material available.
   If there is an object deep in the wound, apply pressure around the object, not directly over it. Do not try to remove the object.
- Apply steady pressure for a full 15 minutes. Don't peek after a few minutes to see if bleeding has stopped. If the bleeding has not slowed down or stopped after 15 minutes, call the local emergency service and continue to apply





## **CUTS**

pressure to the wound. If blood soaks through the cloth, apply another cloth without lifting the first one.

- If bleeding decreases after you apply pressure for 15 minutes, but minimal bleeding starts again once you release the pressure, apply direct pressure to the wound for another 15 minutes. Direct pressure may not be applied up to 3 times (total of 45 minutes) for minimal bleeding. If bleeding (more than just oozing small amounts of blood) continues after 45 minutes of direct pressure, call a health professional.
- Watch for signs of shock and treat accordingly.

## **Are Stitches Necessary?**

For best results, cuts that need stitches should be sutured within 6 to 8 hours. Wash the cut well with soap and water and stop the bleeding, then pinch the sides of the cut together. If it looks better, you may want to consider stitches. If stitches are needed, avoid using an antibiotic or antiseptic ointment until after a health professional has examined the cut.

#### Stitches may be needed for:

- Deep cuts (more than 0.6 cm deep) that have jagged edges or gape open.
- Deep cuts on a joint, such as an elbow, knuckle, or knee.
- Deep cuts on the hands or fingers.
- Cuts on the face, eyelids, or lips.
- Cuts in any area where you are worried about scarring.
- Cuts that go down to the muscle or bone.
- Cuts that continue to bleed after you have applied direct pressure for 15 minutes.

Cuts like these that are sutured usually heal with less scarring than similar cuts that are nog sutured.

#### Stitches may not be needed for:

- Cuts with smooth edges that tend to stay together during normal movement of the affected body part.
- Shallow cuts that are less than 0.5 cm deep and less than 2 cm long.



# DROWNING TREATMENT

If you see someone bobbing vertically in the water, unable to call for help, act quickly to determine whether the person is drowning and rescue him or her immediately.

Drowning happens in a matter of minutes; if there's no lifeguard around you'll have to perform the rescue yourself. If you're prepared you'll be able to make a real difference in someone else's life. Rescue is only half the job. Reviving someone who has drowned or swallowed water is the other half, and it's equally important when it comes to saving a life. Reviving a person involves performing mouth-to-mouth resuscitation. Of course, you should implement universal safety guidelines whenever possible. If you have an airway bag in your first aid kit, use it! It will provide safety during mouth-to-mouth resuscitation, keeping HIV and other infections at bay. Call Netcare (082911) immediately, before beginning these important first aid emergency measures.

#### Mouth-to-mouth resuscitation for a drowning victim:

- Turn the drowning person's head to the side, allowing any water to drain from his or her mouth and nose. Turn the head back to the center. Clear the mouth.
- Begin mouth-to-mouth resuscitation on land, if possible, or in the water if the injured person needs immediate life-and-death measures.
- Strongly breathe four times into the mouth of the injured person as you pinch his or her nose. This helps air get past any water that is clogging the breathing passageways and the lungs.
- After four strong breaths, put your ear near the mouth and watch the chest for any breathing movement.
- 5. Check the pulse for signs of life.
- 6. Repeat the cycle.

You're not out of the water once the drowning victim starts to breathe and choke. In fact, the first 48 hours after a drowning incident can be the most dangerous. Complications resulting from water exposure—pneumonia, infection, heart failure—can all occur during this time. Therefore, you should always take a drowning victim to the hospital immediately.



## **ELECTRICAL BURNS**

## Electrical burns are a medical emergency.

An electrical burn may look minor on the outside, but electricity can cause serious internal damage, including burns and heart rhythm disturbances.

#### Prevention

- Keep electrical cords out of the reach of small children and pets. Plug bare electrical sockets with plastic inserts.
- Replace frayed power cords on electrical appliances.
- Unplug lamps before replacing lightbulbs. Turn off the power at the circuit breaker when replacing bulbs in ceiling or wall lights.
- Unplug all appliances (including your computer) when making minor repairs.
- Keep appliances away from water.
- During a lightning storm, take cover inside a car, large building, or house, or seek low ground. Do not stand under a tree during a lightning storm. Get out of the water and get off boats. Stay away from metal objects.

## Home Treatment

- Do not approach a victim who has been electrocuted until you are sure the area surrounding the victim is safe. Disconnect the power source if possible. If you feel tingling in your lower body, turn around and hop to a safe place.
- Do not attempt to move wires off a victim unless you are sure the power has been disconnected
- If it is safe to approach the victim, check ABCs (Airway, Breathing, Circulation). If necessary, begin rescue breathing and CPR.
- Raise the victim's legs 20 to 30 cm and keep the victim warm.
- Cover burns with dry, sterile dressing.

# When to Seek Healthcare

#### Call Netcare (082 911) immediately:

- If a person who has been electrocuted stops breathing, has no pulse, or has lost consciousness
- If a person who has been electrocuted fell and may have other injuries.

Call your doctor for any electrical burn. Even an electrical burn that looks minor can be serious and needs to be evaluated



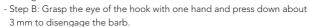
# FISHHOOK REMOVAL

In the excitement of fishing, sometimes fingers are hooked instead of fish. It is useful to know how to remove a fishhook, especially if you are far from medical help.

## **Home Treatment**

#### Remove the hook as follows:

- Use ice, cold water, or hard pressure to provide temporary numbing.
  - Step A: Tie a piece of fishing line to the hook near the skin's surface.



- Step C: While still pressing the hook down (barb disengaged); jerk the line near the skin's surface so that the hook shaft leads the barb out of the skin.
- Another option is to push the hook the rest of the way through the skin, snip off the barb, and then pull the hook out the same way it entered the skin.
- Wash the wound thoroughly with soap if possible. Treat it as a puncture wound.
- Do not try to remove a fishhook from an eyeball. Seek medical care immediately.

## When to Seek Healthcare

- If the hook is near the eye or in the eyelid or eyeball.
- If the hook is in or near a joint, in a bone or muscle, or deep in the skin.
- If you cannot remove the hook.
- If your skin was punctured by a fishhook and your tetanus injections are not up to date. If you need a tetanus booster you should have it within 2 days of being injured.
- If signs of infection develop.





## **FROSTBITE**

# Frostbite is freezing of the skin or underlying tissues caused by prolonged exposure to cold.

Frostbitten skin is pale or blue, is stiff or rubbery to the touch, and feels cold and numb. Frostbite is rated by its severity.

First degree "frostnip": Skin is whitish or red and tingling or burning, but there is little likelihood of blistering if it's rewarmed promptly.

Second degree: Outer skin feels hard and frozen, but tissue underneath is normal. Blistering is likely.

Third degree: Skin is white or blotchy and blue. Skin and tissue underneath are hard and frozen. Blistering always occurs. Burning, throbbing, or shooting pain may follow numbness.

Fourth degree: Skin is red or blue and turns dry, black, and rubbery. Blisters may appear as small bloody spots under the skin. There is deep, aching joint pain.

## Prevention

Stay dry and out of the wind in extreme cold, and cover areas of exposed skin. Keep your body's core temperature up:

- Wear layers of clothing. Wool and polypropylene are good insulators. Wear windproof, waterproof outer layers. Wear wool socks and waterproof boots that fit well.
- Wear a hat to prevent heat loss from your head. Wear mittens rather than gloves.
- Keep protective clothing and blankets in your car in case of a breakdown in an isolated area
- Don't drink alcoholic or caffeinated beverages or smoke when you are out in extreme cold.

# **FROSTBITE**

## **Home Treatment**

- Get inside or take shelter from the wind.
- Check for signs of hypothermia. Treat it before treating frostbite.
- Protect the frozen body part from further exposure to cold. Don't rewarm the area if refreezing is possible. Wait until you reach shelter.
- Warm small areas (ears, face, nose, fingers, toes) with warm breath or by tucking hands or feet inside warm clothing next to bare skin.
- Don't rub or massage the frozen area, because doing so will further damage tissues. Avoid walking on frostbitten feet if possible.
- Keep the frostbitten body part warm and elevated. Wrap it with blankets
  or soft material to prevent bruising. If possible, immerse it in warm water
  (40 to 42°C) for 15 to 30 minutes.
- Blisters may appear as the skin warms. Do not break them. The skin may turn red, burn, tingle, or be very painful. Aspirin, ibuprofen, or paracetamol may help relieve pain. Do not give aspirin to anyone younger than 20.

## When to Seek Healthcare

- If the skin is white or blue, and hard, rubbery, and cold, which indicates third-degree frostbite. Careful rewarming and antibiotic treatment are needed to prevent permanent tissue damage and infection.
- If blisters develop (second- or third degree frostbite). Do not break blisters.
   The risk of infection is very high.
- If signs of infection develop. See page 4.



# **HEAD INJURIES**

Most bumps on the head are minor and heal as easily as bumps anywhere else. Minor cuts on the head often bleed heavily because the blood vessels of the scalp are close to the skin's surface.

In children, blood loss from a scalp injury may be enough to cause symptoms of shock. Head injuries that do not cause visible external bleeding may have caused life-threatening bleeding and swelling inside the skull. The more force involved in a head injury, the more likely a serious injury to the brain has occurred. Anyone who has experienced a head injury should be watched carefully for 24 hours for signs of a serious head injury.

#### Prevention

- Wear a seatbelt when in a motor vehicle. Use child car seats.
- Wear a helmet while biking, motorcycling, skating, kayaking, horseback riding, skiing, or snowboarding.
- Don't dive into shallow or unfamiliar water.
- If you keep firearms in your home, store them unloaded, and lock them up.
   Store and lock ammunition in a separate place.

#### **Home Treatment**

- If the victim is unconscious, assume he or she has a spinal injury. Do not
  move the victim without first protecting the neck from movement.
- If there is bleeding, apply firm pressure directly over the wound with a clean cloth or bandage for 15 minutes. If the blood soaks through, apply additional cloths over the first one.
- Check for injuries to other parts of the body, especially if the person has fallen. The alarm from seeing a head injury may cause you to overlook other injuries that need attention.
- Apply ice or cold packs to reduce the swelling. A "goose egg" may appear anyway, but ice will help ease the pain.

# **HEAD INJURIES**

- For the first 24 hours after a head injury, watch the victim for signs of a severe head injury. Check for the following symptoms every 2 hours:
  - Confusion or difficulty speaking. Ask the person his or her name, address, and age, the date, and the location.
  - Numbness or weakness on one side of the body.
  - Blurred or double vision that does not clear, or significant changes in pupil size or reaction.
  - Lethargy, abnormally deep sleep, or difficulty waking up.
  - Vomiting that continues after the first 2 hours, or violent vomiting that persists after the first 15 minutes.
  - Seizures or convulsions.
- Continue observing the person every 2 hours during the night. Wake the
  person up and check for any unusual symptoms. Call Netcare (082 911)
  emergency services or go to the emergency room immediately if you
  cannot wake the person or if he or she has any of the above symptoms of
  a severe head injury.
- A person who has a head injury should avoid contact sports until cleared by a health professional.

### When to Seek Healthcare

- If the person loses consciousness at any time after being injured.
- If double vision or speech difficulty persists after the first minute.
- If weakness or numbness occurs on one side of the body.
- If blood or clear fluid drains from the ears or nose following a blow to the head (not due to a cut or direct blow to the nose).
- If the person is confused, does not remember being injured, or keeps repeating the same questions.
- If the person develops a severe headache.
- If vomiting occurs after the first 2 hours or violent vomiting persists after the first 15 minutes.
- If the person has seizures or convulsions.
- If bleeding cannot be stopped or the wound needs stitches.



# **HEART ATTACK**

# A heart attack (myocardial infarcation) is caused by a complete blockage of the blood flow to a part of the heart muscle.

This usually occurs when a small blood clot forms in one of the blood vessels that supply the heart muscle. Discomfort or pain caused by a heart attack may be felt in the chest, abdomen, upper back, neck, jaw, and one or both arms. The pain of a heart attack usually lasts longer than 10 minutes and often occurs with other symptoms such as sweating, shortness of breath, or nausea. The pain of a heart attack will not usually go away with rest. Many people mistake heart attack symptoms for other problems such as indigestion, heartburn, or a pulled muscle. It is important to recognise the signals your body sends during the early stages of a heart attack and seek emergency care. Medical treatment is needed to prevent death. Sometimes medications can be given to reduce the heart muscle damage caused by a heart attack.

### When to Seek Healthcare

Call Netcare (082 911) emergency services immediately if you think you may be having a heart attack. Do not try to drive yourself to the hospital. After calling the local emergency services chew and swallow 1 adult aspirin (unless you are allergic to or unable to take aspirin). Symptoms of heart attack include chest pain or discomfort that is crushing (feels like someone is sitting on your chest), squeezing, or increasing in intensity or that occurs with any of the following symptoms:

- Sweating and shortness of breath.
- Nausea or vomiting.
- Pain in the abdomen, upper back, neck, jaw, or one or both arms.
- Light-headedness.
- Rapid or irregular heartbeat.

Call your doctor if you have continuous chest discomfort or pain and there is no obvious cause.

Discomfort caused by a heart attack can occur in any of the shaded areas as well as the upper back.

# **HEAT EXHAUSTION & HEAT STROKE**



# Symptoms include:

- Sweating a lot.
- Fatigue, weakness, headache, dizziness, or nausea.
- Skin that is cool, moist, pale or flushed.

Heat exhaustion can sometimes lead to heat stroke, which requires emergency treatment. Heat stroke happens when your body fails to regulate its own temperature and your body temperature continues to rise, often to 40.5°C or higher. You may stop sweating entirely if you have heat stroke, or you may sweat profusely. Symptoms of heat stroke include:

- Confusion, delirium, or unconsciousness.
- Skin that is red, hot, and dry, even in the armpits.

# Prevention

- Drink 8 to 10 glasses of water per day. Drink even more if you are working or exercising in hot weather.
- Avoid strenuous physical activity outdoors during the hottest part of the day (10am to 4pm).







# **HEAT EXHAUSTION & HEAT STROKE**

- Wear light-coloured, loose-fitting clothing and a hat with a brim to reflect the sun.
- Avoid sudden changes of temperature. Air out a hot car before getting into it. Never leave a child or an animal in a hot car.
- If you take diuretics (water pills), ask your doctor about taking a lower dose during hot weather.
- If you exercise strenuously in hot weather, drink more liquid than your thirst seems to require. Drink about 240 ml of water 10 to 15 minutes before you start exercising and another 240 ml of water every 20 to 30 minutes.

### Home Treatment

- Stop your activity. Get out of the sun to a cool spot and drink lots of cool water, a little at a time. If you are nauseated or dizzy, lie down.
- If a person's temperature exceeds 39°C, call for immediate help and try to lower the temperature as quickly as possible:
  - Remove unnecessary clothing.
  - Apply cool (not cold) water to the person's whole body; then fan the person. Apply ice packs to the groin, neck and armpits. Do not immerse the person in ice water
  - If you can get the person's temperature down to 38°C, take care to avoid overcooling. Stop cooling the person once his or her temperature is lowered to 37°C
  - Do not give aspirin or paracetemol to reduce the temperature.
  - Watch for signs of heat stroke (confusion or unconsciousness, red, hot, dry skin).
  - If the person stops breathing, start rescue breathing.

# When to Seek Healthcare

Call Netcare (082 911) emergency services if the person's body temperature reaches 39°C and keeps rising, or if signs of heat stroke develop:

- Confusion, disorientation, unconsciousness or seizure.
- Skin that is red, hot and dry, even in the armoits. Sweating may be absent or excessive

# **HEAT EXHAUSTION & HEAT STROKE**

## **Counting of Respiration Rates**

The respiration rate is the rate at which a person breathes. It increases with fever and some illnesses. The best time to count the respiration rate is when a person is resting, perhaps after you take the person's pulse while your fingers are still on the person's wrist. The person's breathing is likely to change if he or she knows you are counting it.

Count the number of times the chest rises in 1 full minute. Notice whether there is any sucking in beneath the ribs or any apparent wheezing or difficulty breathing.

# Normal resting respiration rate:

New-born to 1 year:

7 years through adult:

1 through 6 years:

- 40-60 breaths/minute
- 18-26 breaths/minute
- 12-24 breaths/minute





# **HYPERVENTILATION**

When you breathe very fast and deep (hyperventilate), the carbon dioxide (CO<sub>2</sub>) level in your blood can drop to very low levels.

### Symptoms that may occur with hyperventilation include:

- Numbness or tingling in your hands, feet, or around your mouth or tongue.
- Pounding, racing heartbeat and anxiety.
- Feeling like you can't get enough air.
- Light-headedness (feeling like you might pass out).
- Muscle cramps or spasms.
- Chest pain.
- Loss of consciousness (if hyperventilation is severe).

### Prevention

If you have hyperventilated before:

- Ask people to tell you if you start to breathe too fast.
- As soon as you notice fast breathing or other symptoms, slow your breathing to 1 breath every 5 seconds, or slow enough that symptoms gradually go away.

### **Home Treatment**

- Sit down and concentrate on slowing your breathing. Try breathing through pursed lips or through your nose.
- Hold a paper bag over your nose and mouth and take 6 to 12 easy, natural breaths. Continue doing this on and off for 5 to 15 minutes. Do not breathe continuously into the bag. Do not use this technique at all if you have heart or lung problems or if you are at an altitude above 1.8 km.

### When to Seek Healthcare

- If you are hyperventilating and cannot relieve the symptoms.
- If you have frequent or repeated episodes of hyperventilation and anxiety.

# **HYPOTHERMIA**

Hypothermia is a condition of below-normal body temperature that develops when your body loses heat faster than heat can be produced by metabolism, muscle contractions, and shivering.

### Early symptoms indicating mild to moderate hypothermia include:

- Shivering.
- Cold, pale skin.
- Apathy or listlessness.
- Impaired judgment.
- Clumsy movement and speech.

Later symptoms of severe hypothermia include:

- Cold abdomen and rigid muscles.
- Slow pulse and breathing.
- Weakness and drowsiness.
- Confusion.

Shivering may stop if your body temperature drops below 32°C. **Hypothermia is an emergency and can quickly lead to unconsciousness and death.** Hypothermia can happen in wet and windy weather at temperatures of 10° to 15°C or in water temperatures of 15.5°C to 21°C. Frail or inactive people can develop hypothermia indoors if they are not dressed warmly. Early recognition is very important in the treatment of hypothermia. Often a hiker or skier will lose heat to a critical degree before others notice anything is wrong. If someone starts to shiver violently, stumble, or respond incoherently to questions, suspect hypothermia and warm the person quickly.

### Prevention

Whenever you plan to be outdoors for several hours in cold weather, take the following precautions:

- Dress warmly and wear windproof, waterproof clothing. Wear fabrics that remain warm even when they are wet, such as wool or polypropylene.
- Wear a warm hat. An unprotected head loses a great deal of the body's total



# **HYPOTHERMIA**

heat

- Keep your hands and feet dry.
- Head for shelter if you get wet or cold.
- Eat well before going out and carry extra food.
- Don't drink beverages containing alcohol while in the cold. They make your body lose heat faster.
- Older or less active people can prevent indoor hypothermia by dressing warmly and keeping room temperatures above 18°C.

### Home Treatment

The goal of home or "in-the-field" treatment is to stop additional heat loss and slowly rewarm the person.

- For a mild case of hypothermia, get the person out of the cold and wind. Remove cold, wet clothes first, and give the person dry or wool clothing to wear.
- For a moderate case of hypothermia, remove cold, wet clothes first. Then warm the person with your own body heat by wrapping a blanket or sleeping bag around both of you.
- Give warm liquids to drink and high-energy foods, such as sweets or chocolates, to eat. Do not give food or drink if the person is disorientated or unconscious. Do not give alcoholic or caffeinated beverages.
- Rewarming the person in warm water can cause shock or heart attack. However, in emergency situations when help is not available and other home treatments are not working, you can use a warm-water bath (38° to 40.5°C) as a last resort

# When to Seek Healthcare

Call Netcare (082 911) emergency medical services if the person seems confused, stumbles repeatedly, or loses consciousness and remains unconscious.

### Call your doctor:

- If the victim is a child or an older adult. It's a good idea to call regardless of the severity of the symptoms.
- If the person's body temperature remains below 35.5°C after 2 hours of warming.

# **INSECT BITES AND STINGS**

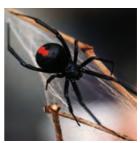
Insect and spider bites and bee, yellow jacket, and wasp stings usually cause a localised reaction with pain, swelling, redness, and itching.

Insect and spider bites and bee, yellow jacket, and wasp stings usually cause a localised reaction with pain, swelling, redness, and itching. In some people,

especially children, the redness and swelling may be worse, and the local reaction may last up to a few days. In most cases, bites and stings do not cause reactions all over the body.

Some people have severe skin reactions to insect or spider bites or strings, and a few have severe allergic reactions that affect the whole body (anaphylactic shock). Symptoms may include urticaria all over the body, shortness of breath and tightness in the Black widow spider throat or chest, dizziness, wheezing, or swelling of the tongue and face. If these symptoms develop, immediate medical attention is needed

Spider bites are rarely serious, although any bite may be serious if it causes a person to have an allergic reaction. A single bite from a poisonous spider, such as a black widow or violin spider, may cause a severe reaction and requires immediate medical attention





Violin spider







# **INSECT BITES AND STINGS**

**Black widow spiders** can be up to 5cm across (although they are generally much smaller) and are shiny black with a red or yellow hourglass mark on their undersides. Bites from female black widows may cause chills, fever, nausea, and severe abdominal cramps.

The **violin spider** is a delicate spider that hunts at night and bites its victim in his or her sleep. The spider measures 8 to 10 mm and has a leg span of 50mm. it is either light or dark brown with black markings on the body. The bite is not painful, but severe itching soon develops. Inflammation and swelling result, followed by a shallow ulcer as a result of the skin cells dying at the site of the bite. Most bites are not serious.

### Prevention

- To avoid bee stings, wear white or light-coloured solid fabrics. Bees are attracted to dark colours and flowered prints.
- Avoid wearing perfumes and colognes when you are outside.
- Apply an insect repellent containing DEET according to the product directions when in insect- and spider-infested areas. Reapply every few hours. Use a lower-concentration DEET product for small children and pregnant women. Wash DEET off when you go inside.
- Wear gloves and tuck pants into socks when working in wood-piles, sheds, and basements where spiders are found.

### **Home Treatment**

- Remove a bee stinger by scraping or flicking it out. Don't squeeze the stinger; you may release more venom into the skin. If the stinger isn't visible, assume there isn't one.
- If you are bitten by a black widow or violin spider, apply ice to the bite and call your doctor immediately. Do not apply a tourniquet.
- Apply a cold pack or ice cube to the bite or sting. For some people, applying a paste of baking soda or unseasoned meat tenderiser mixed with a little water helps relieve pain and decrease the reaction.
- Take an oral antihistamine (such as chlorpheniramine or dexchlorpheniramine) to relieve pain, swelling, and itching. Calamine lotion or hydrocortisone cream may also help.

# INSECT BITES AND STINGS

Carry an emergency kit containing an epinephrine syringe (such as EpiPen)
if you have had a severe allergic reaction to insect venom in the past. Ask
your doctor or pharmacist how and when to use the kit.

### To prevent skin infections:

- Wash the area with soap and water.
- Trim your fingernails to prevent scratching, because scratching can lead to infection.
- Avoid breaking any blisters that develop.

### When to Seek Healthcare

Call Netcare 911 emergency services if you develop the following signs of a severe allergic reaction after you are bitten or stung by an insect or spider:

- Wheezing or difficulty breathing.
- Swelling around the lips, tongue or face, or significant swelling around the site of the bite or sting (for example, your entire arm or leg is swollen).
- · Signs of shock.

## Call your doctor:

- If you develop a spreading skin rash, itching, feeling of warmth, or urticaria.
- If you have been bitten by a type of spider or insect that caused you to have a serious reaction in the past.
- If a blister appears at the site of a spider bite, or if the surrounding skin becomes discoloured.
- If symptoms are not improving in 2 to 3 days or if signs of infection develop.
- To talk about adrenaline kits or allergy injections (immunotherapy) for insect venom if you have had a serious allergic reaction.



# JELLYFISH STINGS

Jellyfish or "blue-bottle" stings cause pain and raised red skin eruptions. If the stings are numerous and a large amount of poison is released into the skin, there may be shortness of breath, nausea, and stomach cramps.

In severe cases there can be muscle cramps, fainting, vomiting, and difficulty breathing.

### Home Treatment

- Rinse the area immediately with sea water. Do not use fresh water and do not rub, doing so will release more poison.
- Splash vinegar, surgical spirits, or meat tenderiser dissolved in salt-water on the area to neutralise the poison.
- Remove any attached tentacles carefully. Protect your hand with a towel and apply a paste of sand or baking soda and saltwater to the area. Scrape the tentacles off with the towel or the edge of a credit card.
- Apply calamine lotion to relieve pain and itching.
- If you are stung by a Portuguese man-of-war jellyfish, scrape the stinging tentacles off with sand and seek medical care immediately.

### When to Seek Healthcare

- Call Netcare 911 emergency services or seek emergency care if signs of a severe allergic reaction develop soon after being stung by a jellyfish.
  - Wheezing, difficulty breathing.
  - Swelling around the lips, tongue, or face or significant swelling around the sting (for example, entire arm or leg is swollen).
- If there is some swelling around the site of the jellyfish sting.
- If the skin around the sting becomes discoloured.
- If non-prescription pain medications are not able to control the pain.

# LIGHTNING STRIKE

When someone is struck by lightning, get emergency medical help as soon as possible - call Netcare (082 911).

### **Treatment**

- If more than one person is stuck by lightning, treat those who are unconscious first.
   They are at greatest risk of dying.
- A person struck by lightning may appear dead, with no pulse or breath.
   Often the person can be revived with CPR. CPR should be attempted immediately refer to page 11.
- Treat those who are injured but conscious next.
- Do not move the person unless he is in danger.
- Then check for breathing and pulse. Begin CPR, if needed, and keep cycles going until further help arrives.
- If there is extra assistance for the rescuer, assess victim and treat for signs of shock, hypothermia, fractures, or burns.
- Signs of shock are low blood pressure, rapid heartbeat, cool, clammy, mottled skin and rapid shallow breathing.
- Treatment of shock: if no injury to lower limbs, elevate legs above the head. Keep patient warm and continue to monitor breathing and pulse.
- Signs of hypothermia: shivering, pale with possible bluish tinge, confusion. Treatment of hypothermia: slow re-warming using warm blankets, clothing, or warm water bottles.

### **Precautions**

These simple precautions can save lives during a lightning storm:

#### **STAY ALERT**

- Monitor local weather conditions regularly.
- Recognise the signs of an oncoming thunder and lightning storm do not wait for lightning to strike nearby before taking cover.



# LIGHTNING STRIKE

#### **SEEK SHELTER**

- Look for a large, enclosed building when a thunder or lightning storm threatens.
- If you are in a car and it has a hard top, stay inside and keep the windows rolled up.
- Avoid small sheds and partial shelters, like pavilions.
- Stay at least a few feet away from open windows, sinks, toilets, tubs, showers, electric boxes and outlets, and appliances. Lightning can flow through these systems and "jump" to a person.
- Do not shower or take a bath during a thunder or lightning storm.
- Avoid using regular telephones, except in an emergency. If lightning hits the telephone lines, it could flow to the phone. Cell and cordless phones, not connected to the building's wiring, are safe to use.

#### IF YOU ARE CAUGHT OUTSIDE:

If you are unable to reach a safe building or car, knowing what to do can save your life.

If our skin tingles or your hair stands on end, a lightning strike may be about to happen. Crouch down on the balls of your feet with your feet close together. Keep your hands on your knees and lower your head. Get as low as possible without touching your hands or knees to the ground.

#### DO NOT LIE DOWN!

- If your are swimming, fishing or boating and there are clouds, dark skies and distant rumbles of thunder or flashes of lightning, get to land immediately and seek shelter.
- If you are in a boat and cannot get to shore, crouch down in the middle of the boat. Go below if possible.
- If you are on land, find a low spot away from trees, metal fences, pipes, tall or long objects.
- If you are in the woods, look for an area of shorter trees. Crouch down away from tree trunks.

# NOSEBLEEDS

Most nosebleeds are not serious and can usually be stopped with home treatment. Some common causes of nosebleeds are low humidity, colds and allergies, injuries to the nose, medications (especially aspirin), and high altitude. Blowing or picking your nose can also cause a nosebleed.

### Prevention

- Low humidity is a common cause of nosebleeds. Humidify your home, especially the bedrooms, and keep the temperature cooler (15°C to 18°C) in sleeping areas.
- If your nose becomes very dry, breathe moist air for a while (such as in the shower) and then put a little petroleum jelly on the inside of your nose to help prevent bleeding. A saline nasal spray may also help.
- Limit your use of aspirin, which can contribute to nosebleeds.

### Home Treatment

- Sit up straight and tip your head slightly forward. Tilting your head back may cause blood to run down your throat.
- Blow all the clots out of your nose. Pinch your nostrils shut between
  your thumb and forefinger or apply firm pressure against the bleeding
  nostril for 10 full minutes. Resist the urge to peek after a few minutes
  to see if your nose has stopped bleeding.
- After 10 minutes, check to see if your nose is still bleeding. If it is, hold
  it for 10 more minutes. Most nosebleeds will stop after you apply direct
  pressure for 10 to 30 minutes.
- Stay quiet for a few hours and do not blow your nose for at least 12 hours after the bleeding has stopped.





# NOSEBLEEDS

### When to Seek Healthcare

- If the bleeding hasn't stopped after you have applied direct pressure for 30 minutes.
- If blood runs down the back of your throat even when you pinch your nose.
- If your nose is deformed after an injury and may be broken.
- If nosebleeds recur often (more than four in a week).
- If you take blood thinners (anti-coagulants) or high doses of aspirin and have had more than one nosebleed in a single day.



# POISONING

FOR ANY POISONING: Call Netcare 911 emergency services or Poison Control (0800 333 444) immediately. Children will swallow just about anything, including poisons. When in doubt, assume the worst.

Always believe a child who indicates that he or she has swallowed poison, no matter how unappetizing the substance is.

If you suspect food poisoning, see page 4.

### Prevention

About 80 percent of poisonings occur in children between the ages of 1 and 4. Develop poison prevention habits before your child is born or certainly before he or she is crawling. Infants grow so fast that sometimes they are crawling and crawling before you have time to protect them.

- Never leave a poisonous product unattended, even for a moment.
- Lock all drugs and vitamins away from children. Aspirin is a common source of childhood poisoning, especially flavoured baby aspirin. Lock up drugs between doses.
- Do no keep poisons, such as drain opener, dishwasher detergent, oven cleaner, or plant food, under your kitchen sink. Keep them completely out of the reach of children. Dishwasher detergent is especially dangerous.
- Keep products in their original containers. Never store poisonous products in food containers.
- Use childproof latches on your cupboards.
- Use "Danger" stickers and teach your children to recognise them.
- Keep the number for Poison Control near your phone.
- Talk with your health professional about including activated charcoal in your first aid supplies at home. Activated charcoal reduces the toxic effect of some poisons.

### When to Seek Healthcare

For poisoning of any kind, call Netcare 911, Poison Control, a hospital, or a health professional immediately for instructions. Have the poison container with you so you can describe the poison.



# POISONING

# **Carbon Monoxide Poisoning**

Carbon monoxide is a colourless, odourless, tasteless gas produced from burning fuels such as paraffin, natural gas, petrol, fuel oil, charcoal, or wood. If fuel-burning appliances are not used properly, dangerous levels of carbon monoxide can build up in enclosed areas.

When a person inhales carbon monoxide, the carbon monoxide begins to replace the oxygen in the blood. This condition is called carbon monoxide poisoning. Symptoms include headache, dizziness, and nausea. If the exposure to carbon monoxide continues, the person may lose consciousness and even die. Infants, small children, older adults, and people with chronic health problems are more easily affected by high amounts of carbon monoxide in the blood, and their symptoms may be more severe. To protect yourself and your family from carbon monoxide poisoning, install a carbon monoxide detector in your home. Also, have your heating appliances, chimneys, and vents inspected each year. Do not leave the car's engine running when the car is in an enclosed area such as a garage, even if the garage door is open. If you know or suspect that someone has carbon monoxide poisoning, seek medical care immediately.

## **Lead Poisoning**

Infants and young children who inhale or eat dust, food, or other things that contain lead are at risk for developing learning disabilities and growth problems. Lead poisoning can cause serious problems in adults as well. Lead is present in old paint, water pipes, and other substances. Lead-based paint may be a hazard in older homes, especially if the paint is flaking or peeling and a child eats the paint flakes.

### To reduce the risk of lead poisoning:

- Keep painted surfaces in good repair. Clean paint flakes and chips from older painted surfaces (such as floors and windowsills) carefully.
- Keep young children away from home remodelling and refinishing projects.
- If your home has lead or lead-soldered water pipes, use cold water and let the water run for a few minutes before using it for drinking, cooking, or making baby formula.
- Have your child's blood tested for lead at about 1 year of age.

# **SEIZURES**

If you see someone who is having a seizure, stay calm. Although seizures seem to last a long time, they usually do not last more than 60 to 90 seconds.



Time the seizure, if you can. If the seizure lasts longer than 3 minutes or the person seizing is pregnant (no matter how long the seizure lasts), call Netcare (082 911) immediately.

A seizure can be terrifying to watch, especially if you've never seen one before. A seizure temporarily interferes with muscle control, movement, speech, vision, or awareness. It may cause a person's entire body to shake violently for a few seconds to a few minutes, and he or she may lose consciousness.

Seizures can be mild to severe, and they affect people differently. Even though you may feel helpless around someone having a seizure and find it difficult to watch, there are many things you can do to help.

# How to help during a seizure

- Protect the person from injury.
  - Keep him or her from falling if you can, or try to guide the person gently to the floor.
  - Try to move furniture or other objects that might injure the person during the seizure.
  - If the person is having a seizure and is on the ground when you arrive, try to position the person on his or her side so that fluid can leak out of the mouth. But be careful not to apply too much pressure to the body.
- Do not force anything, including your fingers, into the person's mouth. Putting something in the person's mouth may cause injuries to him or her, such as chipped teeth or a fractured jaw. You could also get bitten.
- Do not try to hold down or move the person. This can cause injury, such as a dislocated shoulder.



# **SEIZURES**

# How to help after a seizure

- Check the person for injuries.
- If you could not turn the person onto his or her side during the seizure, do so
  when the seizure ends and the person is more relaxed.
- If the person is having trouble breathing, use your finger to gently clear his or her mouth of any vomit or saliva. If this does not work, call for emergency help.
- · Loosen tight clothing around the person's neck and waist.
- Provide a safe area where the person can rest.
- Do not offer anything to eat or drink until the person is fully awake and alert.
- Stay with the person until he or she is awake and familiar with the surroundings.
   Most people will be sleepy or confused after a seizure.

### **Treatment**

- If the person has a history of seizures, he or she may have medications to treat them. Give the medications according to the prescribed directions.
- Medications or brain imaging may be needed at the hospital.
- Stay with the person until emergency help arrives.



Shock may develop as a result of sudden illness or injury. When the circulatory system is unable to get enough blood to the vital organs, the body goes into shock. Sometimes even a mild injury will lead to shock.

# The signs of shock include:

- Cold, pale, clammy skin.
- Weak, rapid pulse.
- Shallow, rapid breathing.
- Low blood pressure.
- Thirst, nausea, or vomiting.
- · Confusion or anxiety.
- Faintness, weakness, dizziness, or loss of consciousness.

Shock is a life-threatening condition. Prompt home treatment can save the person's life.

### Home Treatment

- After calling for emergency care, have the person lie down and elevate his or her legs 30 cm or more. If the injury is to the head, neck, or chest, keep the legs flat. If the person vomits, roll the person to one side to let fluids drain from the mouth. Use care if there could be a spinal injury.
- Control any bleeding and splint any fractures.
- Keep the person warm, but not hot. Place a blanket underneath the person, and cover the person with a sheet or blanket, depending on the weather. If the person is in a hot place, try to keep the person cool.
- Take and record the person's pulse every 5 minutes.
- Comfort and reassure the person to relieve anxiety.

### When to Seek Healthcare

Call Netcare 911 if a person develops signs of shock.



# SNAKE BITES

Snake bites rarely occur in South Africa.

The most poisonous South African snakes are the adder, cobra, mamba and tree snake (boomslang). Even if a poisonous snake bites you, it may not inject poison.



However, if your skin is broken by the bite, assume that poison has been injected. If you are bitten by a snake you know or suspect its poisonous, call for emergency medical care.

If you are bitten by a snake and it is safe for someone who is with you to kill the snake, have the person do so, and take the dead snake with you when you get medical care. By knowing what kind of snake has bitten you, a health professional can quickly select the correct treatment. Be very careful when handling a dead snake. The snake's biting reflex remains for up to 60 minutes after it has died

Get medical care as quickly as possible. Medication for snake bites is most effective when given within 4 hours and is less effective after more than 12 hours have passed.

### Prevention

- Find out what the local snakes look like, whether they are poisonous, and where you are likely to encounter them.
- Wear high leather boots and long pants when you are in areas that snakes inhabit
- Do not put your hands or feet anywhere until you can see that it is safe to do so. Do not step over logs or rocks if you cannot see the other side.
- Avoid walking in snake-infested areas at night.
- Do not handle snakes, even if they are dead, unless you know how to identify snakes and know their habits.

# SNAKE BITES

### Home Treatment

Call the local emergency services if you think you have been bitten by a poisonous snake. While you are waiting for help to arrive (or if help is not available):

- Keep calm. Frantic activity will cause the poison to spread faster.
- If possible, lie down and keep the area of the bite lower than your heart.
- Splint the arm or leg that was bitten at or below heart level.
- Drink non-alcohol beverages in frequent, small amounts to reduce the risk of shock.
- Snake bite kits (such as the Extractor) may be of temporary benefit while
  you wait for medical help to arrive. Use them only if you have been
  instructed how and when to do so by an expert.

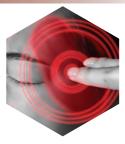
### When to Seek Healthcare

Call Netcare (082 911) emergency services if you think that you or someone you are with has just been bitten by a poisonous snake.



# STROKE

A stroke occurs when a blood vessel (artery) supplying blood to the brain bursts or becomes blocked by a blood clot. Within minutes, the nerve cells in that area of the brain are damaged and die.



As a result, the part of the body controlled by those cells cannot function properly. Call Netcare 911 immediately if you think you may be having a stroke. Do not try to drive yourself to the hospital. If medical treatment is sought as soon as stroke symptoms are noticed, fewer brain cells may be permanently damaged by the stroke.

The effects of a stroke may range from mild to severe and may be temporary or permanent. A stroke can affect vision, speech, behaviour, thought processes, and the ability to move parts of the body. Sometimes it can cause a coma or death. The effects of a stroke depend on:

- Which brain cells are damaged.
- How much of the brain is affected
- How guickly blood supply is restored to the affected area.

A person may have one or more transient ischemic attacks (TIAs) before having a stroke. TIAs are often called mini strokes because their symptoms are similar to those of a stroke. The difference between a TIA and a stroke is that TIA symptoms usually disappear within 10 to 20 minutes; however, TIA symptoms may last up to 24 hours.

A TIA can occur months before a stroke occurs. It is a warning signal that a stroke may soon follow. The first TIA should always be treated as an emergency, even if the symptoms go away after just a few minutes.

# STROKE

### When to Seek Healthcare

The number one cause of stroke is high blood pressure and therefore it's important to know the symptoms of stroke.

The symptoms of stroke depend on which part of the brain has been damaged. Sometimes the person may not be aware of any symptoms at all, but Call the local emergency services immediately if you have any of the following symptoms of stroke:

- Mouth drooping on one side;
- Any new weakness, numbness, or paralysis in your face, arm, or leg, especially on only one side of your body.
- Blurred or decreased vision in one or both eyes that does not clear with blinking.
- Sleepiness or unconsciousness;
- Problems with hearing, taste or touch; and
- Confusion, new difficulty speaking or understanding simple statements and loss of memory.
- Sudden, unexplainable, and intense headache that is different from any headache you have had before.
- Severe dizziness, loss of balance, or loss of co-ordination, especially in another warning sign is present at the same time.

If a symptom was definitely there and then went away after a few minutes, call your doctor immediately. Symptoms that go away in a few minutes may be caused by a TIA. A TIA is a strong sign that a major stroke may soon occur and should be treated as an emergency.



# TICK-BITE FEVER

Ticks are parasites that fasten themselves to the skin and feed on blood. A tick should be removed as soon as you discover it.

Tick-bite fever is an infection spread by the mites of ticks. It is a common illness in South Africa, Israel, and Kenya. The mites are tiny (about the size of the full stop at the end of this sentence).

Early symptoms of tick-bite fever usually include a black spot at the site of the bite, painful lymph glands, and a rash that may appear all over the body. Flulike symptoms including headache, fever, and muscle or joint pains may also occur. Tick-bite fever requires treatment with antibiotics. Aspirin or paracetamol can be used to treat any pain or fever.

### Prevention

### Before going outdoors in a tick-infested area:

- Put on light-coloured clothing and tuck pant legs into socks.
- Apply an insect repellent containing DEET to exposed areas of skin or to clothing. Apply carefully around eyes and mouth.
- Children and pregnant women should use a lower-concentration DEET product.
- Don't put repellent on small children's hands, because children often put their hands in their mouths.
- After returning indoors, wash the repellent off with soap and water.

# **DID YOU KNOW**

Ticks hatch from eggs and develop through three active (and blood-feeding) stages: larvae (small-the size of sand grains); nymphs (medium-the size of poppy seeds); adults (large-the size of apple seeds). If you see them bigger, they're probably partially-full or full of blood.

# TICK-BITE FEVER

### **Home Treatment**

- Regularly check your body for ticks when you are out in the veldt, and thoroughly examine your clothes, skin, and scalp when you return home. Check your pets too. The sooner ticks are removed; the less likely they are to spread infection.
- Remove a tick by gently pulling on it with tweezers, as close to the skin as
  possible. Fine-tipped tweezers may work best. Pull straight out and try not
  to crush the body. Save the tick in a jar for tests in case you develop flulike symptoms after you have been bitten.
- Wash the area and apply an antiseptic.

### When to Seek Healthcare

- if you are unable to remove the entire tick.
- If you develop a rash, especially if you know you were recently exposed to
  ticks. The rash may or may not be in the area where you were bitten and
  may be accompanied by flu-like symptoms, such as fatigue, headache, stiff
  neck, fever, chills, or body aches.



