



First Aid & CPR Training Inc.

REFERENCE MANUAL

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ATTENTION

Please pay extra attention when you see this symbol.

Hello from all of us at Lifesaver 101 First Aid & CPR Training Inc. Thank you for selecting Lifesaver 101 to provide you with educational, enjoyable and effective First Aid and CPR training. This reference manual is to be used with the “hands-on” approach to our interactive training. Please enjoy your program.

Learning objectives include clearly determining when to call 9-1-1 and what to do while waiting for help to arrive.

Being confident in FIRST AID & CPR includes your ability to assess quickly and competently the components of an emergency situation. As a First Aider you will always follow the steps of Emergency Scene Management (ESM) by completing the **Lifesaver 101 Rules of 123 & ABC** and providing ongoing care.

Any scene of a medical emergency can be overwhelming for a first aider. By taking a first aid course you are equipping yourself with the knowledge you will need to become an effective and confident first aider. Pair that knowledge with the first aid supplies and equipment to do the job and you are on your way to helping any casualty.

LIFESAVER 101 COMMON FIRST AID TERMS

First Aid – First Aid is emergency assistance to an injured or ill person.

1. It increases their likelihood of survival.
2. Minimizes suffering.
3. Assists them in recovering from injury or illness.

First Aider – as a First Aider it is your job to take charge of the situation. You are not expected to diagnose injuries and illnesses but to assess and treat suspected injuries and illnesses.

History – any relevant medical information the casualty or bystanders can relay that will aid in first aid or medical treatment

Signs – things you may see (i.e. blood, skin colour, sweating)

Symptoms – things you are told that a casualty is experiencing as a result of their injury and/or illness (i.e. pain).

Mechanism of Injury (MOI) – the cause of the injury or illness which can help you provide the right treatment to the casualty.

Casualty – the injured or ill person.

LIFESAVER 101 FIRST AID & CPR TRAINING INC.'S RULES OF "1 2 3 & A B C"

EMERGENCY SCENE MANAGEMENT (ESM)

ESM is the sequence of events a first aider uses to provide appropriate first aid and keep everyone, including yourself, safe. There are 4 stages of Emergency Scene Management – **Scene Survey, Primary Survey, Secondary Survey and Ongoing Assistance**. Understanding these steps and making sure they occur in the same order in every medical emergency will ensure the safety and well being not only of your casualty but you, the first aider, as well.

Lifesaver 101 has made the first components of Emergency Scene Management (ESM) easy to remember using the **Lifesaver 101 Rules of 123 & ABC** as follows:

SCENE SURVEY - Here you take charge and gather information before helping the casualties. **It's as easy as 123!**

1 - SAFETY FIRST - Safety is your highest priority! Remember you cannot help if you are hurt!

- Take charge, introduce yourself, ask if you can help. Call out to bystanders for assistance as needed.
- If there is any chance the casualty may have a head or spinal injury, tell the casualty not to move.
- Make sure the scene is safe to enter. Check for fire, wire, gas and glass, and other hazards. Gather and use your personal protective equipment (PPE). If the scene is not safe, make it safe if you can, if not– do not enter – call 9-1-1 right away.
- Find out what happened, look for the Mechanism of Injury (cause). Look for other casualties and assess and triage multiple casualties.



BEWARE OF FIRE, WIRE, GAS AND GLASS



2 - RESPONSE

Check responsiveness

- Determine the casualty's level of consciousness. Start by talking/yelling to the casualty,
- If the casualty responds to you by opening their eyes or talking he is **conscious**.
- If the casualty does not speak or open their eyes, tell her to "wake up/open your eyes" while you tap the casualty's shoulder with the tips of your fingers. Do not shake the casualty. If the casualty does not respond the casualty is **unconscious**. This is an emergency! Call 9-1-1.
- If the casualty responds, continue with the ABC's.

3 - CALL 9-1-1 Or ask a bystander to call 9-1-1, confirm, and return.

- If during your 123's (Scene Survey) you decide your casualty needs emergency medical care, call 9-1-1 or have a bystander make the call.
- If you are calling 9-1-1 - Stay with the casualty and use your cell phone on speaker - the dispatcher will ask questions and help you!
- If you are sending a bystander to call 9-1-1 be sure to provide the bystander all the information they need such as location, description of emergency, casualty's level of consciousness, description of injuries or illness and casualty's approximate age and gender.
- Confirm with the bystander that they understand your request and will return.
- Ask the bystander to return to you to make sure the 9-1-1 call was made and to provide you any other assistance you may need.
- Send a bystander to get an AED if available.
- Send a bystander to meet and guide the EMS as they arrive to the scene.
- Use your mobile technology and social media apps which can notify rescuers of nearby emergency and this may increase the speed of help coming to you!

**ONCE YOU HAVE COMPLETED THE 123'S NOW IT IS TIME TO
MOVE ON TO THE ABC'S.**

PRIMARY SURVEY - “IT’S AS EASY AS ABC”

After calling 9-1-1 immediately begin the ABCs.

A – AIRWAY

- If the casualty is responsive ask them to describe what happened. If the casualty answers you know the airway is clear.
- If the casualty is unconscious the airway may not be open. Open the casualty’s airway with a head tilt chin lift if the casualty is on his back.

B – BREATHING

- If the casualty is responsive, check for effective breathing by asking the casualty if he feels his breathing is okay.
- If the casualty is unconscious, keep doing a head tilt chin lift and check breathing for no more than 5 - 10 seconds.

C – CIRCULATION

- If the casualty is not breathing normally or just gasping (agonal breathing**) begin CPR starting with compressions. Use an AED if available.
- If there is any obvious severe bleeding? Give first aid to control it.
- Check skin temperature and colour for shock.
- If you suspect injuries, using PPE, run your hands quickly over the casualty’s head and body to look for and control any bleeding issues.



**Continue to provide CPR
until the AED or help arrives**

**Agonal Breathing is an abnormal pattern of breathing characterized by shallow, slow (3-4 per minute), irregular aspirations followed by irregular pauses. It may also be characterized by gasping, laboured breathing, accompanied by strange vocalizations.

SECONDARY SURVEY

- This may be done once you have completed Lifesaver 101's Rules for 123 & ABC and performed any obviously necessary first aid. Do a **Secondary Survey** if the casualty has more than one injury, medical help will be delayed more than 20 minutes, or if medical help is not coming to the scene and you have to transport the casualty yourself.
- Do a head-to-toe casualty assessment that is used to help gather information about the casualty which may assist in quicker and more efficient treatment. Using PPE such as vinyl or nitrile gloves carefully inspect the casualty for deformities, fluids, swelling or areas sensitive to touch. See full body assessment page 7.
- Collect a detailed medical history. Gather current incident details to determine the condition of the casualty. Other information should be asked of family members and any witnesses. Ask questions of a conscious casualty to gather important information about the incident. Look for and read medical alert bracelets, necklaces or anklets.
- Provide any necessary first aid for all injuries or emergency medical conditions found.
- Continue to assess and monitor the ABC's.

ONGOING CASUALTY CARE

First Aider stays with the casualty until medical help arrives and takes over. Always treat for shock and monitor the ABC's

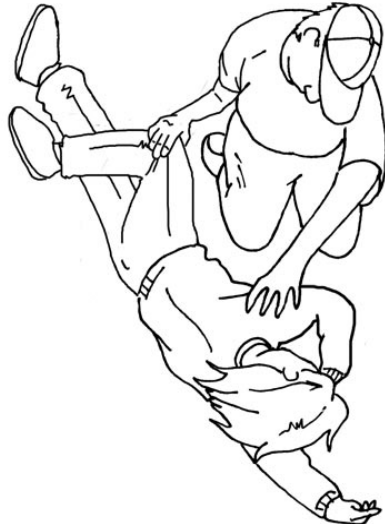
- Treat the casualty for shock
 - Sit them down before they fall down. Use the recovery or supine position when possible.
 - Rest and reassure the casualty
 - Keep the casualty warm
 - Don't give the casualty anything to eat or drink
- Continue to assess and monitor the ABC's
- If there are changes to the ABC's treat to the best of your ability
- Enlist bystanders as needed to provide any necessary aid
- Do not leave the casualty until help arrives
- When EMS arrives provide them with as much relevant information as you are able.

FULL BODY ASSESSMENT (Secondary Scene Survey)

A Full Body Assessment is a head-to-toe casualty check that is used to help gather information about the casualty. This assessment may assist in quicker and more efficient treatment towards recovery. This assessment may be done once you have completed Lifesaver 101's rules of **123 & ABC** and provide any obviously necessary first aid.

Using vinyl or nitrile gloves carefully and discretely inspect the casualty for deformities, fluids, swelling or areas sensitive to touch. Try to avoid latex gloves in order to avoid possible allergic reactions. Please note that some people may have latex allergies. Assessing a casualty should include collecting related medical history and current incident details to determine the condition of the casualty. Other information should be asked of family members and any witnesses (if present), or could be determined by observing a medical alert bracelet, necklace or anklet. Ask questions of a conscious casualty to gather important information about the incident.

ALWAYS PROCEED WITH CAUTION ... PROVIDE ONGOING CARE - TREAT FOR SHOCK AND MONITOR THE ABC's



Maintain and protect the casualty's airway.



The back is bad, the side is safer!

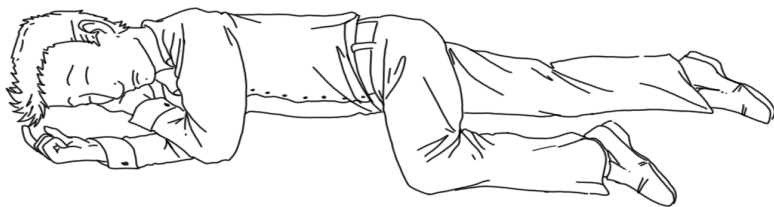
THE RECOVERY POSITION



Extend the casualty's arm closest to you over his head, the arm away from you across his body and his leg furthest away from you bent up as shown.



Place your hand on the casualty's raised knee and far shoulder. Roll the casualty towards you by pulling on the knee and shoulder.



Adjust the casualty's arm and leg so they are in a stable position. Adjust the casualty's airway as needed and provide ongoing care.

Use your assessment skills to proceed with providing aid to a casualty. Observe Medical Alert jewellery.



REMEMBER:

LIFESAVER 101 FIRST AID & CPR TRAINING INC.'S RULES OF "1 2 3 & A B C"

First Aid is emergency assistance to an injured or ill person. It increases their likelihood of survival, minimizes suffering, and assists them in recovering from injury or illness. Treat for the worst and hope for the best!

Never second-guess yourself as to whether you should have called **911**.

Assess the situation and activate **EMS** (Emergency Medical Services) by calling 911. Keep calm and stay focused. If in doubt call **911**.

YOU ARE NOT ALONE! OTHER PEOPLE CAN HELP YOU.

Bystanders – have them control traffic, call 911, and keep the scene safe.

Authorities – (Police, Hydro) – Police Officers, Firefighters and Ambulance Personnel (EMS) are highly trained and it is their duty to respond. They will take charge of the situation when they arrive. Give them all of the information you have about the casualty, the scene, and your involvement. Hydro workers can terminate electrical power if necessary.

Medical Help – off duty Health Care Professionals (i.e. Doctors, Nurses) are a great resource in an emergency. If they are available ask them for help and guidance in providing First Aid to your casualty.

EMERGENCY ACTION PLAN (PLAN, PREPARE, PRACTICE)

- Recognition of an emergency.
- Activation of EMS (Emergency Medical Services) by calling 911.
- Designation of an ERT (Emergency Response Team) which consists of a take-charge person, a call person, and control person(s).
- Gather history and information about the incident (below).
- Have a backup plan in case regular ERT members are absent.

1. Can I help you?
2. What happened?
3. Where does it hurt?
4. Any medical history?

Gather Information:

Age, Sex, Past History, Vital Signs,
Complaints, Treatment Given (Rx),
Incident History.

LEGALITIES

The Good Samaritan Principles (Ontario Bill 20 2001)

This is your incentive to place your fears and reservations for involvement aside. Exercise common sense and, based on your skill level and training, do what is reasonable. The law is on your side! Your good intentions are most important.

4 GOOD SAMARITAN PRINCIPLES

Consent - A first aider requires consent to assist a conscious casualty. If the casualty is or becomes unconscious, consent is implied. If the casualty refuses your first aid and you are concerned for their well being call 911.

Scope of training - If you do assist, use reasonable care and do not exceed your level of training.

Good intention - First aider must have the intent to help, not hurt the casualty. First aider cannot request monetary compensation for providing first aid.

Abandonment - Once You Start, Don't Stop! You have no legal obligation to help; a moral obligation should hopefully encourage your involvement. Exceptions involve persons whose occupations include lifesaving duties (i.e. lifeguards and paramedics). The legal responsibility to provide assistance applies when you are involved in a motor vehicle accident. You are to at least activate EMS if no other help can be administered.

Your obligation is to provide help until EMS arrives. Unless you are unable to carry on due to fatigue or a hazard endangering your safety, you must continue providing aid.

All that is expected of you is to **“do your best to help the casualty.”**



THE HIGHWAY TRAFFIC LAWS SAY:

Remain at or return immediately to the scene of the accident!
Render all possible assistance!

THE 5 RIGHTS

As first aiders we only assist with medications. Administering medications is a medical act that should be left to professionals, caregivers or to the person who has been prescribed the medication. When assisting with medication consider the 5 Rights - right person, the right time, the right medication, the right dosage and the right route.

RULE OF CPR: ONCE YOU START – DON'T STOP!

There are 3 reasons you can stop:

1. Your safety is at risk or exhaustion.
2. The casualty resuscitates
3. EMS arrives or someone more qualified than you takes over.

SAFETY AND PREVENTION

A rescuer's highest priority should be his or her personal safety. Assess the situation and proceed with a plan. Consider all the potential hazards, use your emergency action plan, and call for help as needed.

COMMUNICABLE DISEASES: AWARENESS AND THE FIRST AIDER

Understanding how transmission takes place and prevention awareness are essential in avoiding unnecessary contraction of these diseases and viruses. Assume that all bodily fluids are infectious for blood-borne diseases such as HBV (Hepatitis B), HCV (Hepatitis C) and HIV (Human Immuno Deficiency Virus). Airborne diseases such as Tuberculosis, Meningitis, Colds and Flues may also be present in the casualty's expelled breath. Avoid contact with any of the casualty's bodily fluids and expelled breath.

Personal Protective Equipment (PPE) should be used whenever possible.

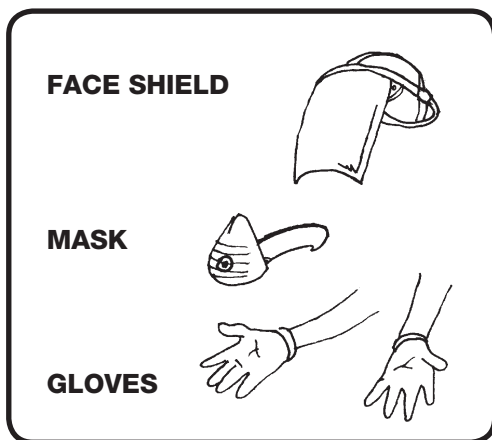
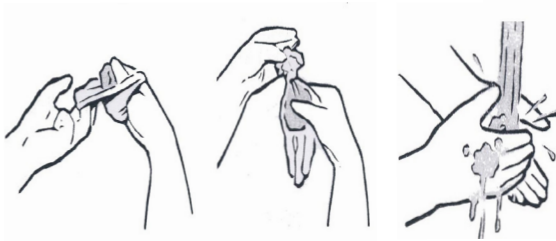
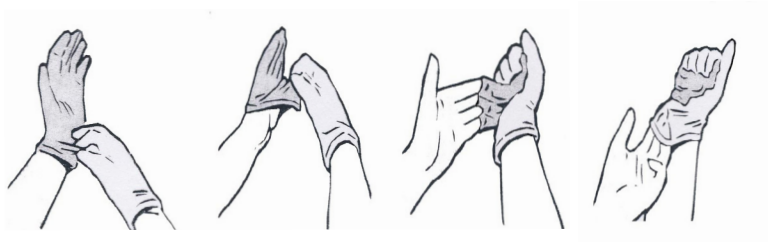
Gloves and face barriers are recommended to help avoid contact with body fluids and airborne viruses.

Using soap and water for washing hands and a 9:1 solution of water-to-bleach for contaminated equipment are the suggested methods of cleaning. Scrub hands well including the fingernails. Bacteria on the hands is also trapped under the nails. Good hygiene will reduce the risk of transmitting communicable diseases.

REMEMBER:

***LIFESAVER 101 FIRST AID & CPR TRAINING INC.'S RULES OF
"1 2 3 & A B C"***

SAFE GLOVE REMOVAL



AN OUNCE OF PREVENTION IS WORTH A POUND OF CURE.

A casualty's highest priorities are those related to breathing, specifically their airway.

A - AIRWAY

- Physical passages through which air enters the lungs.
- The tongue is the most common airway obstruction for an unconscious casualty on their back.



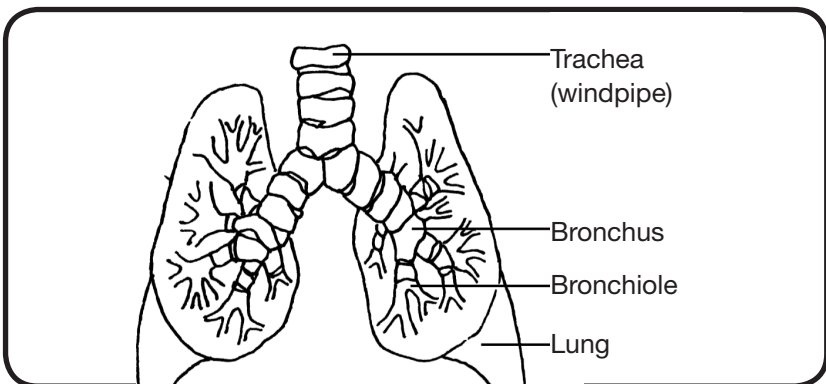
Casualty's tongue blocking airway



Head-tilt/Chin-lift method to remove tongue from blocking the airway

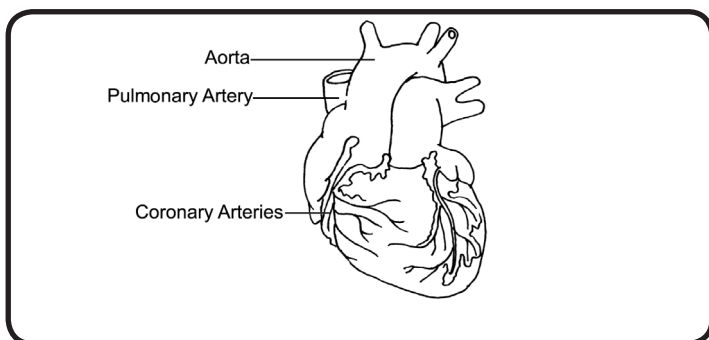
B - BREATHING

- A process where air containing 21% oxygen is taken into the lungs. The body will consume approximately 5% of this oxygen, thus leaving approximately 16% exhaled oxygen to be used in the ventilation process of CPR.
- Agonal Breathing is an abnormal pattern of breathing characterized by shallow, slow (3-4 per minute), irregular inspirations followed by irregular pauses. It may also be characterized by gasping, laboured breathing, accompanied by strange vocalizations.



C - CIRCULATION

- Arteries and capillaries carry oxygenated blood to all the body's cells and, most importantly, to the brain.
- Brain damage may begin to occur if the brain is deprived of oxygen for approximately 5 minutes.
- After about 10 minutes brain damage is usually permanent and irreversible.
- An adult's heart beats approximately between 60 - 100 beats per minute.
- Check circulation by observing skin colour and capillary refill on the casualty. If distal circulation is poor, release and then rebandage the casualty.



When assessing a life-threatening situation, one must determine what is most pertinent to the casualty's survival.

Triage

In multiple-casualty emergency situations, TRIAGE is prioritizing casualty care by assessing the order in which treatment should be given. Providing aid to those most serious is crucial, while remembering we must "Save who is saveable."

Assess each casualty using the 123 & ABCs and look for mechanism of injury. Determine which casualty is the highest priority and provide needed first aid then move on to the next casualty. Call 9-1-1 as soon as you recognize the need.

In order to prioritize casualty care, the 'Three B's' should be considered:



BREATHING BLEEDING BONES

The above guideline will help you determine the issues that should first be addressed. This process of prioritizing is referred to as triage.

CONSCIOUSNESS means how aware the person is of themselves and their surroundings. Consciousness can range from completely conscious to completely unconscious. Decreases in Levels of Consciousness (LOC) can be caused by shock, head injuries, diabetic emergencies, poisoning, heart attack and stroke.

When a person is **conscious** their eyes open spontaneously, they are oriented and alert and can answer your questions and follow directions.

When a person is **semi-conscious** their eyes open to speech or pain, their speech is confused or they may be moaning, they react to pain but may not obey commands.

When a person is **unconscious** their eyes will not open, they are not aware of their surroundings and do not respond to questions and they do not react to pain. Unconsciousness may become a breathing emergency if the casualty is lying on their back!



DECREASED LEVEL OF CONSCIOUSNESS TREATMENT

- Begin ESM using Lifesaver 101's Rules of **123 & ABC**.

1 - Safety – Check for fire, wire, gas and glass, and other hazards. Take charge, introduce yourself, ask if you can help, find out what happened, look for the Mechanism of Injury (cause).

2 - Response – Start by talking/yelling to the casualty. If needed tap the casualty's shoulder with the tips of your fingers to try to get a response.

3 - Call 9-1-1 – If required call 9-1-1 or ask a bystander to call 9-1-1, confirm, and return.

& Assess the ABC's

A - irway – Ask what happened? If the casualty answers clearly you know the airway is clear. If the casualty is unresponsive, you may need to open the airway with a head tilt chin lift.

B - reathing – Check for effective breathing for no more than 5 seconds.

C - irculation – Control bleeding, check skin colour and temperature for shock. If the casualty is not breathing, begin CPR

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DECREASED LEVEL OF CONSCIOUSNESS TREATMENT

Specific Treatment

- Do a full body assessment if necessary and give first aid.
- Turn the casualty into the recovery position if injuries permit.
- Always ensure the airway is open.
- Loosen any tight clothing.
- Monitor the casualty's level of consciousness and note any changes.
- If the casualty is not breathing begin CPR (30 compressions:2 breaths)
- Provide ongoing care and TREAT FOR SHOCK AND MONITOR THE ABC's

FAINTING is a momentary lapse of consciousness and most often not life threatening. Fainting is caused by a temporary lack of oxygen going to the brain. Some common causes of fainting are fear or anxiety, sight of blood, pain, fatigue, hunger or underlying medical conditions such as high blood pressure.

When a person is about to faint there are warning signs such as paleness, sweating, nausea and dizziness. When a person is about to faint, act quickly! Sit them down before they fall down! Ensure a fresh air supply, loosen any tight clothing and stay with the casualty until they are recovered.

FAINTING – TREATMENT

- Begin ESM using Lifesaver 101's Rules of **123 & ABC**.

1 - Safety – Check for fire, wire, gas and glass, and other hazards. Take charge, introduce yourself, ask if you can help, find out what happened, look for the Mechanism of Injury (cause).

2 - Response – Start by talking/yelling to the casualty. If needed tap the casualty's shoulder with the tips of your fingers to try to get a response.

3 - Call 9-1-1 – If required call 9-1-1 or ask a bystander to call 9-1-1, confirm, and return.

& Assess the ABC's

Continued on the next page

FAINTING – TREATMENT (Continued)

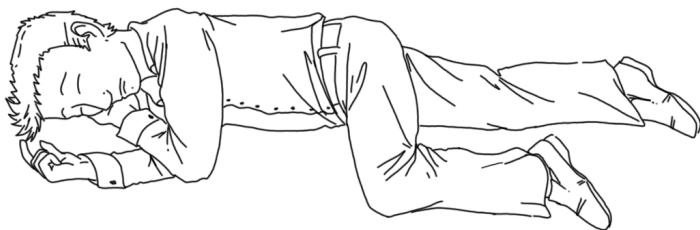
A - irway – Ask what happened? If the casualty answers clearly you know the airway is clear. If the casualty is unresponsive, you may need to open the airway with a head tilt chin lift.

B - reathing – Check for effective breathing for no more than 5 seconds

C - irculation – Control bleeding, check skin colour and temperature for shock.

Specific Treatment

- Do a full body assessment if necessary and give first aid.
- Turn the casualty into the recovery position if injuries permit.
- Always ensure the airway is open.
- Loosen any tight clothing.
- Make casualty comfortable as consciousness returns and keep them lying down for 10-15 minutes.
- Provide ongoing care and TREAT FOR SHOCK AND MONITOR THE ABC's



***Recovery from a faint should be quick and full. If this is not the case stay with the casualty until medical help takes over.*

SAFETY AND PREVENTION

- Always stay well hydrated and eat regularly.
- Have your health care provider regularly monitor any ongoing medical conditions you may have and take medication as prescribed.
- If you have been standing or sitting for a long period of time allow your body to adjust before performing any sudden movements.
- Ensure you are well rested for work or play.

SHOCK

Shock is the body's reaction to trauma due to an injury or illness. This results in a decrease of oxygen and other nutrients reaching the body's tissue (cells) and the brain (also known as hypoperfusion).

Shock can be life threatening. Therefore, understanding the mechanism of injury is essential in order to prevent this condition from worsening. Causes of shock may include: severe bleeding, heart attack, stroke, crush injuries, nerve and spinal injuries and motor vehicle accidents.

To simplify the recognition of other injuries and illnesses, first aiders need to recognize the following short list of signs and symptoms of shock. This will allow the first aider to tell the difference between signs and symptoms of shock and signs and symptoms of other conditions requiring first aid attention.

SIGNS & SYMPTOMS

- Pale, cool, clammy skin
- Nausea, vomiting
- Confusion, disorientation
- Restlessness, anxiety
- Blue lips, nail beds, earlobes
- Changing levels of consciousness
- SOB (Shortness of Breath)
- Weak, rapid heart rate
- Shivering
- Sweating
- Thirst

“TREAT THE CAUSE”

TREATMENT

- Begin ESM using Lifesaver 101's Rules of **123 & ABC**.
- 1 - Safety** - Check for fire, wire, gas and glass, and other hazards. Take charge, introduce yourself, ask if you can help, find out what happened, look for the Mechanism of Injury (cause)
- 2 - Response** - Start by talking/yelling to the casualty. If needed tap the casualty's shoulder with the tips of your fingers to try to get a response.
- 3 - Call 9-1-1** - If required call 9-1-1 or ask a bystander to call 9-1-1, confirm, and return.

& Assess the ABC's

A - irway – Ask what happened? If the casualty answers clearly you know the airway is clear. If the casualty is unresponsive, you may need to open the airway with a head tilt chin lift.

B - reathing – Check for effective breathing for no more than 5 seconds. If the casualty is responsive, ask if his breathing is ok.

C - irculation – Control bleeding, check skin colour and temperature for shock.

Specific Treatment

- Rest and re-assure the casualty. “Sit them down before they fall down.”
- Use one of the 4 shock positions below.
- Warm the casualty.
- Monitor the ABC's and continue ongoing care until casualty recovers or help arrives.

Shock may be mild to severe and can be life threatening. Shock can occur due to physical, mental, or emotional trauma. To prevent the casualty's condition from worsening **Assess and Treat The Cause** of shock.

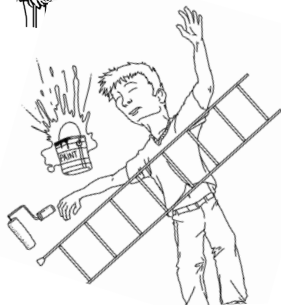
* Avoid giving anything by mouth to the casualty.

(Exceptions may include those suffering from heat exhaustion, diabetes or possible poisoning.)



Semi Sitting

Casualty is Conscious



Position Found

Casualty has suspected head or spinal injury. If the casualty is unconscious, open the airway.



Recovery Position

Casualty is unconscious, semi-conscious or conscious and no head or spinal injury is suspected



Supine Position

Casualty is conscious or semi-conscious and no head or spinal injury is suspected

HEART ATTACKS, STROKES, AND CARDIAC ARREST

Recognition by the first aider of the signs and symptoms of a heart attack, stroke or cardiac arrest is vital for providing care for a person suffering from either condition.

A HEART ATTACK occurs due to an insufficient amount of oxygenated blood reaching the heart muscle. This results in heart cell death and can trigger cardiac arrest. Most heart attacks are caused by CVD but can also happen when a severe spasm (tightening) of a coronary artery occurs that cuts off blood flow through the artery. A casualty suffering a heart attack requires immediate medical attention in order to receive timely life saving Advanced Cardiac Life Support such as medication to dissolve clots or surgery.

ANGINA occurs when one or more of the arteries becomes hardened and narrowed and the blood supply to part of the heart is limited. If the heart is working harder than normal and needs more blood it cannot get the oxygen it needs and the casualty may experience some of the symptoms listed below. These symptoms usually don't last long and are relieved by prescription medication.

SIGNS AND SYMPTOMS

Heart Attack / Angina

- Casualty may experience crushing pain in the chest or pain spreading from shoulders, jaw, neck and/or arms and back
- Feeling of indigestion or heartburn
- Denial of attack
- Loss of coordination
- Loss of bowel control
- Unsteadiness or a sudden fall

Note: Some or all signs and symptoms of shock may be present, such as:

- SOB (Shortness of Breath)
- Paleness, sweating, nausea/vomiting
- Changing levels of consciousness

HEART ATTACK – TREATMENT

1 - Safety - Check for fire, wire, gas and glass, and other hazards. Take charge, introduce yourself, ask if you can help, find out what happened, look for the Mechanism of Injury (cause)

2 - Response – Start by talking/yelling to the casualty. If needed tap the casualty's shoulder with the tips of your fingers to try to get a response.

3 - Call 9-1-1 - Call 9-1-1! This is a medical emergency! or ask a bystander to call 9-1-1, confirm, and return.

A - irway – Ask what happened? If the casualty answers clearly you know the airway is clear. If the casualty is unresponsive, you may need to open the airway with a head tilt chin lift.

B - reathing – Check for effective breathing for no more than 5 seconds. If the casualty is responsive, ask if his breathing is ok.

C - irculation – Control bleeding, check skin colour and temperature for shock.

SPECIFIC TREATMENT

- Ask the casualty where it hurts? Has this ever happened before? Do you have any medication for this pain?
- Place the casualty in a comfortable resting position.
- Loosen clothing of casualty to make them more comfortable.
- Assist the casualty to chew 1-2 low dose aspirin (review the 5 rights to avoid life-threatening allergies or other complications).
- Assist the casualty to take prescribed Nitroglycerin tablets or spray for relief of angina pain. Ask casualty if he is using medications such as Viagra to treat erectile dysfunction. If yes do not assist them to take Nitroglycerin as doing so may cause a significant drop in the casualty's blood pressure.
- If the casualty loses consciousness and stops breathing, start CPR with compressions.

USE THE FIVE RIGHTS FOR MEDICATION!

Provide ongoing care **“TREAT FOR SHOCK AND MONITOR THE ABC’s”**



Regular check-ups with your physician could reveal preliminary medical conditions such as **Angina** or **TIA**s (Transient Ischemic Attacks).

Detection and awareness may prevent serious injury or death. A history of heart attacks and/or strokes may be indicated by a casualty wearing a medical alert bracelet, necklace or anklet. Early recognition of **Angina** or **TIA**s (commonly referred to as “mini strokes”) is essential for reducing the possibility of suffering from such a condition.

STROKE

A STROKE occurs when the flow of oxygenated blood to the brain has been interrupted due to blockage such as a blood clot or a rupture or aneurysm of a blood vessel (hemorrhagic stroke). A stroke is also an emergency that demands immediate medical attention!

Transient Ischemic Attack (TIA) is caused by lack of oxygen to part of the brain and has the same symptoms as a stroke but only lasts for a few minutes to 24 hours and leaves no permanent brain damage. This is a warning sign that a stroke may follow.

SIGNS & SYMPTOMS – STROKE AND TIA

F – Facial droop – one side of the face does not move as well as the other

A – Arm drift – have casualty hold both arms out . One arm may not move or drifts down compared to the other

S – Speech – casualty may slur words, be unable to speak or use the wrong words.

T – Time - get medical help immediately. The earlier a stroke is treated the better the outcome.

Casualty may also complain of;

- Confusion
- Weakness
- Headache
- Blurred vision
- Pupil dilation
- Body numbness, or paralysis (opposite side of facial paralysis)
- Loss of bodily functions
- **Symptom onset is fast so act FAST!**

STROKE (OR TIA) – TREATMENT

- Begin ESM using Lifesaver 101's Rules of **123 & ABC**

1- Safety - Check for fire, wire, gas and glass and other hazards. Take charge, introduce yourself, ask if you can help, find out what happened, look for the Mechanism of Injury (cause).

2 - Response – Start by talking/yelling to the casualty. If needed tap the casualty's shoulder with the tips of your fingers to try to get a response.

3 - Call 9-1-1 - This is a medical emergency! Call 9-1-1 or ask a bystander to call 9-1-1, confirm and return. Tell the 9-1-1 dispatcher you think the casualty is having a stroke!

& Assess the ABC's

A - irway – Ask what happened? If the casualty answers clearly you know the airway is clear. If the casualty is unresponsive, you may need to open the airway with a head tilt chin lift.

B - reathing – Check for effective breathing for no more than 5 seconds. If the casualty is responsive, ask if his breathing is ok.

C - irculation – Control bleeding, check skin colour and temperature for shock.

SPECIFIC TREATMENT

- Place the casualty in a comfortable resting position.
- Call 9-1-1! This is a medical emergency.
- Note the time signs and symptoms of stroke began!
- Reassure the casualty and keep them warm.
- If the casualty experiences a decreased level of consciousness, place the casualty in the recovery position with the numb or paralyzed side down to reduce pressure on the functioning side (Remember: Dead Side Down)
- If the casualty loses consciousness and stops breathing, start CPR with compressions.



REMEMBER...

1. **DO NOT** elevate the casualty's legs!
2. **DO NOT** assist with any medications!

Provide ongoing care “TREAT FOR SHOCK AND MONITOR THE ABC’s”

CARDIOVASCULAR DISEASE (CVD)

CARDIOVASCULAR DISEASE (CVD) is a group of conditions that affects the heart (cardio) and blood vessels (vascular). Atherosclerosis is the build-up of fatty substances along the inside walls of the arteries. This build-up creates a smaller blood flow route which results in unnecessary and unwanted work for the heart muscle, however, sometimes blood flow to the heart is completely restricted. There are a number of factors which can affect (raise or reduce) the risk of CVD. The narrowing and hardening of the arteries is a life long (continuous) process. Risk factors include those that are non-modifiable (cannot be changed) and those that are modifiable (can be changed).

Non-Modifiable

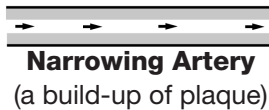
Modifiable

- Heredity
- Age
- Gender
- Race
- Exercise
- Diet / Nutrition
- Weight
- Smoking
- Diabetes (controllable)
- High blood pressure
- High stress levels

ARTERIES AND BLOOD FLOW



Free Flow



Narrowing Artery
(a build-up of plaque)



Complete Blockage

Cardiac arrest - is a medical emergency. When a casualty stops breathing and the heart stops beating, then a casualty is experiencing cardiac arrest. The casualties heart may be “shaking like a bowl of jelly” in a rhythm called Ventricular Fibrillation.

Cardiac arrest may have a variety of causes – heart disease, drowning, stroke, electrocution, suffocation, drug overdose, motor vehicle or other injury.

CARDIAC ARREST – TREATMENT

CPR will buy the casualty time until the defibrillator is available to “Zap” the heart back into a regular rhythm. The CPR sequence for Adults, Children and Infants are on the following pages.

THE “LIFESAVER SURVIVAL LINKS”

The “Lifesaver Survival Links” provide a First Aider a sequential way to deal with a casualty in cardiac arrest. Following the links in order is the casualty’s best chance for survival!

The following illustrates the Lifesaver Survival Links:



**Early
9-1-1**

**Early
CPR**

**Early
“ZAP”
(AED)**

**Early
Advanced
Life Support
(EMS)**

**Early Integrated
Post-Cardiac
Arrest Care
(Hospital)**



COMPRESSION ONLY CPR

The Lifesaver Survival Links emphasise early recognition of the emergency, calling 911 and starting good quality CPR.

If you have not been trained in CPR or are unable or unwilling to give breaths to the casualty, for any reason - don't give up! You can do Compressions Only CPR.

Compressions Only CPR is CPR without the mouth-to-mouth breaths. All you need to do is provide high quality chest compressions by pushing hard and pushing fast in the center of the chest at a rate of 100-120 times per minute.

Remember - it is better to do something than nothing!

CARDIO PULMONARY RESUSCITATION (CPR)

Early CPR will increase a casualty's chance for survival. Stimulating the heart creates circulation and moves oxygenated blood through the body and into the brain. This will allow a casualty to be more responsive to early defibrillation.

In keeping with our simplistic approach to the "First Aider's Responsibilities," it is important to understand that resuscitation is not our goal. Once you begin CPR on a casualty you should continue administering aid until EMS arrives. Since EMS will have already been activated, administering CPR most likely will be limited to the average response time of emergency medical services in your area (8 to 10 minutes in the Greater Toronto Area).

SIGNS & SYMPTOMS

RESPIRATORY ARREST

- Chest does not rise and fall
- First Aider hears no breathing
- First Aider feels no breathing

CARDIAC ARREST

- No breathing detected
- No signs of circulation or life (no breathing, coughing, movement)
- Perspiration and skin colour changes.



DID YOU KNOW ...

Children, unlike adults, are likely to suffer respiratory arrest rather than cardiac arrest. Therefore, CPR is more likely to revive children.

CPR GUIDELINES FOCUS ON THESE PRINCIPLES

- 30 compressions : 2 breaths
- Push hard / Push fast (30 compressions in 15-18 seconds) 100 - 120BPM
- Ensure full chest recoil
- Minimize interruptions in CPR (60% of your rescue CPR time should be compressions)
- Avoid over ventilating, casualty may vomit as a result
- Early defibrillation is crucial (call 9-1-1 ASAP)



For a pregnant casualty receiving CPR, raise the casualty's right hip (while keeping the chest flat) to remove the weight of the unborn fetus off the blood return vessel allowing blood to flow back to the heart more freely.



ADULT CASUALTY (8 YEARS AND UP) - TREATMENT

- 1 - Safety** - Check for fire, wire, gas and glass and other hazards. Take charge, introduce yourself, ask if you can help, find out what happened, look for the Mechanism of Injury (cause).
- 2 - Response** – Start by talking/yelling to the casualty. If needed tap the casualty’s shoulder with the tips of your fingers to try to get a response.
- 3 - Call 9-1-1** - or ask a bystander to call 9-1-1, confirm, and return. Send a bystander to get the AED.

&

A - irway – Open the airway with a head tilt chin lift.

B - reathing – Check for effective breathing for no more than 5 seconds.

C - irculation – Begin CPR starting with compressions.

- Kneel beside the casualty, place your hands in the center of the casualty’s chest, lock your elbows.
- For an adult, use 2 hands and compress straight down 2 inches (5cm) but no more than 6 cm. Ensure resistance is met with the compressions.
- Push 30 times at a rate of at least 100 - 120 beats per minute. Count out loud.
- Give the casualty 2 breaths. Breaths should be 1 second long, just enough to make the chest rise.
- Continue to provide CPR until help arrives, the casualty begins to respond or you become exhausted.
- Use an AED if available.

CHILD CASUALTY (1 TO 8 YEARS OLD) - TREATMENT

- 1 - Safety 1st** - Check for fire, wire, gas and glass, and other hazards.
- 2 - Response** – Start by talking/yelling to the casualty. If needed tap the casualty’s shoulder with the tips of your fingers to try to get a response.
- 3 - Call 9-1-1** - or ask a bystander to call 9-1-1, confirm, and return. Send a bystander to get the AED.

Continued on the next page

CHILD CASUALTY (1 TO 8 YEARS OLD) - TREATMENT (Continued)

A - irway – Open the airway with a head tilt chin lift.

B - reathing – Check for effective breathing for no more than 5 seconds.

C - irculation – Begin CPR starting with compressions..

- Kneel beside the casualty, place your hand in the center of the casualty's chest, lock your elbow.
- Place your other hand on the child's forehead in order to maintain a partially open airway.
- For an child, use 1 hand and compress straight down about 1/3 the depth of the chest. Ensure resistance is met with the compressions.
- Push 30 times at a rate of at least 100 - 120 beats per minute. Count out loud.
- Give the casualty 2 breaths. Breaths should be 1 second long, just enough to make the chest rise.
- Continue to provide CPR until help arrives, the casualty begins to respond or you become exhausted.
- Use an AED if available.

*** If alone with a unconscious non-breathing child, perform CPR for approximately 2 minutes; 30:2 (compressions to breaths) 5 times, and then call 9-1-1.**



INFANT CASUALTY (UNDER 1 YEAR OLD) - TREATMENT

1 - Safety 1st - Check for fire, wire, gas and glass, and other hazards.

2 - Response –Start by talking/yelling to the casualty. If needed tap sole of the infant's foot with the tips of your fingers to try to get a response.

3 - Call 9-1-1 - or ask a bystander to call 9-1-1, confirm, and return. Send a bystander to get the AED.

A - irway – Open the airway with a head tilt chin lift.

B - reathing – Check for effective breathing for no more than 5 seconds.

C - irculation – Begin CPR starting with compressions.

- Position yourself beside the casualty and place 2 fingers in the center of the chest. Compress straight down about 1/3 the depth of the chest. Push 30 times at a rate of at 100-120 beats per minute. Count out loud.
- Give the infant 2 breaths by coving their mouth and nose with your mouth and giving 2 small breaths, just enough to make the chest rise.
- Continue to provide CPR until help arrives, until the casualty begins to respond, or you are exhausted.
- Use an AED if available.

If alone with a unconscious non-breathing infant, perform CPR for approximately 2 minutes; 30:2 (compressions to breaths) 5 times, and then call 9-1-1.



INFANT CHOKING (CONSCIOUS) - TREATMENT

Use air exchange recognition skills. If the infant's airway is obstructed, initiate 5 glancing back-blows followed by 5 chest thrusts. Continue this combination until the airway becomes clear (unblocked) or the infant becomes unconscious.

If alone with a unconscious non-breathing infant, perform CPR for approximately 2 minutes; or 30:2 (compressions to breaths) 5 times, and then call 9-1-1.



Found Unconscious Obstructed (Adult, Child and Infant)

Begin ESM using Lifesaver 101's Rules of 123 & ABC. If a non-breathing casualty has an obstructed airway, perform CPR. Check the mouth for foreign objects & then attempt a breath. If unsuccessful, attempt to open the airway again and try a second breath. Continue to provide CPR until help arrives, until the casualty begins to respond, or you are exhausted.

AUTOMATED EXTERNAL DEFIBRILLATION (AED)

AED's (Automated External Defibrillators) save lives. Quick recognition of a casualty suffering a heart attack or a collapse requires activation of Emergency Medical Services (9-1-1) to get a defibrillator.

If a casualty suffers a "sudden cardiac arrest", the likeliness of survival has a direct relationship to how quickly the casualty can be defibrillated. These machines will deliver an electric shock that momentarily disrupts a heart's chaotic electrical activity long enough for the nodes to reset and hopefully establish a normal heart rhythm again. The AED will provide audio and visual prompts for the rescuer.

AED's are to be used on all casualties. If child (Pediatric) pads are available, then use them on children from 1 to 8 years of age. If the child pads are not available, then use the adult pads for children. Do not use child pads on an adult. Use an AED on all casualties including infants under 1 year of age.

The casualty must be unresponsive and not breathing to require an AED to be attached to them. With children, perform 5 sets of 30 compressions and 2 breaths or about 2 minutes of CPR before attaching and using the AED.

HOW AND WHEN TO USE AN AED

1. Ensure your own safety 1st.
2. Ensure casualty is unresponsive.
3. Ensure **9-1-1** is called & AED is on route.

&

A - Airway (open with a head tilt chin lift)

B - Breathing (check for breathing for no more than 5 seconds.

C - Circulation (start CPR with compressions)

Continue to perform CPR until the AED arrives. When the AED arrives, have trained rescuers use the AED as soon as possible.

STEPS

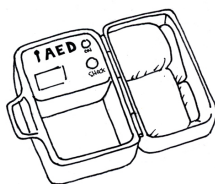
1. Turn on (or open) the AED and follow audio and/or visual prompts.
2. Bare the casualty's chest and attach the pads as indicated by pictures on pads.
3. Clear every one away from casualty and let the AED analyze the casualty's heart rhythm.
4. Press the shock button if told to do so by the AED.
5. Immediately begin CPR following shock delivered by AED.
(30 compressions followed by 2 breaths, and repeat 5 times).
6. Clear casualty, let AED analyze & deliver shock if advised to do so by the AED

***Repeat process until help arrives or until casualty shows signs of life.**

When pressing the shock button, the rescuer must shout and wave stand clear.

Please note that if no shock is advised, follow audio and or visual prompts and, unless the casualty shows signs of life, begin CPR.

AED Unit



SPECIAL CONSIDERATIONS

- Casualty should be dry. Wipe off water & ensure casualty is not laying in a large pool of water. This can reduce the effectiveness of the shock and possibly endanger the rescuer.
- If the casualty has a hairy chest, the rescuer may need to shave the casualty's chest where the pads are to be attached to ensure good contact.
- Medication patches should be removed from a casualty's chest to avoid interference to shock and for the rescuers safety in case contact to the rescuers skin occurs. Patches should be carefully removed and the chest should be wiped off.
- In cases of an implanted pacemaker or implanted defibrillator the rescuer must adjust pad placement so pads are at least 1" away from the device. These devices are located just beneath the surface of the casualty's skin and appear as an abnormal lump.

OTHER CONSIDERATIONS WHEN USING AN AED

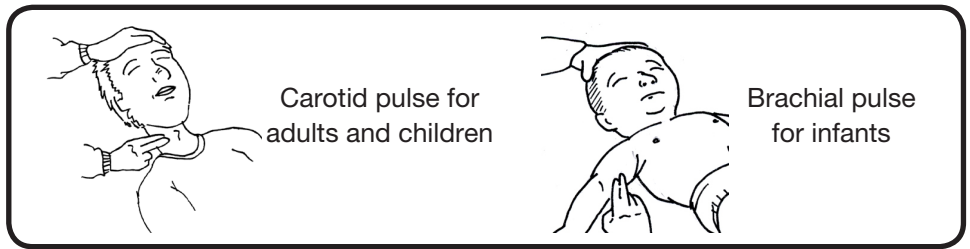
- It is not recommended to use an AED if severe trauma is suspected. If any uncertainty of severity, continue CPR and use of AED as required.
- With a casualty who has suffered severe hypothermia, deliver a maximum of 1 shock and if unsuccessful, continue CPR as required until help arrives.
- AED's can not be used in a moving vehicle, as the motion can interfere with the AED's ability to properly analyze the casualty's heart rhythm.
- If possible, AED use on metal surfaces should be avoided. Non conductive surfaces are best if the casualty can be quickly and carefully moved off the metal surface.
- AED training is highly recommended for proper and safe use of the device. Understanding audio and visual prompts are both prudent and necessary to provide optimal care for a casualty in cardiac arrest to survive.

HEALTH CARE PROFESSIONALS (HCP)

Health Care Professionals include Doctors, Nurses, Paramedics, Dentists, etc. The following techniques are to be performed in a clinical setting when two or more health care professionals are available. Lone health care professionals should tailor their rescue to reflect the most likely cause of arrest.

Sudden collapse requires a quick assessment to decide on the action to be taken. The healthcare professional should assess whether respiratory or cardiac arrest has occurred and respond accordingly.

To determine if the patient has experienced cardiac arrest or respiratory arrest health care professionals will assess the patient's pulse. Pulse checks should be carried out at the same time as the health care professional is assessing breathing. Pulses are assessed in the Carotid Artery for adults and children. Brachial pulse is to be checked for infants.



The following guidelines apply in a clinical setting with 2+ HCP

Casualty	Age	Ratio	Tools	Rate
Adult	over Puberty	30:2	2 hands	100-120BPM
Child	1-Puberty	15:2	1-2 hands	100-120BPM
Infant	0-1 years	15:2	2 thumbs	100-120BPM

During two rescuer CPR with an advanced airway in place, rescuers no longer provide cycles of compressions with pauses for ventilations. The compressor provides continuous compressions and the rescuer providing rescue breaths gives 8 to 10 breaths per minute. (1 breath about every 6 to 8 seconds).

When two or more healthcare professionals are present during CPR, rescuers should rotate the compressor role every cycle to avoid rescuer fatigue.

Healthcare professionals should use a modified jaw thrust to open the airway of a casualty with suspected head and/or spinal injuries. If this technique is taking too much time or is too challenging to perform the head tilt-chin lift should be performed.

To perform a modified jaw thrust - Grasp the corners of the lower jaw and lift with both hands one on each side moving the jaw forward without moving the neck. If the patient's lips are closed you may open them with your thumbs.



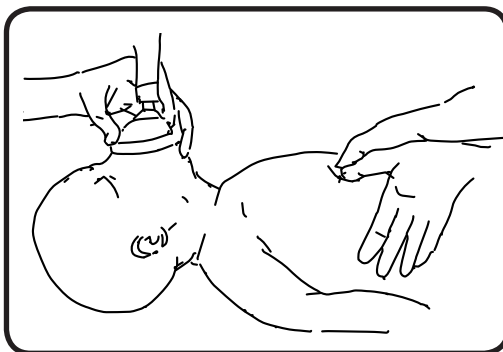
Modified jaw thrust

During two rescuer infant CPR, the two thumb-encircling hands technique should include a thoracic squeeze for chest compressions.

One HCP will utilize the BVM while the second HCP places their thumbs in the center of the chest and encircle the infant by placing their hands behind the infant's back. (thumbs always need to be touching; fingers may not always touch in the back if the infant is large or HCP has small hands).

Perform CPR by squeezing the infant with the fingers and thumbs at the same time. CPR on infants in a Health care setting is performed at a ratio of 15:2.

Switch with your partner every 2 minutes.

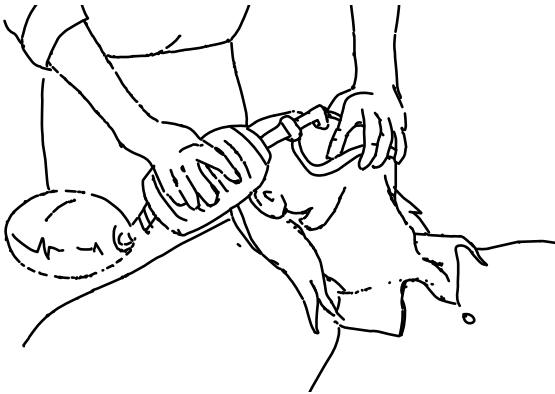


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HEALTH CARE PROFESSIONALS (HCP) (Continued)

Safety is of the highest priority for any health care provider. Health care providers should always use personal protective equipment(PPE) when performing CPR on a a casualty.

When providing ventilations it is ideal for a HCP to utilize a Bag Valve Mask (BVM). Use the 'CE' hand position to obtain a seal with the mask This position involves the thumb and index finger holding the mask. Once the position and seal are obtained, "bagging" can commence. The bag should be depressed for a full 1-2 seconds and then released. Chest rise should be seen. If you overventilate the patient they may vomit.



When the patient is experiencing respiratory arrest, a HCP will provide Artificial Respiration by providing rescue breaths using a BVM. In this case, the HCP will provide 12-20 breaths per minutes.

If the patient has a confirmed or suspected spinal injury utilize a modified jaw thrust in combination with the BVM wherever possible.



If a BVM is not available a HCP may consider using a One way air-valve.(Pocket mask)

CHOKING

Choking is due to a partial or complete blockage of the airway. Choking can be caused when food, toys, medication or other objects are swallowed and block the airway. Air exchange is the key factor in determining how to render aid to a choking casualty.

COUGHING IS NOT CHOKING!

Intervention for coughing is not required. Simply encourage the casualty to continue coughing forcefully and stay with them. Follow them if they wander off to avoid isolation.

If the airway becomes completely obstructed, you must act quickly because this is a life-threatening emergency! The casualty may go unconscious and their heart may stop!



*Universal sign
for choking*

SIGNS & SYMPTOMS

OBSTRUCTION

1. Partial airway obstruction with good air exchange.
2. Partial airway obstruction with poor air exchange.
3. Complete airway obstruction.

CASUALTY

- Is able to speak
- Can cough forcefully
- Weak, ineffective cough
- Wheezing sounds
- Breathing difficulties
- Cannot speak, cough or breathe
- Distress and facial discolouration is apparent.

ASK! "Are you Choking?"

Sir, are you choking?



"I can help you, OK?"

I'm trained in first aid and I'm going to help! OK?



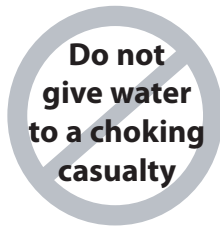
CHOKING - TREATMENT

Recognize air exchange and determine necessary treatment.

CONSCIOUS ADULT OR CHILD CASUALTY WHEN COUGHING

(Partial obstruction)

- Do not interfere.
- Encourage forceful coughing.
- Remain with casualty.
- Alert bystanders.



CONSCIOUS ADULT OR CHILD CASUALTY WHEN CHOKING

(Complete obstruction)

- Begin ESM using Lifesaver 101's Rules of 123 & ABC

1 - Safety - Check for fire, wire, gas and glass, and other hazards. Take charge, introduce yourself, ask if you can help, find out what happened, look for the Mechanism of Injury (cause)

2 - Response - Start by talking/yelling to the casualty. If needed tap the casualty's shoulder with the tips of your fingers to try to get a response.

3 - Call 9-1-1 - This is a medical emergency! Call 9-1-1 or ask a bystander to call 9-1-1, confirm, and return.

& Assess the ABC's

A - Airway – Ask what happened? If the casualty answers clearly you know the airway is clear. If the casualty is unresponsive, you may need to open the airway with a head tilt chin lift.

B - Breathing – Check for effective breathing for no more than 5 seconds. If the casualty is responsive, ask if his breathing is ok.

C - Circulation – Control bleeding, check skin colour and temperature for shock.

- Ask, confirm, and act quickly.
- Follow the **“5 & 5”** - 2 step process for choking.

CONSCIOUS ADULT OR CHILD CASUALTY WHEN CHOKING

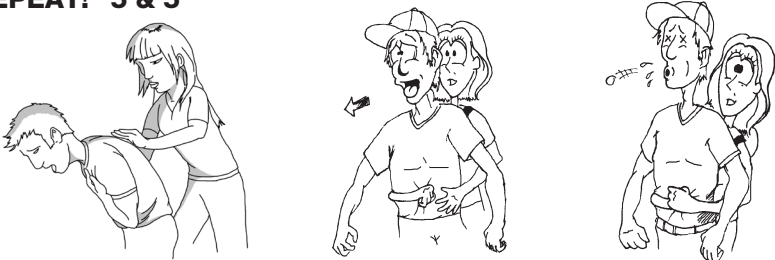
(Continued)

STEP 1

- Position yourself behind the casualty and assist him to bend over.
- Secure his arm and administer 5 back blows between the shoulder blades.

STEP 2

- Place one of your legs between the casualty's legs and keep your head tilted slightly to one side to protect yourself.
- Place a fist with thumb outside the knuckles near the navel but well below the xiphoid process (notch at lower part of the sternum).
- Clasp with other hand, and give 5 abdominal thrusts. Thrust inwards and upwards to create an "artificial cough," using as much force as required to dislodge the object.
- Alternate between back blows and abdominal thrusts until the object clears or the casualty loses consciousness.
- **REPEAT! "5 & 5"**



- Implement the buddy system and remain with the casualty until you are certain no harm will come to them or until help arrives.
- If the casualty is pregnant or if access to the abdominal landmark area is not possible, landmark on the chest as used for adult and child CPR. Use chest thrusts as an alternative method to clear airway obstruction.
- Wheelchair choking casualties are treated the same - always make sure to lock the brakes on the wheelchair. Shorten the distance for chest or abdominal thrusts by crossing over the casualty's shoulder with one arm, and under their armpit with your other arm to landmark on the chest and thrust until the airway clears or the casualty becomes unconscious.
- If unsuccessful and the casualty becomes unconscious, tilt the wheelchair back, slide the person off the chair for safety, and treat them as unconscious. Activate EMS immediately, and perform CPR while waiting for help to arrive.

OBSERVED UNCONSCIOUS CHOKING / OBSTRUCTED ADULT/CHILD CASUALTY

TREATMENT - "When they fall, make the call!"

Aid the casualty to the ground and call 9-1-1.

If alone with a child perform 2 minutes of CPR (30:2, 5 times) then **call 9-1-1**.

With an adult casualty start CPR as soon as possible starting with compressions. Continue to with the steps of CPR but perform a visual check before opening the airway and giving the two breaths.

Look in the casualty's mouth and insert fingers only to remove a foreign object if visible at the back of the throat.

Open the airway (head-tilt/chin-lift) and give the casualty 2 breaths. If the first breath does not enter the lungs, reposition the casualty's head to ensure airway is open, then give a second breath.

If the airway becomes unobstructed (clear), reassess the Lifesaver 101 Rules of **123 & ABC** and provide ongoing care as needed.



Provide ongoing care "TREAT FOR SHOCK AND MONITOR THE ABC's"



Please Note:

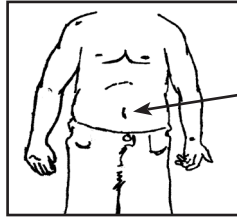
Always encourage the casualty of either a choking or other rescue procedure to seek medical attention to ensure no complications have occurred. As a precautionary measure, a bystander should call 9-1-1 ASAP for a still-conscious infant with an obstructed airway. If the foreign object is dislodged from the infant's airway during CPR, the bystander can give the 9-1-1 dispatcher an update. Always look in the mouth of an unconscious casualty if due to choking before delivering breath as this will avoid causing foreign objects to fall in further.

- If alone, try to use the back of a chair or similar object to create a forceful “artificial cough” to unblock your airway obstruction.
- You may also attempt to perform abdominal thrusts on yourself with your fist as you exit to seek help.
- Call 9-1-1 if unsuccessful. Tap your phone on the chair three times or depress any key three times in succession. This is understood by 9-1-1 dispatch to be a distress call. Unlock the door and exit quickly.



TORSO LANDMARK

Near the navel, and well below the xiphoid process.



Near the navel

CHEST THRUST

Use when abdominal area is not accessible. (pregnancy, obese)



SAFETY AND PREVENTION

- People who are walking/running while eating are more likely to choke
- Supervise children when they are eating, discourage playing while eating.
- Keep small objects out of reach of children, no toys when eating.
- Always cut food into manageable pieces.

WOUNDS AND BLEEDING

A wound is a soft tissue injury that can result in internal or external bleeding, or both. Blood loss from a wound can be life threatening. A decrease in both the volume of blood and the blood pressure in one's circulatory system can be fatal. If not controlled, this will induce and accelerate shock. Wounds can occur by any of the following means:

- Abrasions (scrapes)
- Incisions (cuts)
- Lacerations (tears / penetrations)
- Avulsions (flaps of skin)
- Contusions (bruising)
- Complete Amputation: Body part fully severed from casualty.
- Partial Amputation: Some soft tissue connection remains
- Punctures (penetrations)

SIGNS & SYMPTOMS

External Bleeding

- Appearance of blood
- Swelling and discolouration
- Pain
- **Arterial bleed**- spurting bright red blood - life threatening!
- **Venous bleed** - darker, oozing blood - possibly life threatening!

Internal Bleeding

- Swelling and/or pain
- Bruising
- Guarding injury
- Pain
- Tenderness
- Redness



REMEMBER

SAFETY FIRST, and always use your gloves to minimize contact with blood and/or other bodily fluids.

WOUNDS AND BLEEDING - TREATMENT

1 - Safety - Check for fire, wire, gas and glass, and other hazards. Take charge, introduce yourself, ask if you can help, find out what happened, look for the Mechanism of Injury (cause)

2 - Response - Start by talking/yelling to the casualty. If needed tap the casualty's shoulder with the tips of your fingers to try to get a response.

3 - Call 9-1-1 - If required call 9-1-1 or ask a bystander to call 9-1-1, confirm, and return.

& Assess the ABC's

A - irway – Ask what happened? If the casualty answers clearly you know the airway is clear. If the casualty is unresponsive, you may need to open the airway with a head tilt chin lift.

B - reathing – Check for effective breathing for no more than 5 seconds. If the casualty is responsive, ask if his breathing is ok.

C - irculation – Control bleeding, check skin colour and temperature for shock.

Minor Wound Care - Wounds can easily become infected if they are not cleaned properly. Minor wounds should be cleaned with soap and water or water alone for 5 minutes. Antibiotic cream can be used on superficial wounds. Bandages and dressing should be clean and sterile. These bandages should be changed at least once a day to minimize infection.

Signs of Infection to watch for are redness, swelling, heat, abnormal discharge and pain. Seek Medical attention for infection!

Tetanus - often referred to as “lockjaw” is potentially fatal. Common causes are animal bites or wounds contaminated by soil, feces or dust. A casualty requires immunizations for protection from this infection.

ABRASIONS, INCISIONS, LACERATIONS, PUNCTURES, AVULSIONS (OPEN WOUNDS) - SPECIFIC TREATMENT

R - Rest and Re-assure the casualty.

D - Apply Direct Pressure with a sterile, lint-free dressing. If additional dressing is required, always apply new dressing over soaked (existing) dressing. Bandage the dressing in place with a narrow triangular bandage or roller bandage. Check circulation below the injury.

NEVER REMOVE THE INITIAL DRESSING DURING TREATMENT!

EMBEDDED OBJECTS - SPECIFIC TREATMENT

- Begin ESM using Lifesaver 101's Rules of **123 & ABC**

R - Rest and Re-assure the casualty.

D - Direct pressure should be applied around the object.

- Do not remove an embedded object from the casualty. The object itself will minimize bleeding and prevent further damage if left in place.
- Carefully apply indirect pressure to the object by either stacking dressing around it or by using a ring pad. Stabilize and secure with bandages.

AMPUTATION - SPECIFIC TREATMENT

- Begin ESM using Lifesaver 101's Rules of **123 & ABC**
- R** - Rest and Re-assure the casualty.
- D** - Direct pressure should be applied to the digit or limb with clean dressing and bandaged in place.
- **Full Amputation** - Wrap moist, sterile dressing around amputated part and seal in a plastic bag. Place this sealed bag into another bag with ice. Collect details of the cause and time of the amputation and pass this information on to EMS.
 - **Partial amputations** - Reposition and bandage in proper position (i.e. for fingers, the partially severed digit should be positioned alongside the other fingers for stability).
 - Provide ongoing care - treat for shock and monitor the ABC's

SUCKING CHEST WOUNDS -SPECIFIC TREATMENT

- Begin ESM using Lifesaver 101's Rules of **123 & ABC**
- Leave the wound exposed or apply a non-occlusive dressing (regular gauze dressing).
- If the dressing becomes saturated, it must be changed.
- If there is significant external bleeding, direct pressure to the chest wound with a hand or a gauze dressing should be applied.
- Provide ongoing care - treat for shock and monitor the ABC's

INTERNAL BLEEDING - SPECIFIC TREATMENT

- Begin ESM using Lifesaver 101's Rules of **123 & ABC**
- R** - Rest and Re-assure the casualty.
- Apply a cool compress to the affected area
 - Call 9-1-1 immediately. Internal bleeding may be life threatening!
 - Provide ongoing care - treat for shock and monitor the ABC's

GUM, TONGUE & CHEEK - SPECIFIC TREATMENT

- Begin ESM using Lifesaver 101's Rules of 123 & ABC
- Apply principles of RD (Rest/Re-assure, Direct pressure to wound).
- Pack the area with gauze to control the bleeding
- Ice may be helpful to slow bleeding in the mouth
- See treatment for dental evulsion on page 60.
- Provide ongoing care - treat for shock and monitor the ABC's

PALM OF HAND WOUND- SPECIFIC TREATMENT

- Begin ESM using Lifesaver 101's Rules of 123 & ABC
- Apply principles of RD (Rest/Re-assure, Direct pressure to wound).
- Have the casualty grasp a roll bandage and make a fist
- Wrap the hand with a triangular bandage to secure
- Provide ongoing care - treat for shock and monitor the ABC's

ABDOMINAL WOUND- SPECIFIC TREATMENT

- Begin ESM using Lifesaver 101's Rules of 123 & ABC
- Apply principles of RD (Rest/Re-assure, Direct pressure to wound).
- Apply gauze to any open wounds
- Look for and treat internal bleeding if wound is closed
- If internal organs are protruding - do not try to put them back in. Cover all exposed organs with clean moist dressings. Call 9-1-1 ASAP!
- Complications can include severe bleeding or contamination. Watch for signs of shock and infection.
- Provide ongoing care - treat for shock and monitor the ABC's



The application of a tourniquet may be acceptable in a delayed care situation only after direct pressure fails or is not possible. Training on the use of tourniquets is recommended for those taking advanced-level training programs.

SAFETY AND PREVENTION

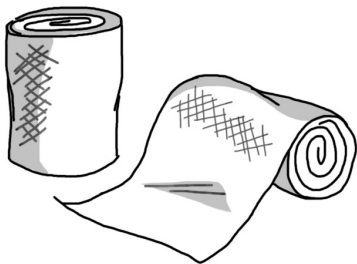
- Always use Personal Protection Equipment (PPE) when assisting a casualty.
- For minor cuts, gently wash with mild soap and water.
- One time use antibiotic cream can now be added to first aid kits/stations.
- Use cream only on minor wounds after cleaning then discard leftover cream.

DRESSINGS

The protective covering put on a wound to help control bleeding, absorb blood and prevent further contamination. Dressing should be large enough to cover the wound, sterile, absorbent, non-stick and lint free. Use commercially available dressings whenever possible but you can improvise your own if you need to. Commercial dressings are commonly found as gauze, pressure dressings, and adhesive dressings (with their own bandage). You can improvise dressings with towels, sheets, sanitary napkins, diapers or other lint free, sterile material. When handling dressings, avoid touching the surface that will contact the wound to minimize the chance of infection.

BANDAGES

Any material that is used to hold the dressing in place, maintain pressure over a wound, support a limb or joint, immobilize or secure a splint. You may use commercially prepared bandages or improvise your own. When using bandages remember to apply them firmly to control bleeding and check circulation beyond the bandage to make sure it is not too tight. Commercially prepared bandages include triangular bandages and rolls. You can improvise bandages by using towels, sheets, or any other clean material.



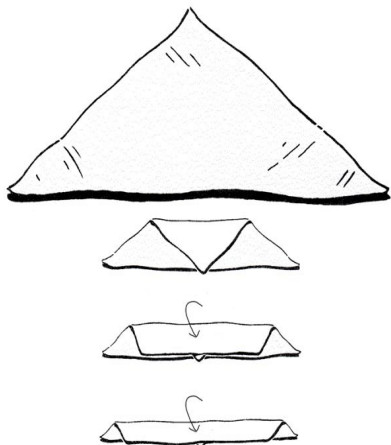
Roll bandages

Gauze like material, packed in a roll and can be used to secure dressings in place. To use, start at the narrow part of the limb, wrap the injured area, overlapping at each turn by one quarter to one third. When done, secure with tape, safety pin or cutting and tying in place.

Triangular bandages

Are commonly found in first aid kits can be used as follows;

1. **Full cloth** - Use as sling, head bandage, or foot bandage.
2. **Broad bandage** – Use to secure large dressings.
3. **Narrow Bandage** – Use to secure smaller dressings, immobilize bones and joints, attaching to slings



NOSEBLEEDS - SPECIFIC TREATMENT

- Begin ESM using Lifesaver 101's Rules of 123 & ABC
- Pinch the fleshy part of the nose (nostrils).
- Have the casualty lean forward.
- Hold the nose closed continuously for 10 minutes (obtain medical attention if bleeding persists past the 10 minute period).
- Avoid blowing/picking at the nose!
- A cold compress on the bridge of the nose and/or at the back of the neck will assist in constricting the blood vessels and slow down the bleeding.



BITES - SPECIFIC TREATMENT

- Begin ESM using Lifesaver 101's Rules of 123 & ABC
- Wash the bite with soap and water.
- Apply principles of RD (Rest/Re-assure, Direct pressure to bite).
- Observe the casualty for allergic reaction.
- Try to identify any animal or insect responsible for a bite.

SCALP/EAR WOUND - SPECIFIC TREATMENT

- Begin ESM using Lifesaver 101's Rules of 123 & ABC
- Rest the casualty.
- Direct pressure should be applied to the wound.
- Dress with gauze and apply pressure to control the bleeding
- Use a triangular bandage as a bandana to keep dressing in place.
- If trauma to the head has occurred suspect and treat for head/spinal injury.
- Provide ongoing care - treat for shock and monitor the ABC's

**PROVIDE ONGOING CARE
"TREAT FOR SHOCK AND MONITOR THE ABC'S"**



Check for proper distal circulation in the fingers by noting good circulation & colour. Push on nailbed until it turns white, note how long it takes to return to normal. If it takes a long time or does not return, circulation is a problem. If bandages are too tight, release and rebandage the injury.

ASTHMA (Respiratory Difficulties)

Asthma and breathing difficulties occur for a number of reasons such as allergies, heat and exercise. Inflammation of the air passages, a build-up of mucous, and constriction of the lower airways are common characteristics of asthma.

SIGNS & SYMPTOMS

- SOB (Shortness of Breath)
- Laboured breathing
- Cyanosis (skin appears pale or bluish)
- Coughing or wheezing
- Dizziness
- Tightness in chest

Note: Some or all signs and symptoms of shock may be present.



In extreme asthma attacks, an EpiPen can be used to assist the casualty, then call 9-1-1.

ASTHMA - TREATMENT

- Begin ESM using Lifesaver 101's Rules of 123 & ABC

1 - Safety - Check for fire, wire, gas and glass, and other hazards. Take charge, introduce yourself, ask if you can help, find out what happened, look for the Mechanism of Injury (cause)

2 - Response - Start by talking/yelling to the casualty. If needed tap the casualty's shoulder with the tips of your fingers to try to get a response.

3 - Call 9-1-1 - Is this a medical emergency? Call 9-1-1 or ask a bystander to call 9-1-1, confirm, and return.

& Assess the ABC's

A - irway – Ask what happened? If the casualty answers clearly you know the airway is clear. If the casualty is unresponsive, you may need to open the airway with a head tilt chin lift.

B - reathing – Check for effective breathing for no more than 5 seconds. If the casualty is responsive, ask if his breathing is ok.

C - irculation – Control bleeding, check skin colour and temperature for shock.

SPECIFIC TREATMENT

- Rest and re-assure the casualty.
- Assist with medication (inhaler)
- Coach the casualty in breathing while they are sitting upright.
- Asthma may be brought on by dust, pollen, air quality factors, stress, physical exertion and cold temperatures.
- Separate an asthmatic casualty from external stimuli that act to trigger respiratory difficulties.



*(Use as directed
by a physician)*

SAFETY AND PREVENTION

- Remember that asthmatic reactions can range from annoying to life threatening.
- It is best for an asthmatic casualty to avoid the triggers which cause the condition to be activated.
- During an attack, the casualty should stop all activity and sit down upright while stretching open the lungs. Coach the casualty to breathe deeply and assist with medications.
- If there is any doubt whether their medication should be given, do so.
- The benefits of taking medications even if not required, far outweigh a choice not giving them their medications.

ALLERGIES/ANAPHYLAXIS

An allergy is a person's abnormal reaction to substances which are generally harmless to most others. Allergies range from being a mere annoyance to a fatal medical condition. Foods, drugs, insect venoms, and pollen are the most common allergens. A possible life-threatening medical condition or reaction due to allergies is referred to as anaphylactic shock.

SIGNS & SYMPTOMS

- Breathing difficulties
- Swelling of eyes, lips and throat
- Hives
- Red, watery eyes
- Itchy, pale skin
- Vomiting and diarrhea
- Abdominal discomfort
- Laboured breathing

Note: Some or all signs and symptoms of shock may be present.



If in doubt, give an anaphylactic casualty their EPIPEN and call 9-1-1.

ALLERGIES - TREATMENT

- Begin ESM using Lifesaver 101's Rules of 123 & ABC

1 - Safety – Check for fire, wire, gas and glass, and other hazards. Take charge, introduce yourself, ask if you can help, find out what happened, look for the Mechanism of Injury (cause).

2 - Response – Start by talking/yelling to the casualty. If needed tap the casualty's shoulder with the tips of your fingers to try to get a response.

3 - Call 9-1-1 – If required call 9-1-1 or ask a bystander to call 9-1-1, confirm, and return

& Assess the ABC's

Continued on the next page

ALLERGIES/ANAPHYLAXIS (Continued)

A - irway – Ask what happened? If the casualty answers clearly you know the airway is clear. If the casualty is unresponsive, you may need to open the airway with a head tilt chin lift.

B - reathing – Check for effective breathing for no more than 5 seconds. If the casualty is responsive, ask if his breathing is ok.

C - irculation – Control bleeding, check skin colour and temperature for shock.

SPECIFIC TREATMENT

- Call 9-1-1 quickly and assist the casualty with their EPIPEN.
- Administer the EPIPEN - press it into the outer thigh muscle and hold steady for 10 seconds.
- Rub injected area and lay the casualty down.
- Apply cold compresses to swollen areas if available.
- Scrape away a noticeable bee stinger with a credit card (or similar object).
- If the EPIPEN is not effective after 5 minutes give a second dose. Seek medical advice before administering additional EPIPENS.

Provide ongoing care “TREAT FOR SHOCK AND MONITOR THE ABC’s”

SAFETY AND PREVENTION

- Persons with Anaphylaxis should always carry their EPIPEN .
- This medication is intramuscular, secure casualty, check for muscle and interfering objects & assist or administer their EPIPEN, through the clothing is acceptable.
- Hold the EPIPEN with a fist and ensure no thumbs are on either end of the device when administering to avoid accidental injection into the first aider’s thumb.
- Always keep track of expiry dates on EPIPENS so they can be replaced before they expire.
- Once used, place the EPIPEN back in its original container.
- Make sure to give any used EPIPENS to the EMS for safe disposal.

DIABETES

Diabetes is a medical condition which arises as a result of the body's inability to maintain a proper balance of blood sugar levels. Insufficient insulin levels result in high blood sugar levels. If the pancreas does not produce enough insulin or can't use it effectively, the result is an improper blood sugar level because the sugar cannot be converted to energy. Insulin is the "key" that allows sugar (glucose) to enter and access the cells.

CAUSES, SIGNS & SYMPTOMS

INSULIN SHOCK

- Needs sugar (hypoglycemic)

CAUSES

- Hunger, fatigue, too much insulin, vomiting

SIGNS & SYMPTOMS

- Faint, weak, headache
- Pale, cool, sweating
- Shallow breathing
- Agitated, aggressive
- Staggering, confused

DIABETIC COMA

- Needs insulin (hyperglycemic)

CAUSES

- Too much food, illness, not enough insulin

SIGNS & SYMPTOMS

- Drowsiness
- Flushed, dry skin
- Laboured breathing
- Thirst, frequent urination
- Acetone smell on breath

Note: Some or all signs and symptoms of shock may be present.



If in doubt, give SUGAR. Fluids such as orange juice and non-diet pop are best. If casualty is semi or unconscious, rub honey, maple syrup or icing sugar gel on to their gums.

DIABETES - TREATMENT

- Begin ESM using Lifesaver 101's Rules of 123 & ABC

1 - Safety – Check for fire, wire, gas and glass, and other hazards. Take charge, introduce yourself, ask if you can help, find out what happened, look for the Mechanism of Injury (cause).

2 - Response – Start by talking/yelling to the casualty. If needed tap the casualty's shoulder with the tips of your fingers to try to get a response.

3 - Call 9-1-1 – If required call 9-1-1 or ask a bystander to call 9-1-1, confirm, and return

Continued on the next page

DIABETES (Continued)

& Assess the ABC's

A - irway – Ask what happened? If the casualty answers clearly you know the airway is clear. If the casualty is unresponsive, you may need to open the airway with a head tilt chin lift.

B - reathing – Check for effective breathing for no more than 5 seconds. If the casualty is responsive, ask if his breathing is ok.

C - irculation – Control bleeding, check skin colour and temperature for shock.

SPECIFIC TREATMENT

- Check for Medical Alert jewellery (bracelets, necklaces, anklets).
- Ask questions relating to details of the casualty's diabetic condition.
- Assist in giving a conscious casualty 'SUGAR' or 'SUGAR SUPPLEMENT' such as apple/orange juice, Mentos, Skittles, jelly beans, or milk.
- If the symptoms do not go away in 10 minutes give more sugar.
- If the casualty is unconscious - call 911 and place the casualty in the recovery position until help arrives. Monitor the ABC's for any changes.
- Never give insulin unless you are the guardian or you have been given permission to do so by the guardian and have received the appropriate training. If in doubt, give sugar - it will not worsen casualty's condition.
- Call 911 if the casualty's condition does not improve.

Provide ongoing care "TREAT FOR SHOCK AND MONITOR THE ABC's"

SAFETY AND PREVENTION

- It is very important for a diabetic to maintain proper sugar levels through proper nutrition and exercise.
- Be familiar with friends/family and co-worker's normal behaviour in order to detect "highs and lows". Lows happen quickly, highs take time to develop.
- Remember that if you are unsure if a known diabetic is experiencing high or low sugar levels, assist with sugar in a liquid form.
- Encourage diabetics to wear medical alert bracelets or necklaces.

SEIZURES

Seizures are disorders of the electrical, chemical and nervous systems that involve a partial or total loss of consciousness. This condition may be accompanied by varying degrees of involuntary muscle contractions. Causes for seizures include epilepsy, head injuries, diabetes, high fever, stroke, drug overdose, chemical imbalance, etc...

SIGNS AND SYMPTOMS

- Unconsciousness (unresponsiveness)
- Eyes rolled up and back
- Violent convulsions (jerking movements)
- Frothing at the mouth
- Casualty becomes rigid
- Loss of bodily functions (urination)



Note: Some or all signs and symptoms of shock may be present.



Protect the casualty and call 9-1-1 ASAP!

SEIZURES - TREATMENT

- Begin ESM using Lifesaver 101's Rules of 123 & ABC

1 - Safety – Check for fire, wire, gas and glass, and other hazards. Take charge, introduce yourself, ask if you can help, find out what happened, look for the Mechanism of Injury (cause).

2 - Response – Start by talking/yelling to the casualty. If needed tap the casualty's shoulder with the tips of your fingers to try to get a response.

3 - Call 9-1-1 – If required call 9-1-1 or ask a bystander to call 9-1-1, confirm, and return

& Assess the ABC's

A - irway – Ask what happened? If the casualty answers clearly you know the airway is clear. If the casualty is unresponsive, you may need to open the airway with a head tilt chin lift.

Continued on the next page

SEIZURES (Continued)

B - reathing – Check for effective breathing no more than 5 seconds. If the casualty is responsive, ask if his breathing is ok.

C - irculation – Control bleeding, check skin colour and temperature for shock.

SPECIFIC TREATMENT

- Call 9-1-1 for Grand Mal seizures (exceptions by medical direction only).
- Place something soft under the casualty's head.
- Do not place anything in a casualty's mouth, and don't restrain movement.
- Let the seizure run its course.
- Cover the casualty with a blanket to provide privacy in case they urinate themselves.
- Protect the casualty from injury by shielding the head and clearing the area.
- For an infant having a seizure from a high fever, follow the steps above.

Provide ongoing care "TREAT FOR SHOCK AND MONITOR THE ABC's"

SAFETY AND PREVENTION

- The highest priority is the casualty's safety.
- If an infant has a high fever give acetaminophen as per the directions, sponge the infants skin with cool water, encourage the infant to drink, dress the infant in light clothes. Continue to monitor the temperature, if it does not reduce seek medical attention.
- Covering the casualty with a blanket to provide privacy in case they urinate themselves will protect the casualty's dignity.
- Treat for shock in the recovery position.
- Following a seizure, the casualty will appear confused, drowsy, levels of consciousness can vary, and they will feel extremely tired.
- Seizures are generally not life threatening, but the dangers that are encountered during the seizure may be so if not recognized and addressed by the First Aider.

Seizures range from minor to severe. Severe seizures are often referred to as Grand Mal or "Tonic-Clonic" seizures.

BONE AND JOINT INJURIES

“IF IT HURTS, DON’T MOVE IT”

Fractures occur as the result of a bone breaking, chipping or being crushed. A fracture is an acute injury which involves soft tissues. Fractures can be open (when the skin is broken) or closed (when the skin remains intact). Over-extension of a joint can lead to nerve, ligament, tendon and blood vessel damage, this is called a sprain. X-rays are required to accurately distinguish between sprains, strains and fractures. Bone and joint injuries are not usually life threatening. There are 206 bones in the body. Consider the Mechanism of Injury to assess the severity of casualty’s condition.

SIGNS & SYMPTOMS

- Swelling of injured area
- Discolouration, bruising
- Pain
- Loss of function
- Possible deformity
- Possible numbness or tingling
- The sound of bones breaking
- Internal bleeding
- Compound fracture (open)

Strains can be distinguished by:

- 1° - Stretched
- 2° - Partially torn
- 3° - Completely torn

Use splint only if transporting.



Note: Some or all signs and symptoms of shock may be present.



ATTENTION:

Pelvic and bilateral femur bone injuries CAN BE FATAL! Femur fractures - look for shortening of the legs, deformities, legs turned inward and severe pain. If the casualty is having trouble standing, having severe pain in the groin or back and has an urge to urinate, the casualty may have a pelvic injury. The most effective emergency care for a fractured femur is the use of a mechanical type traction splint. Use the traction splint you have available and have been trained on unless the limb is partially amputated. If you do not have a commercial traction splint, you can apply manual traction until further medical assistance arrives.

Pelvic fractures require stabilization - There are commercial pelvic binders or slings available. Use the one you have available and are trained on. If you do not have a commercial device available, you can easily create one with triangular bandages and a blanket.

Continued on the next page

BONE AND JOINT - TREATMENT

Begin ESM using Lifesaver 101's Rules of 123 & ABC

RICE (Principles of RICE)

Use only for closed fractures, sprains and dislocations.

R REST AND REASSURE

I IMMOBILIZE (Prevent any movement)

C COLD (Reduces pain and swelling)

E ELEVATE (If possible, have the casualty elevate the injured area.)

Refrain from movement, brace and stabilize the injury. If possible secure the joints above and below the injury site. Splint only if transporting the casualty.

Ice for 20 minutes on and 20 minutes off, and repeat as required.

DISLOCATION INJURIES

(Bone separated from socket or normal position)

SPECIFIC TREATMENT

- Begin ESM using Lifesaver 101's Rules of 123 & ABC
- Immobilize the injured area.
- To immobilize, hold steady in place, use padding and slings to stabilize. The casualty will help find the most comfortable position to avoid excessive pain.
- Support the weight of the arm against the body with padding & slings.
- Apply a cold compress to the injured area.



TREAT FOR SHOCK AND MONITOR THE ABC's

SLINGS & SPLINTS

USE A SLING ONLY IF TRANSPORTING CASUALTY “POINT TO THE JOINT”

Slings are used to provide support and protection for an arm. There are many commercial slings or you can improvise a sling with items you can find around the house. Minimize movement to reduce the possibility of further damage.

If it hurts “DON’T MOVE IT”.

- **Tubular sling-** Have the casualty support their arm diagonally across the body with the fingers pointing to the opposite shoulder. Place a triangular bandage over the forearm and hand with the “point to the joint”. Both ends make a straight line down the opposite side of the casualty’s body. Bring the lower end across the back and over the shoulder on the uninjured side. Tie the two ends together so the knot rests comfortably for the casualty. Twist the point until tight to support the elbow then tuck it in on itself.
- **Arm sling -** Have the casualty support their arm horizontally across the body with the fingers pointing just above the opposite elbow. Place a triangular bandage between the forearm and chest to the point is past the elbow and the ends are straight up and down. Bring the upper end over the shoulder on the uninjured side and the lower end over the hand and forearm. Tie the two ends together so the knot rests comfortably for the casualty. Twist the point until tight to support the elbow then tuck it in on itself.
- **Improvised Sling -** If you don’t have a commercial sling available a sling can be easily improvised. Use a scarf, belt, or bandana, or any other item that is strong enough to hold the arm in place. You can even have the casualty use the clothes they are wearing by unzipping their coat and placing their hand inside in a raised position.
- If you don’t need to transport the casualty you can ask the casualty to put the injured part in a comfortable position to aid in stabilization (i.e.. rest injured limb or body part on a pillow).
- **Splints -** There are many commercial splints on the market or you can improvise. A splint should be rigid and padded to support the body part comfortably. Place the splint comfortably against the affected body part and secure it in place with bandages.

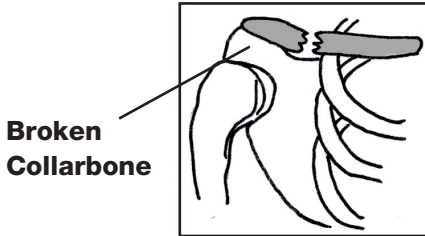


COLLARBONE INJURY (Clavicle)

Begin ESM using Lifesaver 101's Rules of **123 & ABC**

Immobilize the injured area by first using a broad triangular bandage to support the casualty's arm in a sling (see SLINGS & SPLINTS on pg. 53). Next secure the arm to the chest by wrapping a second triangular bandage across the forearm and around the body (TRAVERSE BANDAGE).

TREAT FOR SHOCK AND MONITOR THE ABC's



COMPOUND INJURY OR OPEN FRACTURE (Skin Pierced by Bone)

SPECIFIC TREATMENT

Begin ESM using Lifesaver 101's Rules of 123 & ABC

- Immobilize the injured area.
- To immobilize, carefully apply indirect pressure around the compound fracture site using either a stacking method of dressing and bandages or a number of traditional ring pads (donut bandages).
- Secure above and below the injury site - as well, secure the joints above and below the fracture.

TREAT FOR SHOCK AND MONITOR THE ABC's

SAFETY AND PREVENTION

- Apply cold compress once stabilized and never directly to skin.
- Ensure all work & play areas are safe.
- Ensure all safety equipment is used and is in proper working order i.e. safety harnesses and seat belts!
- Work Safe & Smart. Work within your own limitations & capabilities.
- Always use proper lifting techniques.

HEAD AND SPINAL INJURIES

Head and/or spinal injuries due to falls, collisions, or direct blows to the head can damage the brain and or nervous system. Suspect a head or spinal injury if you did not witness the incident. Never move a casualty unless the situation becomes life threatening. If you have to move a casualty, do so carefully. Attempt to assess the mechanism of injury to determine possible head or spinal injuries.

SIGNS & SYMPTOMS

- Changing levels of consciousness
- Confusion or disorientation. Difficulty remembering
- Numbness or loss of feeling below injury site
- Tingling sensation
- Headaches
- Fluid or blood discharge from nose and ears
- Pupil dilation/ black eyes
- Visible head injury (bumps or other obvious trauma)
- Internal bleeding (most commonly from the spleen)

Note: Some or all signs and symptoms of shock may be present.

HEAD AND SPINAL INJURIES - TREATMENT

- Begin ESM using Lifesaver 101's Rules of 123 & ABC
- Ensure the casualty does not move. Say - "Don't move!" - manually stabilize the casualty's head in place. DO NOT apply a cervical collar.
- Only move the casualty if it is a life threatening emergency - not breathing is life threatening. You will have to open the airway and if needed, begin CPR.
- Moving the casualty could result in permanent disability, unresponsiveness or death. Determine the mechanism of injury (get all pertinent information).
- Maintain stabilization. Support the casualty's head in position found.
- Any fluid exiting the head should slowly drain with light pressure.
- Keep the casualty awake and monitor their recovery progress.
- Do not give the casualty anything to eat or drink.
- Provide re-assurance and comfort.

HEAD AND SPINAL INJURIES - TREATMENT (Continued)

Only move a casualty if it is a life threatening emergency!

You may have to move a casualty with a suspected head or spinal injury to do CPR, if they are vomiting, to place a casualty on a spinal board, or to provide life saving first aid.

How to turn a casualty from face down to face up (2 or more rescuers)

One first aider supports the head from above with your right hand on the right side of the head and left hand on the left side of the head. The second first aider extends the casualty's closest arm over the casualty's head then holds onto the casualty's far shoulder and waist. At the same time, the first aiders roll the casualty as a unit keeping the head and spine in line. If there is more help, have the third first aider support the lower body during the roll.

How to turn a casualty from face up to the side (2 or more rescuers)

One first aider supports the head from above with your right hand on the right side of the head and left hand on the left side of the head. The second first aider crosses the casualty's arms across the chest then holds onto the casualty's far shoulder and waist. At the same time, the first aiders roll the casualty as a unit keeping the head and spine in line. If there is more help, have the third first aider support the lower body during the roll.

Provide ongoing care "TREAT FOR SHOCK AND MONITOR THE ABC's"



REMEMBER

Head and Spine stay in line!



SAFETY AND PREVENTION

- Use proper safety equipment at work & at play.
- Work & play within your own capabilities & training.
- Make sure all equipment is safe & operating properly.

HEAD INJURIES

All head injuries are potentially serious because they can damage the brain and make someone lose responsiveness. The severity of the head injury depends on how someone hit their head and how hard the impact was.

A head injury may cause damage to the brain tissue or blood vessels inside the skull, or even cause a skull fracture. These are the most common things which may happen if someone has a head injury.

Concussion - is a brief period of unresponsiveness - this is a temporary condition which can be mild, serious or somewhere in between.

Cerebral compression - a severe blow to the head can cause swelling or bleeding in the brain. This is life threatening!

Skull Fracture - there may be a crack or break in the skull - this is serious.



SPINAL INJURY

You should always assume that someone who has a head injury may also have a neck or spine injury

TREAT ACCORDINGLY!

SIGNS & SYMPTOMS

- Changing levels of consciousness
- Confusion or disorientation.
- Difficulty remembering
- Headaches
- Fluid or blood discharge from nose and ears
- Pupil dilation/ black eyes
- Visible head injury (bumps or other obvious trauma)
- Nausea/Vomiting

HEAD INJURY- TREATMENT

- Begin ESM using Lifesaver 101's Rules of 123 & ABC
- Have the casualty stop all activity.
- Use a cold compress against the wound, treat any bleeding with direct pressure.
- Any fluid exiting the head should slowly drain with light pressure.
- Check the casualty's level of responsiveness.

If the casualty is alert and responsive - treat for shock and continue to monitor the ABCs.

Continued on the next page

HEAD INJURY- TREATMENT (Continued)

If the casualty is not alert or responsive - the injury may be severe - CALL 911.

If the casualty loses responsiveness at any point CALL 911 and treat accordingly.

Any fluid exiting the head should slowly drain with light pressure.

SPECIAL CONSIDERATIONS

Elderly people are more susceptible to head injuries and concussions - when in doubt get them medical aid.

If a casualty is wearing a helmet when they sustain a head injury DO NOT remove the helmet.

DENTAL AVULSION

There are times when a casualty may sustain a head injury and lose one or more teeth.

TREATMENT

- Begin ESM using Lifesaver 101's Rules of 123 & ABC
- Using gloves - place the tooth in a balanced salt solution. If not available use propolis, whole milk, coconut water, egg whites, ricetral, saline or phosphate buffered saline. If no other solution is available, use the person's saliva but do not store the tooth in the casualty's mouth.
- DO NOT re-implant the tooth unless you have been specifically trained to do so.
- The avulsed tooth should be held by the crown, not the root. Do not clean the tooth as this could damage the tissues.
- Control any bleeding by having the casualty bite down on a clean dressing.
- Pack the toothless area with gauze and get emergency dental care ASAP!

Provide ongoing care "TREAT FOR SHOCK AND MONITOR THE ABC's"

EYE, EAR AND NOSE INJURIES

Safety and prevention are key factors in protecting yourself from injury to these sensitive areas. A strong awareness of WHMIS (Workplace Hazardous Material Information System) will assist in protecting yourself from chemical hazards.

EYE INJURIES: Because of the potential for damage and blindness, a First Aider should demonstrate the utmost care when attending to a casualty with an eye injury. Injuries to the eyes can include particles such as dust in the eye, chemicals entering the eye, embedded objects in the eye or extruded eye balls.

SIGNS & SYMPTOMS

Tearing, redness, swelling, pain, blurred vision, object or debris visible in the eye. For an extruded eye, the eyeball will be out of the socket and remain attached to the socket.

Examining the eye - Put your gloves on and place the casualty at rest in a well lit room. Open the casualty's eye with your fingers then have the casualty look from side to side and up and down while you look in the eye for debris.

TREATMENT

- Begin ESM using Lifesaver 101's rules of **123 & ABC**.
- Avoid touching the injured eye in any way.
- **Debris particles or chemicals in the eye** - Carefully flush the affected eye(s) with cool water for 15 minutes if eyes come in contact with chemicals or other foreign objects that may cause irritation.
- **Embedded objects in the eye** - Secure any objects embedded in the eye by placing a cup (or equivalent barrier) over that eye for protection. **GET MEDICAL ATTENTION!**
- Cover up both eyes as to minimize synchronized movement that might cause irritation or further damage.
- **Extruded eyeball** - cover the eyeball and socket with moist dressing. Hold in place with tape or bandages. - **GET MEDICAL ATTENTION!**

TREAT FOR SHOCK AND MONITOR THE ABC'S

Always use PPE such as goggles and faceshields when working with debris or chemicals!

EYE, EAR AND NOSE INJURIES

EAR INJURIES: Ear injuries also require careful treatment. Ear injuries can be a result of sudden loud noises, blows to the head, or objects entering the ear. Permanent hearing loss can occur if ear injuries are not treated in a timely manner.

SIGNS & SYMPTOMS

Bleeding, redness, swelling, pain, hearing loss, object or debris visible in the ear.

TREATMENT

- Begin ESM using Lifesaver 101's Rules of 123 & ABC.
- Rest the casualty.
- Determine the mechanism of injury.
- Direct pressure should be applied to the wound.
- Dress with gauze and apply pressure to control the bleeding.
- Use a triangular bandage as a bandana to keep dressing in place.
- If trauma to the head has occurred suspect and treat for head/spinal injury. Use a gauze bandage to catch fluids, and try to safely prevent the re-entry of fluid. Allow for slow drainage, don't use full pressure.
- Medical attention should be sought if a foreign object enters the ear.
- If you are unable to remove the object or debris easily seek immediate medical attention.

TREAT FOR SHOCK AND MONITOR THE ABC'S

Provide ongoing care "TREAT FOR SHOCK AND MONITOR THE ABC's"



EYE WASH



WARNING! EAR INJURIES



NOSEBLEEDS

SPECIFIC TREATMENT

NOSE INJURIES: Nose injuries can be extremely serious due to blood loss. Determining the mechanism of injury may assist in assessing the seriousness of an injury. Nose injuries and bleeds can result from trauma to the nose, inhaling chemicals or drugs, inserting objects in the nose.

SIGNS & SYMPTOMS

Bleeding, swelling, pain, bruising under the eyes, breathing difficulties.

NOSEBLEEDS - SPECIFIC TREATMENT

- Begin ESM using Lifesaver 101's Rules of 123 & ABC
- Pinch the fleshy part of the nose (nostrils).
- Have the casualty lean forward.
- Hold the nose closed continuously for 10 minutes (obtain medical attention if bleeding persists past the 10 minute period).
- Avoid blowing/picking at the nose!
- A cold compress on the bridge of the nose and/or at the back of the neck will assist in constricting the blood vessels and slow down the bleeding.

TREAT FOR SHOCK AND MONITOR THE ABC'S

INSERTED OBJECT - SPECIFIC TREATMENT

- Begin ESM using Lifesaver 101's Rules of 123 & ABC
- Using gloves, examine the nose, if you can see the object, attempt to remove.
- If you are unable to easily remove the object, seek medical attention as the object could lodge in the sinus cavities.

TREAT FOR SHOCK AND MONITOR THE ABC'S

SAFETY AND PREVENTION

- Always work & play using proper safety equipment & ensure it's in proper working order.
- If Eye, Ear and Nose injuries are a result of possible head & spinal injury, then caution casualty not to move while waiting for help. If fluid is draining from the ears or nose due to trauma, let the fluid slowly drain while waiting for help.
- Do not use firm pressure causing increased pressure in the casualty's head. A medical check up should be made if casualty was not hospitalized to eliminate further potential injury.

BURNS

A burn occurs when body tissue becomes damaged due to exposure to extremely high or low temperatures. Types of burns include:

1. **Thermal (heat, cold)**
2. **Radiation**
3. **Chemical**
4. **Electrical**

The degree of seriousness depends on both the percentage of the casualty's body that has been exposed to the heat source, and the depth and cause of the burn. Location of injury and the health of the casualty are also important factors in assessing burn severity.

Layers of Skin: 1st - Epidermis 2nd - Dermis 3rd - Hypodermis

Degrees of Burns: 1° - Superficial 2° - Partial Thickness 3° - Full Thickness

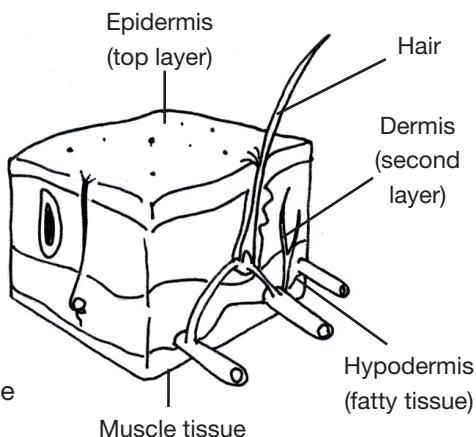
SIGNS & SYMPTOMS

1st and 2nd Degree Burns

- Redness
- Pain
- Swelling
- 2nd degree burns are deeper and often result in blistering

3rd Degree Burns

- Charred and blackened skin, or white and blanched skin (dead skin cells).
- Likely without sensation (nerve damage).
- Pain more likely around burn edges.



FOR MOST BURNS - TREATMENT

- Begin ESM using Lifesaver 101's Rules of **123 & ABC**.

1 - Safety – Check for fire, wire, gas and glass, and other hazards. Take charge, introduce yourself, ask if you can help, find out what happened, look for the Mechanism of Injury (cause).

2 - Response – Start by talking/yelling to the casualty. If needed tap the casualty's shoulder with the tips of your fingers to try to get a response.

Continued on the next page

FOR MOST BURNS - TREATMENT

3 - Call 9-1-1 – If required call 9-1-1 or ask a bystander to call 9-1-1, confirm, and return.

& Assess the ABC's

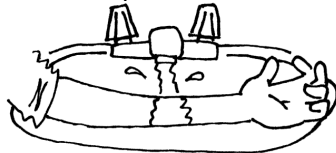
A - irway – Ask what happened? If the casualty answers clearly you know the airway is clear. If the casualty is unresponsive, you may need to open the airway with a head tilt chin lift.

B - reathing – Check for effective breathing for no more than 5 seconds. If the casualty is responsive, ask if his breathing is ok.

C - irculation – Control bleeding, check skin colour and temperature for shock.

SPECIFIC TREATMENT

- Flush or immerse in cool water for 15 minutes.
- Remove casualty's burnt clothing & jewellery immediately unless stuck to the skin.
- Cover loosely with a moist, clean, lint-free dressing.



EXCEPTIONS

- Chemical Burns - "Brush before you flush" Refer to SDS sheets. (chemical is possibly water-activated).
- Electrical Burns - Prevent water from entering open wound (dress first).

Provide ongoing care "TREAT FOR SHOCK AND MONITOR THE ABC's"

DID YOU KNOW?

- 4 complications that may result from a burn are - Shock, infection, pain or fluid loss/dehydration
- 5 instances when medical help is required for a casualty who has been burned: On genitals, area greater than 3 palm sizes, any third degree burn, 2nd or 3rd on face or hands, or burns to eyes
- Carefully remove watches & jewellery if near a burn to avoid sticking to skin.
- If the burned area is larger than three palm sizes, immediately CALL 911.

Continued on the next page

DID YOU KNOW? (Continued)

- NEVER BREAK BLISTERS! it's the body's natural mechanism to protect itself.
- If fingers or toes are burned, separate, insert moist gauze or dressing & submerge in water to prevent webbing. Avoid dousing casualty if more than 10% of the body is burnt to minimize the chance of further shock.
- Always check for multiple burn sites, especially with electrical burns.
- One time use water based gels can now be added to first aid kits/stations, use gel only on minor burns after cleaning, then discard leftover gel.
- Discard and replace gel if expired.

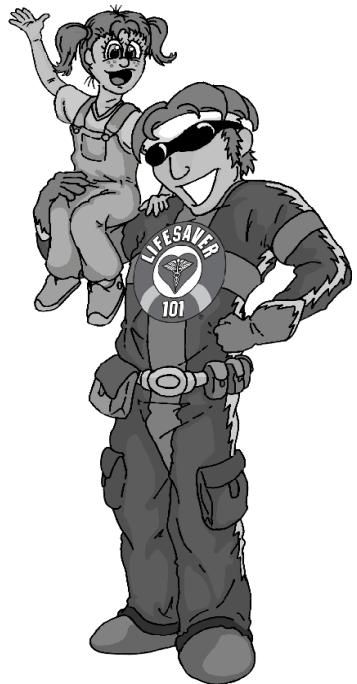
SAFETY AND PREVENTION

- Educate people on safety and awareness of potential hazards.
- Unplug unused appliances & tools.
- Always use proper safety equipment at work and at play and insure they are proper working order.
- Turn off electricity before starting repair work on machinery.
- Lock and tag electrical items in your workplace.
- Ensure equipment is in good working order.



REMEMBER

If you catch on fire, “stop, drop and roll” to extinguish flames.



POISONS

A poison is a foreign substance in the form of a solid, liquid, or gas which enters the body and causes illness, injury or death. Poisons enter the body by:

- **INGESTION** (eating something)
- **INHALATION** (breathing)
- **ABSORPTION** (skin contact)
- **INJECTION** (needle, stinger, puncture)



SIGNS & SYMPTOMS

- Breathing difficulties
- Nausea and vomiting
- Dizziness and confusion
- Abnormal behaviour
- Headache
- Unconsciousness
- Burning sensation in throat
- Skin irritation
- ABC's may not be present

Note: Some or all signs and symptoms of shock may be present.



If a casualty has sustained a jellyfish sting deactivate the venom by liberally washing the affected area with vinegar (4-6% acetic acid) ASAP for at least 30 seconds. After the nematocysts are removed or deactivated treat the pain by immersion in hot water for 20 minutes.

POISONS - TREATMENT

- Begin ESM using Lifesaver 101's Rules of **123 & ABC**
- 1 - Safety** – Check for fire, wire, gas and glass, and other hazards. Take charge, introduce yourself, ask if you can help, find out what happened, look for the Mechanism of Injury (cause).
- 2 - Response** – Start by talking/yelling to the casualty. If needed tap the casualty's shoulder with the tips of your fingers to try to get a response.
- 3 - Call 9-1-1** – If required call 9-1-1 or ask a bystander to call 9-1-1, confirm, and return.

& Assess the ABC's

Continued on the next page

POISONS - TREATMENT (Continued)

A - irway – Ask what happened? If the casualty answers clearly you know the airway is clear. If the casualty is unresponsive, you may need to open the airway with a head tilt chin lift.

B - reathing – Check for effective breathing for no more than 5 seconds. If the casualty is responsive, ask if his breathing is ok.

C - irculation – Control bleeding, check skin colour and temperature for shock.

SPECIFIC TREATMENT

- **INGESTION** \longrightarrow Call 9-1-1 or Poison Control and follow orders.
- **INHALATION** \longrightarrow Fresh air immediately for the casualty.
- **ABSORPTION** \longrightarrow Brush, then flush with cool water for 15 minutes.
- **INJECTION** \longrightarrow Call 9-1-1 or Poison Control and follow orders.

(Inquire about a “Sting Kit,” or EPIPEN, if stung by a bee or bitten by a snake.)

- Send SDS (Safety Data Sheet) to the hospital with the casualty if the poisoning occurred on the job or is work related.
- Do not induce vomiting or give anything by mouth. Call Poison Control. (What burns going down will burn coming back up)
- Identify the poison, if possible, and seek medical attention. How much was consumed? Size & Health of casualty? When the poisoning took place?
- Bee stingers should be scraped away with a credit card or similar object.

SAFETY AND PREVENTION

- Store all substances in properly identifiable containers
- Be properly trained at the workplace with all hazardous materials
- Always read instructions first before using hazardous materials
- When assisting with medication consider the right person, the right time, the right medication, the right dosage and the right route.
- In the workplace and at home, it is advised that any hazardous materials are stored and used in a safe manner.
- Stay current on your WHMIS training.
- When handling chemicals in the workplace always refer to your SDS sheets.

OPIOID DRUG OVERDOSE

An Opioid overdose happens when there are more drugs in the body than it can handle. Examples of Opioids are Heroin, Morphine, Dilaudid, Methadone, etc.

SIGNS AND SYMPTOMS

- Trouble waking or talking
- Won't wake up
- Difficulty Breathing,
- Body is very limp
- Gurgling sounds or unusual snoring

Grey, purple or blue lips/nails
Cold, clammy skin
Tiny pupils

OPIOID OVERDOSE TREATMENT

- Begin ESM using Lifesaver 101's Rules of 123 & ABC
- Call 9-1-1 right away if the person is not responsive or not breathing! - most common sign of an overdose
- Use Naloxone if you have received training
- If the person is not breathing begin CPR
- If the first dose of Naloxone does not work, a second dose can be administered.
- If the casualty is breathing, put them in the recovery position and stay with the person until help arrives.

SAFETY AND PREVENTION

- If you are going to take drugs:
 - Do not mix drugs with alcohol or other drugs as it increases the risk of overdose or death
 - Avoid taking drugs alone - try to always have someone else present
- If you are helping someone who is overdosing - make sure to use PPE so you are not exposed to the drug as well!
- The Good Samaritan Drug Overdose Act provides some legal protection for individuals who seek emergency help during an overdose. The act became law on May 4, 2017



Naloxone is used to temporarily reverse the effects of an overdose. It can take 1-3 minutes to work -It will last up to 45 minutes Side effects - sudden withdrawal and/or possible allergic reaction!

COLD INJURIES

A person's extremities (limbs) are the first things affected when the core body temperature becomes too cold due to poor circulation - frostbite could be the first warning sign. If untreated, it can be followed shortly by hypothermia. Hypothermia occurs when the body temperature drops below acceptable levels. This may result in a loss of consciousness and possibly cardiac arrest.

SIGNS AND SYMPTOMS “Shivering is good, the body is warming.”

COLD / FROSTBITE

- Pain, numbness
- Pale, firm tissue
- Stiff joints
- Loss of sensitivity

HYPOTHERMIA

- Shivering (may stop)
- Slurred speech
- Loss of coordination

COLD INJURIES (FROSTBITE) - TREATMENT

- Begin ESM using Lifesaver 101's Rules of **123 & ABC**.

1 - Safety – Check for fire, wire, gas and glass, and other hazards. Take charge, introduce yourself, ask if you can help, find out what happened, look for the Mechanism of Injury (cause).

2 - Response – Start by talking/yelling to the casualty. If needed tap the casualty's shoulder with the tips of your fingers to try to get a response.

3 - Call 9-1-1 – If required call 9-1-1 or ask a bystander to call 9-1-1, confirm, and return.

& Assess the ABC's

A - irway – Ask what happened? If the casualty answers clearly you know the airway is clear. If the casualty is unresponsive, you may need to open the airway with a head tilt chin lift.

B - reathing – Check for effective breathing for no more than 5 seconds. If the casualty is responsive, ask if his breathing is ok.

C - irculation – Control bleeding, check skin colour and temperature for shock.

SPECIFIC TREATMENT

- Remove the casualty from the cold environment. DO NOT rub the affected frostbitten area.
- Use blankets, hot water bottles or your own body heat to warm the casualty only if there is no risk of refreezing.
- You may immerse the body part in luke warm water for 20-30 minutes
- DO NOT use chemical warmers directly on skin.
- DO NOT actively warm a casualty who has deep frostbite. GET MEDICAL ATTENTION. Wrap any open wounds with sterile dressings.
- Provide ongoing care by treating for shock and monitoring the ABC's

COLD INJURIES (HYPOTHERMIA) - TREATMENT

- Begin ESM using Lifesaver 101's Rules of **123 & ABC**.

1 - Safety – Check for fire, wire, gas and glass, and other hazards. Take charge, introduce yourself, ask if you can help, find out what happened, look for the Mechanism of Injury (cause).

2 - Response – Start by talking/yelling to the casualty. If needed tap the casualty's shoulder with the tips of your fingers to try to get a response.

3 - Call 9-1-1 – If required call 9-1-1 or ask a bystander to call 9-1-1, confirm, and return.

& Assess the ABC's

A - irway – Ask what happened? If the casualty answers clearly you know the airway is clear. If the casualty is unresponsive, you may need to open the airway with a head tilt chin lift.

B - reathing – Check for effective breathing for 45 seconds. If the casualty is responsive, ask if his breathing is ok.

C - irculation – Control bleeding, check skin colour and temperature for shock.

SPECIFIC TREATMENT

- Remove the casualty from the cold environment.
- Handle the casualty carefully and remove any wet clothing they are wearing.
- Warm the casualty by using blankets, hot water bottles or your own body heat.
- Give sips of warm fluid to a conscious casualty who is not too nauseated.
- Call 9-1-1 immediately! This is a medical emergency!
- Provide ongoing care by treating for shock and monitoring the ABC's

HEAT INJURIES

Drink plenty of fluids, rest and avoid prolonged periods of time exposed to high temperatures. Heat exhaustion can rapidly turn into heat stroke, where the core body temperature rises above tolerable levels. Normal body temperature is 37° C (98.7° F). A decrease or increase of 2° can affect the body's functions. The key is to recognize when the casualty's condition worsens, and when to call 9-1-1.

Heat and cold injuries can be life threatening because they can affect a persons ABC's

SIGNS & SYMPTOMS “Sweating is a good sign, body is still cooling.”

HEAT EXHAUSTION

- Muscle cramps/spasms
- Weakness/dizziness
- Sweating
- Tiredness

HEAT STROKE

- Hot, flushed, dry skin
- Headache, confusion
- Drowsy, weak
- Decreasing levels of consciousness



“When sweating stops, and the casualty is still in the hot environment, things have worsened.”

HEAT INJURIES (HEAT EXHAUSTION) - TREATMENT

- Begin ESM using Lifesaver 101's Rules of **123 & ABC**.

1 - Safety – Check for fire, wire, gas and glass, and other hazards. Take charge, introduce yourself, ask if you can help, find out what happened, look for the Mechanism of Injury (cause).

2 - Response – Start by talking/yelling to the casualty. If needed tap the casualty's shoulder with the tips of your fingers to try to get a response.

3 - Call 9-1-1 – If required call 9-1-1 or ask a bystander to call 9-1-1, confirm, and return.

& Assess the ABC's

A - irway – Ask what happened? If the casualty answers clearly you know the airway is clear. If the casualty is unresponsive, you may need to open the airway with a head tilt chin lift.

B - reathing – Check for effective breathing for no more than 5 seconds. If the casualty is responsive, ask if his breathing is ok.

C - irculation – Control bleeding, check skin colour and temperature for shock.

SPECIFIC TREATMENT

- Move the casualty to a cooler area.
- Only give sips of cool water to a conscious casualty not an unconscious one.
- Remove any extra clothing and loosen any clothing around the neck.
- Gradually cool the casualty and apply cool compresses in areas such as the Groin, armpits, chest, forehead and back of the neck.
- Immerse the casualty in cool water to speed recovery.

Provide ongoing care “TREAT FOR SHOCK AND MONITOR THE ABC’s”



Elderly people and those in poor health are more likely to experience heat injuries. Without immediate medical attention, heatstroke can cause permanent brain damage or death!

HEAT INJURIES (HEAT STROKE) - TREATMENT

- Begin ESM using Lifesaver 101's Rules of **123 & ABC**.
- 1 - Safety** – Check for fire, wire, gas and glass, and other hazards. Take charge, introduce yourself, ask if you can help, find out what happened, look for the Mechanism of Injury (cause).
 - 2 - Response** – Start by talking/yelling to the casualty. If needed tap the casualty's shoulder with the tips of your fingers to try to get a response.
 - 3 - Call 9-1-1** – If required call 9-1-1 or ask a bystander to call 9-1-1, confirm, and return.

& Assess the ABC's

- A - irway** – Ask what happened? If the casualty answers clearly you know the airway is clear. If the casualty is unresponsive, you may need to open the airway with a head tilt chin lift.
- B - reathing** – Check for effective breathing for no more than 5 seconds. If the casualty is responsive, ask if his breathing is ok.
- C - irculation** – Control bleeding, check skin colour and temperature for shock.

SPECIFIC TREATMENT

- Move the casualty from the hot environment & remove excess clothing.
- Treat the same as for heat exhaustion and minimize fluid intake if the casualty is nauseated (moisten lips).
- Immerse the casualty in cool water to speed recovery.
- Medical Emergency - Call 9-1-1

Provide ongoing care “TREAT FOR SHOCK AND MONITOR THE ABC's”

SAFETY AND PREVENTION

- Remember to dress appropriately based on the weather.
- Wear several layers of clothing in the cold.
- Keep hydrated (drink fluids) in hot & cold weather.
- Take regular breaks from work & play to keep rested.
- Use appropriate protection and / or sunscreen to protect your skin.
- By exercising common sense, heat and cold injuries can be avoided.

5 DIFFERENT OPTIONS TO MOVE A CASUALTY



REMEMBER

Never move a casualty unless it's a life threatening emergency like an explosion, car on fire, etc.

Cradle Carry



Crutch Carry



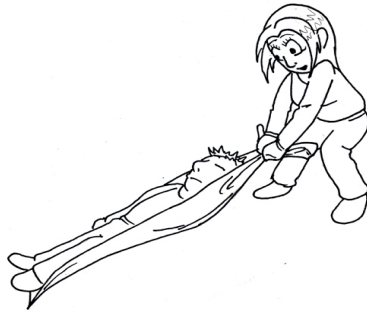
Fireman Carry



Drag Carry



Drag Carry with Blanket



SAFETY AND PREVENTION

- Select a carry safest for you as the rescuer to avoid injury to yourself.
- Carefully and cautiously walk with your casualty to safety where you can wait for EMS to arrive.
- Whenever possible minimize movement of the casualty's head & neck to avoid causing any further injury during the carry.
- Always keep the head & spine in line when moving a casualty to safety.

IN CLOSING - A WORD OF THANKS

We hope you have enjoyed our program and encourage your continued renewal or re-certification. Maintaining your skills will increase your ability to provide First Aid & CPR when an emergency occurs. We suggest that this manual be used for reference only. It should be used as a guide to refresh knowledge acquired in the Lifesaver 101 program you attended.

PLEASE REMEMBER

Doing something is much better than doing nothing. Activate EMS (Emergency Medical Services) as quickly as possible for emergency situations, and use common sense and reasonable aid to assist in a casualty's smooth recovery. Understand that shock can be present with all injuries and illnesses, even if not overtly noticeable.

Therefore, always provide ongoing care "Treat for Shock and Monitor the ABC's." It is not essential to have 'perfect' technique but anything you do should be done to the best of your ability. At the very least, you should call 9-1-1 and remove a casualty from danger if safe to do so.

Safety and Prevention are our best tools for awareness but accidents are inevitable. So stay sharp, take charge and initiate a quick response to an emergency situation.



LIFESAVER 101 FIRST AID & CPR TRAINING INC.'S RULES OF "1 2 3 & A B C"



REMEMBER

Activate the Lifesaver Survival Links and make a difference!
Stay calm, do your best, and keep it as simple as **123 & ABC.**

You are the casualty's best chance for survival until help arrives.

*Thank you,
The Team at Lifesaver 101*

Instructions: Answer the following thirty questions by filling in each blank using one word from the choices below.

1. A rescuer's highest priority, even before the ABC's, is _____.
2. The ratio of compressions to breaths for all casualties is _____.
3. During a serious allergic reaction, a casualty may require this aid: _____.
4. Blowing too much air into a casualty may cause this to happen: _____.
5. These people can help you control traffic and call 911 _____.
6. Airway, Breathing and Circulation are easily remembered as _____.
7. The primary goal of CPR is to buy time and keep the brain _____.
8. With a choking casualty, when they _____ we make the call.
9. Remember this "word" when treating for a stroke: _____.
10. To prevent shock from becoming worse, we treat the _____ of shock.
11. When a casualty is unconscious and not breathing remember to call 911 then..
12. Alternative landmark for a choking casualty whose abdomen is not accessible:
13. Once you start CPR, don't _____.
14. When performing CPR on a pregnant woman always lift her _____ hip.
15. A heart attack occurs when the heart doesn't get enough : _____.
16. With second degree burns, _____ should not be broken.
17. Our main goal during a seizure is to _____ the casualty.
18. In most cases this is the best treatment for a burned casualty _____.
19. To prevent transmission of communicable diseases always use : _____.
20. When assisting with medication always consider the _____.
21. This aid will help a casualty who is having an asthma attack: _____.
22. With diabetes, when in doubt, give this to help the casualty: _____.
23. For a chemical burn brush and then _____ with water.
24. Treat an open chest wound with a _____.
25. Breathe into a casualty just enough to make the chest _____.
26. To open a casualty's airway, use the _____.
27. An unconscious one's most common airway obstruction while on their back is:
28. After approximately __ minutes without oxygen, the brain begins to die.
29. The protective covering put on a wound to help control bleeding is called a ____.
30. When treating a casualty who has an embedded object _____ the object.

_____/30

- | | | | | |
|---------------|-------------|---------------------------|---------------|--------------|
| 1. 5 RIGHTS | 8. CHEST | 15. HEAD TILT - CHIN LIFT | 22. RISE | 28. TONGUE |
| 2. 30:2 | 9. DRESSING | 16. INHALER (PUFFER) | 23. SAFETY | 29. VOMITING |
| 3. ABC's | 10. EPIPEN | 17. OXYGEN | 24. STABILIZE | 30. WATER |
| 4. ALIVE | 11. FALL | 18. NON-OCCLUSIVE GAUZE | 25. Start CPR | |
| 5. BLISTERS | 12. FAST | 19. PERSONAL PROTECTIVE | 26. STOP | |
| 6. BYSTANDERS | 13. FIVE | EQUIPMENT (PPE) | 27. SUGAR | |
| 7. CAUSE | 14. FLUSH | 20. PROTECT | | |
| | | 21. RIGHT | | |

1. If a casualty has ingested poison call _____.
2. When handling chemicals at work always refer to _____.
3. When a casualty is suffering from heat stroke their skin will feel: _____.
4. With frostbite, do not _____ the affected area.
5. Remember this “word” when treating for bone and joint injuries _____.
6. A head to toe check of a casualty is called a _____.
7. Move a casualty only if it is a _____-threatening emergency.
8. Seek medical attention if a nose bleed last longer than ____ minutes.
9. If a casualty with a suspected head/spinal injury is bleeding from the nose ____ stop the bleeding, slow it down.
10. With a conscious choking infant have a bystander call 911 _____.
11. _____ is a momentary loss of consciousness, most often not life threatening.
12. Workplace Hazardous Material Information System is also know as _____.
13. Do not induce _____ if a casualty has ingested poison.
14. Remember head and _____ stay in line.
15. With a bone or joint injury use a _____ only if transporting the casualty.
16. If alone with an unconscious/non-breathing child casualty perform 2 _____ of CPR then call 9-1-1.
17. The cause of the injury is also known as _____.
18. A casualty in cardiac arrest usually requires this medical aid _____.
19. The process of prioritizing multiple casualty care is called _____.
20. When a casualty has an embedded object in one eye _____.
21. A _____ is the injured or ill person in need of first aid.
22. With a lost tooth have the casualty _____ to stop bleeding.
23. Provide _____ by treating for shock and monitoring the ABCs:.
24. The shock position for a casualty with a suspected spinal injury is in ____.
25. A first aider must always obtain _____ from the casualty.
26. Seek medical attention if you suspect a casualty has sustained a _____.
27. _____ means how aware the person is of themselves and their surroundings.
28. With a hypothermic casualty _____ the casualty from the cold environment.
29. To avoid accidents in the workplace, always consider safety & _____.
30. If in doubt, call _____ for help.

_____/30

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|------------------|-------------------------------|-------------------------|------------|--------------|
| 1. 9-1-1 | 8. COVER BOTH EYES | 14. LIFE | 22. REMOVE | 28. TRIAGE |
| 2. AED (ZAPPER) | 9. DON'T | 15. MECHANISM OF INJURY | 23. RICE | 29. VOMITING |
| 3. ASAP | 10. FAINTING | 16. MINUTES | 24. RUB | 30. WHMIS |
| 4. BITE ON GAUZE | 11. FULL BODY | 17. MSDS (SDS) | 25. SPLINT | |
| 5. CASUALTY | ASSESSMENT | 18. ONGOING CARE | 26. SPINE | |
| 6. CONCUSSION | 12. HOT & DRY | 19. PREVENTION | 27. TEN | |
| 7. CONSENT | 13. LEVEL OF
CONSCIOUSNESS | 20. POISON CONTROL | | |
| | | 21. POSITION FOUND | | |

