St. John Ambulance Presentation Summary: CPR & AED

This document is for information purposes and does not certify the reader in first aid. For more information on how to become trained in first aid, contact your local first aid course provider.

Ontario legislation: First Aid response and AED use

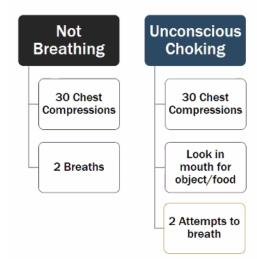
- The Good Samaritan Act was passed in 2001. This piece of legislation protects those who provide emergency first aid to a person who is ill, injured or unconscious as a result of an accident or emergency. There are four requirements of the Good Samaritan Act: 1) you must obtain consent (in the case of an unconscious person, you assume consent), 2) the first aider must provide reasonable care (nothing above your skill level), 3) you avoid negligent acts (example: do not provide CPR to an individual who is still breathing), and 4) you hand over the duty of care to paramedics or a more skilled first aider when they arrive on the scene.
- In Ontario, use of an AED is an un-regulated act. Therefore, you do not need a medical certificate to use one.
- In 2007, the Chase McEachern Act was passed. This piece of legislation protects the person using the AED in a first aid scenario, as long as the use of the AED is in good faith.

Cardiopulmonary Resuscitation (CPR)

- CPR is an emergency lifesaving procedure that is used when a person's breathing and /or heartbeat has stopped. CPR combines rescue breathing and compressions. If you do not have an appropriate barrier device or you feel unsafe providing rescue breaths (example: during the COVID-19 pandemic), you can continue with compression-only CPR.
- A video demonstration of CPR can be found here: <u>https://www.youtube.com/watch?v=2BICvIu9bHg</u>

When to stop CPR

- 1. The person begins to breathe on their own again.
- 2. You become too tired to continue.
- 3. Another first aider/paramedics takeover.
- 4. An AED has been placed on the patient and has advised you to stop CPR.



AED Explained

- Automated External Defibrillator is a medical device that can analyze the heart's rhythm and (if appropriate) deliver an electrical shock, to help the heart re-establish an effective rhythm. An AED cannot re-start a heart, but it can re-set the heart rhythm.
- A video demonstration on how to use an AED can be found here: <u>https://www.youtube.com/watch?v=UFvL7wTFzl0</u>

Heart Attack & Angina

- A heart attack, also known as a Myocardial Infarction (MI), occurs when an artery supplying your heart (coronary artery) becomes blocked by fatty deposits known as plaque. Blockage of a coronary artery prevents your heart muscle from receiving vital oxygen and nutrients, and the tissue begins to die.
- Angina occurs when there is a narrowing of an artery supplying the heart due to the buildup of plaque.
- A key difference between treatment outcomes of a heart attack vs. angina is that symptoms of angina are typically relieved when the trigger for their symptoms (example: exercise) and is removed and/ or the individual takes their medication. However, if a person is unaware of their condition or their angina symptoms do not improve when they take their prescribed medication, treat the situation as you would if the person was having a heart attack.

Common signs & symptoms include:

- Chest pain or pressure that may spread into the arm/neck/jaw
- *Shock (pale/clammy skin)
- Nausea or vomiting
- Breathing difficulty
- Denial of symptoms (Ex. "It's just indigestion")
- Sudden collapse
- Elevated heart rate/pulse
- About 70% of women will display signs and symptoms that are distinct from men. Such signs and symptoms may include:
 - Body aches (jaw, neck, arm, shoulder or back)
 - Nausea, vomiting, indigestion or heartburn
 - \circ Unexplained sleep disturbances beyond what the person typically experiences
 - Extreme fatigue beyond what is normally experienced by the person (this is very common in women)

*Important! Symptoms of a heart attack can be mistaken for influenza (the flu). Remember: Flu symptom = a fever. Heart attack symptom = cool/clammy skin (no fever).

First Aid Protocol for Heart Attack & Uncontrolled Angina

- Contact 9-1-1 and if possible, ask a bystander to bring you an AED
- Place the person in a comfortable position, ideally seated against a wall
- Loosen tight clothing
- Check for symptoms of shock and monitor the person's breathing
- Remain calm, reassure the person
- Keep the person warm
- Do not give the person water
- If the person <u>is not</u> on erectile dysfunction medication, you can recommend the person chew two 81mg ASA (baby Aspirin) or one regular ASA tablet
- If the person goes unconscious, proceed with CPR protocol. If the person begins to breath at any point during CPR, **stop CPR**

Stroke and Transient Ischemic Attack (TIA)

- A stroke occurs when the blood supply to the brain is either interrupted or reduced, which prevents the brain from receiving oxygen and nutrients. Brain tissue begins to die within minutes when it does not receive adequate oxygen and nutrients.
- A TIA is sometimes referred to as a "mini-stroke" because the blood flow to the brain is blocked for only a short time. Although transient, it is a warning sign. The first aid protocol for a stroke and TIA are the same, as both need to be addressed by trained medical professionals.
- Use the acronym **F.A.S.T.** to help you remember the signs and symptoms, and what to do!
 - Face. Fascial numbness, weakness, dizziness/vertigo.
 - **A**rm. Look for paralysis or asymmetries of the body that are not normally present.
 - **S**peech. Slurred speech, difficulty speaking or abnormal speech patterning (for the person).
 - **T**ime. Contact 9-1-1 immediately.
- While you wait for the paramedics to arrive, place the person in a comfortable position: 1) seated with their back against a wall or 2) lying on their unaffected side (if applicable) in the semi-prone position
- If the person goes unconscious, initiate CPR procedure and ask a bystander to get you an AED.

Common Questions

- 1) Why chew ASA and not swallow ASA? You can swallow ASA tablets. Answer: However, chewing helps the body absorb the medication faster!
- 2) Why can't I take my Nitroglycerin medication if I have taken erectile dysfunction (ED) medication? Answer: Erectile dysfunction medications are vasodilators, and ED medications are also vasodilators. Taking both = too much vasodilation, which can be detrimental.
- 3) Why can't I give ASA tablets to a person experiencing symptoms of a stroke/TIA? Answer: A stroke is bleeding within the brain. If a person takes ASA, this only prolongs the brain bleed as it decreases the ability of the blood to clot.
- 4) Who would I contact if I am interested in taking a first aid course?
 A: There are many organizations which offer first aid courses in Canada, such as St. John's Ambulance, Canadian Red Cross, and First Aid 4 U (to name a few).