



Alberta Health  
Services

Alberta **Children's** Hospital

# Tracheostomy and Ventilator Education Program Module 12: CPR

# Disclaimer

This material is intended for use by trained family members and caregivers of children with tracheostomies who are patients at the Alberta Children's Hospital. Although reasonable efforts were made to confirm the accuracy of the information, Alberta Health Services does not make any representation or warranty, express, implied or statutory, as to the accuracy, reliability, completeness, applicability or fitness for a particular purpose of such information. This material is not a substitute for the advice of a qualified health professional, so please seek medical advice from an appropriate health professional for questions regarding the care and treatment of any patient. Alberta Health Services expressly disclaims all liability for the use of these materials, and for any claims, actions, demands or suits arising from such use.

# Emergencies

- A child with a tracheostomy tube in place, whether they have a ventilator to help their breathing or not, is at a higher level of risk for harm, injury, or death because of the trach
- You have learned about dealing with such events to decrease the chances of an emergency occurring and the impacts of an emergency should one occur
- Your community emergency algorithms will help you manage the tracheostomy tube and will direct you to call 911 and initiate rescue breathing and CPR if needed
- Always make sure your emergency supplies are checked daily
- Always follow BEST

# CPR

- CPR, Cardiopulmonary Resuscitation – part of Heart and Stroke Canada’s pathway to improving the survival of cardiac arrest:
  - Recognize the victim is in arrest and needs help
  - Call 911 to activate EMS for help
  - Start high quality CPR as soon as possible to improve blood flow to the brain and organs
  - EMS can provide advanced life support and defibrillation
  - EMS can transport to hospital for stabilization
  - The hospital can provide post arrest care and support

# CPR

- There are many CPR courses available from Basic Life Support and upwards
- Most courses are certificate based and provide a certificate for 1 to 3 years
- These courses are usually meant for health care providers and do not teach how to provide breathing for a child with a tracheostomy tube in place

# Family & Friends CPR

- The material covered in this module is based on:
  - Family and Friends CPR Cardiopulmonary Resuscitation (Heart and Stroke Canada)
  - A non certificate program that uses research-proven theory and practice to provide CPR instruction to non-medical providers

<https://resuscitation.heartandstroke.ca/resources/other>

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# Family & Friends CPR

- This program has 7 modules that cover Adult to Infant CPR, Airway Block, and AED and is intended for non medical learners that want to learn CPR but do not require a certificate
- For the purpose of trach training, this presentation will focus on the module that is appropriate for the age of your child:
  - Adult CPR with Breaths and AED
  - Child CPR and AED
  - Infant CPR
- The materials will be modified to demonstrate how to provide rescue breathing for children with tracheostomy tubes in place

# Assess

- Follow your Emergency Algorithms
- Have 911 on speaker to help you
- Always remember why your child has this trach (can they breathe on their own, can they breathe through their upper airway or not)
- Remember how to assess your child:
  - Respiratory effort, colour, responsiveness

# Rescue Breaths

- Rescue breathing is part of CPR = 911 will help you with this
- Always try to position your child on a flat surface with their head tilted back and their chin lifted for the best airway position
- Rescue breaths should be provided gently and slowly over 1 second while you watch for chest rise with each breath
- Always give 2 breaths – one after the other
- If there is no chest rise, you can try to reposition the head

# Rescue Breathing for a Trach

- If your child has a tracheostomy tube and can breathe on their own normally – you will not have a bagging unit
- To provide rescue breaths for your child:
  - If they have a normal upper airway, you can provide breaths by mouth to mouth while blocking the tracheostomy tube/stoma OR by mouth to tracheostomy tube/ stoma while blocking the mouth and nose as you have been instructed
  - If they do not have a normal upper airway, you can provide breaths by mouth to tracheostomy tube/stoma as you have been instructed

# Rescue Breathing for a Trach

- If your child has a tracheostomy tube and is ventilated – you will have a bagging unit
- To provide rescue breaths for your child:
  - Connect the bagging unit to the tracheostomy tube and ventilate by squeezing the bag gently as you have been instructed
  - If the tracheostomy tube is not in place, you can provide rescue breaths by holding the connector tightly over the stoma to create a seal for the breaths as you have been instructed
  - You can provide mouth to tracheostomy tube/stoma as well if you can't use or find your bagging unit



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# Rescue Breathing for a Trach

- No matter how you are providing breaths for your child:
  - As you provide breaths, watch the rib cage for chest rise to make sure the breaths go in
  - Your child has much smaller lungs than you do, so be gentle and don't use too much force to get the breaths in
  - Give 2 breaths for every 30 compressions of CPR – 911 will help you with this
  - Provide 1 breath every 3 to 5 seconds or about 12 – 20 breaths per minute
  - Mouth to mouth provides 17% oxygen while bagged breaths provide 21% oxygen even when there's no extra oxygen on

# Family & Friends CPR

- Adult CPR with Breaths and AED Module
- Child CPR and AED Module
- Infant Module
- *We are now going to watch the video of the Module that is appropriate for your child – each Module will take approximately 45 minutes and will focus on CPR and practicing compressions specifically for your child's age and size*
- *Each Module also has practice built in to focus on compressions and rescue breathing*

# Barrier Device

- Remember, as a family member – you do not need to use a barrier device to provide rescue breaths = your caregivers will need one
- Make sure your Emergency Kit has a Barrier Device for emergencies like this for your caregivers



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# CPR

- In the case of an emergency, you will be able to provide CPR to your child if required
- Always call 911 when you have an emergency where you will need help
- Always follow BEST
- Always check your emergency supplies
- Always have a fully charged phone ready for emergencies
- Review your Emergency Algorithms and be prepared