

# Firefighter

## Medical Directives

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Hamilton  
Health  
Sciences

CENTRE FOR PARAMEDIC  
EDUCATION AND RESEARCH

LAST REVISED 2023-02-24

The Centre for Paramedic Education and Research has agreed to provide medical direction and develop a Continuous Quality Improvement Program for the Guelph Fire Department. These medical directives outline the standards to which the Guelph Fire Department will provide patient care when dealing with a patient in cardiac arrest or peri-arrest state.

This Firefighter guide contains resuscitation guidelines consistent with the 2020 Heart and Stroke Foundation of Canada BLS guidelines as well as the Ministry of Health and Long-Term Care Training Bulletin, Issue 111 – version 1.0 Deceased Patient Standard.



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# Introduction

Cardiac /  
Circula.

## Purpose of Standards

These Firefighter Medical Directives are designed to guide the specifics of patient care delivered by Firefighters prior to Paramedic arrival and ensure the practices utilized are current with prehospital resuscitation guidelines when caring for a patient in a Cardiac Arrest or Peri-arrest state.

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## Summary

The Firefighter Medical Directives establish practice and patient care parameters needed to provide high quality patient care for the cardiac arrest / peri-arrest patient prior to Paramedic arrival. The directives are designed to be dynamic, in order to allow for changes based upon new medical evidence and / or standards of medical practice.

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## Use of the Medical Directives by Firefighters

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These medical directives apply to Firefighters who provide patient care under the license and / or authority of the CPER Medical Director. Delegation of controlled acts or other procedures in these medical directives to Firefighters falls under the exclusive oversight of the CPER Medical Director.

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The medical directives are designed to guide a Firefighter in the provision of timely and appropriate care to cardiac arrest / peri-arrest patients in the prehospital setting prior to the arrival of Paramedics. While great care has been taken in developing these medical directives, they cannot account for every clinical situation. Thus, they are not a substitute for sound clinical judgement.

## General Structure of a Medical Directive

All medical directives follow the same format and are comprised of the following sections:

**Written Management Process:** Description of the type of procedure to be performed

**Algorithm Directive:** Although written in a linear fashion it is understood several tasks may / should be done simultaneously.

The Firefighter who proposes a treatment to a person shall ensure that consent is obtained. Valid consent requires that a person has the capacity to provide the consent.

## Responsibility of Care

While on scene and prior to EMS Paramedic arrival, decisions on patient care are the responsibility of the fire crew in whole. Resuscitation for a patient in cardiac arrest should be initiated unless the patient is "obviously dead" (definition to follow) or a valid Do Not Resuscitate Confirmation Form is found for the patient.

Sometimes resuscitation is initiated but then subsequently the patient is found to be obviously dead or a valid Do Not Resuscitate Confirmation Form is found; resuscitation can be discontinued by the fire crew in these two instances. In all other cases, it is expected that if the fire crew initiates resuscitation, they would continue until transferring care to the EMS Paramedic team.

When transferring care to the Paramedic crew the reporting Firefighter shall attempt to provide:

- ▶ a history of the patient's current problem(s) and relevant past medical history
- ▶ pertinent physical findings
- ▶ a summary of management prior to EMS arrival
- ▶ the patient's response to treatment, including most recent vital signs

Occasionally, the cardiac arrest patient will be in an area that cannot be accessed by Paramedics and the only rescuers are Firefighters. The Firefighters would typically inform the highest qualified nearby Paramedic of the patient's status, and the Paramedic would contact the Base Hospital Physician for termination of resuscitation if necessary. An additional consideration when extricating a patient in cardiac arrest is if continued CPR puts rescuers at risk or cannot be continued for more than five minutes. In this case, the Base Hospital Physician can be contacted early via a Paramedic for consideration of termination of resuscitation.

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## Definitions

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**Age** (for Cardiac Arrest / Bradycardia Directives)

- ▶ **Adult Patient:**
  - Any patient who has reached puberty and older for CPR guidelines. (Underarm hair for males, breast development for females)
  - Any patient  $\geq 8$  years old for AED guidelines
- ▶ **Child (Pediatric) Patient:**
  - Age  $\geq 1$  year old to puberty for CPR guidelines
  - Age  $\geq 1$  year old to  $< 8$  years old for AED guidelines
- ▶ **Infant Patient:**
  - $\geq 30$  days old to  $< 1$  year old
- ▶ **Neonate Patient:**
  - Birth to  $< 30$  days old

AED: The term "AED" has become commonly associated with a defibrillator which analyzes a cardiac rhythm, automatically charges when a shockable rhythm is identified, but requires an operator to press the "shock" button. For the purposes of this document the term AED will be used to describe the defibrillation devices utilized by the Fire Department. The Firefighter will be required to press the "shock" button when prompted to by the machine.

**Deceased Person**

- ▶ **Deceased Patient:** means a patient who is:
  - Obviously dead (see definition);
  - without vital signs and the subject of a Do Not Resuscitate Confirmation Form (See Appendix A)

- the subject of a medical certificate of death, presented to the Paramedic crew, in the form that is prescribed by the *Vital Statistics Act* and that appears on its face to be completed and signed in accordance with that Act;
  - without vital signs and the subject of a Termination of Resuscitation Order given by a physician to a Paramedic, including a Base Hospital Physician; or
  - without vital signs and the subject of a Withhold Resuscitation Order given by a physician to a Paramedic, including a Base Hospital Physician
- ▶ **Legal Death:** exists only when a physician or RN has certified death. (Completion of the Medical Certificate of Death).
- ▶ **Obviously Dead:** means death has occurred if gross signs of death are obvious, including the reason of :
- Decapitation (head off body), transection (body split into two or more), visible decomposition (decayed body), putrefaction (rotting of body); or
  - Absence of vital signs and:
  - a grossly charred body (burned black)
  - an open head or torso wounds with gross outpouring of cranial or visceral contents (brains and guts spilled out of body)
  - gross rigor mortis (i.e. limbs and/or body stiff, posturing of limbs or body); or
  - lividity (dark purple or black discolouration of skin in lower area of body due to gravity, this discolouration does not change if firm pressure is applied to skin or with changing the position of body).

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## Research

Clinical research is fundamental to the practice of medicine and the development of safer, more effective treatment options for patients. At times, research protocols require temporary changes to medical directives. In recognition of the importance of prehospital clinical research, CPER Medical Directors may delegate changes in medical directives to Firefighters if the research-related treatment is endorsed by the appropriate organizations including the Fire Service Management and ethics review board. Changes to medical directives will be introduced as an auxiliary medical directive. Upon completion of a prehospital clinical trial, research-related treatment must be halted and care as prescribed in the original medical directives must resume.

## List of Abbreviations

### A

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ACP	Advanced Care Paramedic
ALS	Advanced Life Support

### B

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BLS	Basic Life Support
BPM	beats per minute
BVM	bag-valve-mask

### C

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CCP	Critical Care Paramedic
CPR	Cardiopulmonary Resuscitation
CTAS	Canadian Triage and Acuity Scale

### E

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ECG	electrocardiogram
ETCO <sub>2</sub>	end tidal carbon dioxide
ETT	endotracheal tube

**F**

---

FiO<sub>2</sub>      fraction of inspired oxygen

**G**

---

g              gram  
GCS          Glasgow Coma Scale

**H**

---

HR            heart rate  
Hx            history  
HSF          Heart and Stroke Foundation

**K**

---

kg            kilogram

**L**

---

LOA          level of awareness  
LOC          level of consciousness/loss of consciousness

**R**

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ROSC        return of spontaneous circulation

**V**

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VSA          vital signs absent

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# Cardiac / Circulation

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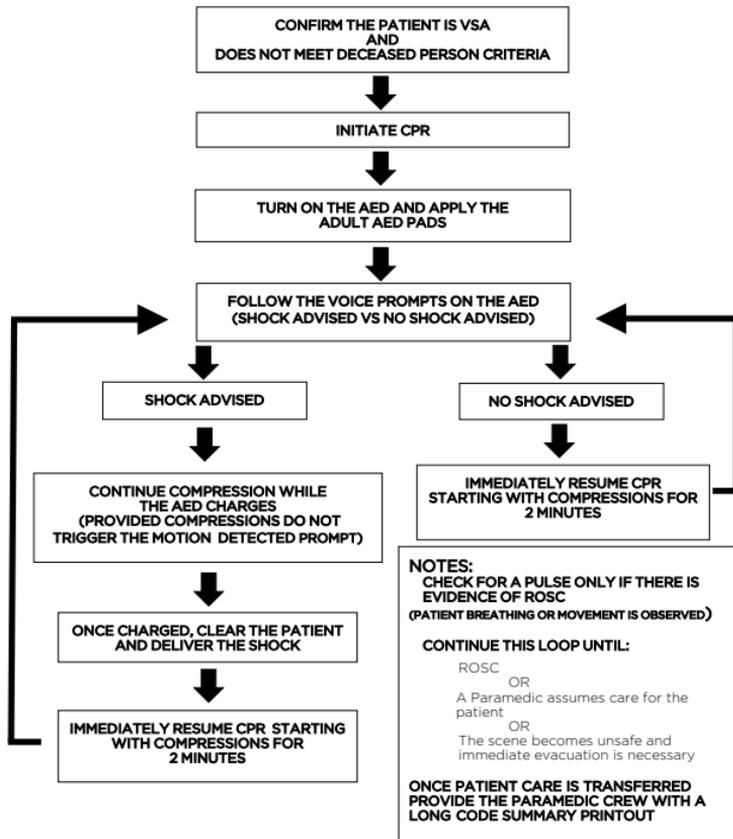
## Adult Cardiac Arrest Management

- As per HSF BLS standards confirm the patient is Vital Signs Absent
  - Unresponsive **AND**
  - Absent or Abnormal or Agonal Respirations **AND**
  - Absent Carotid Pulse
- Initiate CPR as per HSF BLS guidelines
  - Two rescuer 30:2 utilizing a BVM and ensuring Firefighters:
    - Push hard to a depth of at least 5 cm but not more than 6 cm (use of a CPR feedback device is recommended)
    - Push fast at a rate of at least 100 compressions per minute but not more than 120. (If the AED is equipped with a cadence device it is recommended this be utilized)
    - Allow the chest to fully recoil between compressions
    - Rotate compressor every 2 minutes
    - Provide ventilations which produce gentle chest rise
    - **MINIMIZE** interruptions in compression

If hypothermia is suspected:

- If trained, follow BICO guidelines.
  - Attempt to prevent further heat loss. If available, apply heat to upper trunk.
  - Follow standard BLS AED guidelines (if “no shock advised” and the firefighter suspects severe hypothermia, consider assessing pulse/breathing for up to one minute).
  - Oropharyngeal airway placement and gentle suctioning if required are acceptable procedures. Vigorous airway procedures and suctioning should be avoided due the increased risk of ventricular fibrillation.
  - Handle patient gently and attempt to maintain horizontal positioning.
- Apply the AED utilizing the Adult pads as soon as possible and follow the voice prompts
  - Continue to follow the voice prompts until:
    - Return of spontaneous circulation (ROSC) OR
    - A Paramedic assumes care for the patient OR
    - The scene becomes unsafe and immediate evacuation is necessary
  - Once transfer of patient care has occurred to the Paramedic crew and the patient is no longer on the Fire Department AED, print off a “long” code summary if your AED is capable. The long code summary will illustrate all cardiac rhythms including the initial rhythm. The Paramedic crew can then provide this information to the ED staff.
  - If narcotic overdose is suspected in adult cardiac arrest, the firefighter may give one dose naloxone without interrupting CPR or defibrillation. The firefighter may consider additional doses of naloxone, as long as effective CPR and defibrillation can be maintained. The patient must be  $\geq 12$  years of age to receive naloxone.

## Adult Cardiac Arrest Algorithm



## Pediatric / Infant Cardiac Arrest Management

- As per HSF BLS standards confirm the patient is Vital Signs Absent
  - Unresponsive **AND**
  - Absent or Abnormal or Agonal Respirations **AND**
  - Absent Carotid Pulse
- Initiate CPR as per HSF BLS guidelines
  - Two rescuer 15:2 utilizing a BVM and ensuring Firefighters:
    - Push hard to a depth of 1/3 anteroposterior (AP) depth of the thorax, about 4 cm in infants and about 5 cm in pediatrics (children)
    - Push fast at a rate of at least 100 compressions per minute but not more than 120. (If the AED is equipped with a cadence device it is recommended this be utilized)
    - Allow the chest to fully recoil between compressions
    - Rotate compressors every 2 minutes
    - Provide ventilations which produce gentle chest rise
    - **MINIMIZE** interruptions in compressions

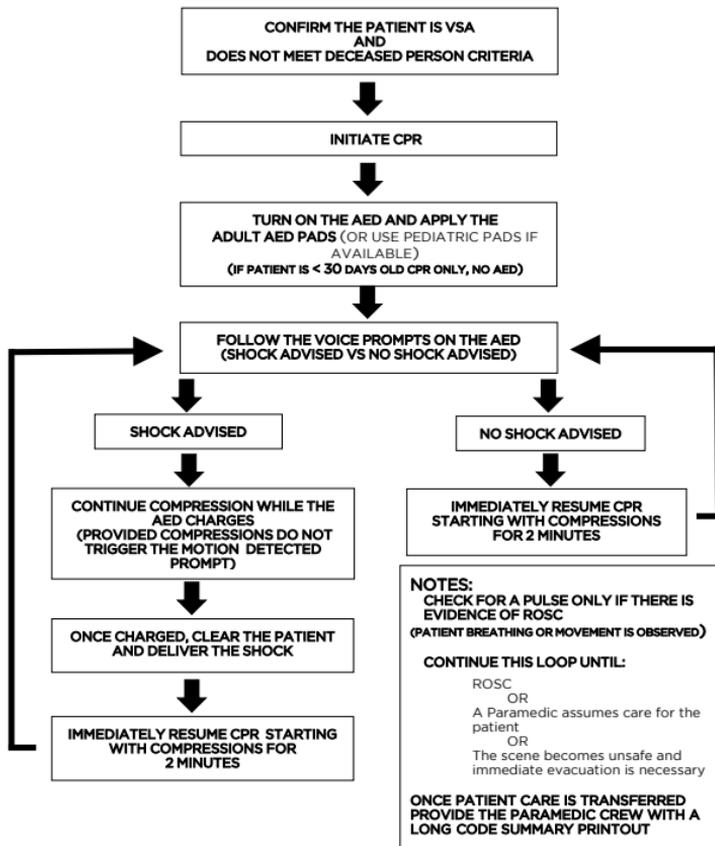
If hypothermia is suspected:

- If trained, follow BICO guidelines.
  - Attempt to prevent further heat loss. If available, apply heat to upper trunk.
  - Follow standard BLS AED guidelines (if “no shock advised” and the firefighter suspects severe hypothermia, consider assessing pulse/breathing for up to one minute).
  - Oropharyngeal airway placement and gentle suctioning if required are acceptable procedures. Vigorous airway procedures and suctioning should be avoided due the increased risk of ventricular fibrillation.
  - Handle patient gently and attempt to maintain horizontal positioning.
- Apply the AED utilizing the Adult pads as soon as possible and follow the voice prompts (or use pediatric pads if available)
  - Pad position may need to be modified to an Anterior / Posterior location to accommodate very small children / infants.
  - Continue to follow the voice prompts until:
    - Return of spontaneous circulation (ROSC) OR
    - A Paramedic assumes care for the patient OR
    - The scene becomes unsafe and immediate evacuation is necessary
  - Once transfer of patient care has occurred to the Paramedic crew and the patient is no longer on the Fire Department AED, print off a “long” code summary if your AED is capable. The long code summary will illustrate all cardiac rhythms including the initial rhythm. The Paramedic crew can then provide this information to the ED staff.

## NOTE:

- Pulse checks on infants should be assessed at the brachial artery (inside of upper arm between the axilla and elbow), and on children > 1 year old at the carotid artery in the neck.
- All patients <30 days of age will receive CPR at a 3:1 ratio for compressions:ventilations
- Once care of a pediatric patient < 8 years of age is transferred to a Paramedic and manual defibrillation is utilized the Paramedics may elect to change to Pediatric Pads.

## Pediatric / Infant Cardiac Arrest Algorithm

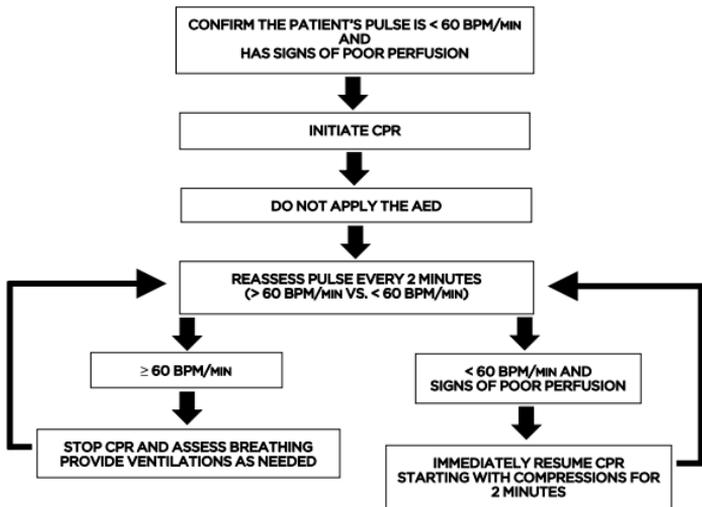


## Pediatric / Infant Severe Bradycardia

- As per HSF BLS standards confirm the patient has a pulse < 60 BPM/min **AND** signs of poor perfusion
  - Altered Mental Status (unresponsive) **AND** any of the following
  - Cyanosis (bluish colouring around lips or in nail beds)
  - Mottling (skin looks marbled / patchy)
  - Cool extremities
  - Weak pulses
- Initiate CPR as per HSF BLS guidelines
  - Two rescuer 15:2 utilizing a BVM and ensuring Firefighters:
    - Push hard to a depth of 1/3 anteroposterior (AP) depth of the thorax, about 4 cm in infants and about 5 cm in pediatrics (children)
    - Push fast at a rate of at least 100 compressions per minute but not more than 120. (If the AED is equipped with a cadence device it is recommended this be utilized)
    - Allow the chest to fully recoil between compressions
    - Rotate compressors every 2 minutes
    - Provide ventilations which produce gentle chest rise
    - **MINIMIZE** interruptions in compressions
- **DO NOT** apply the AED unless the pulse is unobtainable and the patient is VSA.
- Continue CPR until:
  - The patient becomes responsive OR
  - The pulse rate increases to > 60 BPM/min OR
  - A Paramedic assumes care for the patient and directs you to stop OR
  - The scene becomes unsafe and immediate evacuation is necessary
- Assess the pulse rate every 2 min. If the pulse becomes undetectable refer to the *Pediatric / Infant Cardiac Arrest Guideline*.

NOTE: Pulse checks on infants should be assessed at the brachial artery (inside of upper arm between the axilla and elbow), and on children > 1 year old at the carotid artery in the neck.

## Pediatric / Infant Severe Bradycardia Algorithm

**NOTES:**

**IF NO PULSE IS FOUND REFER TO THE PEDIATRIC / INFANT CARDIAC ARREST GUIDELINE**

**SIGNS OF POOR PERFUSSION INCLUDE:**

**ALTERED MENTAL STATUS (UNRESPONSIVE) AND ANY OF THE FOLLOWING:**

Cyanosis (bluish colouring around lips or in nail beds)

Mottling (skin looks marbled / patchy)

Cool extremities

Weak pulses

**CONTINUE CPR UNTIL:**

The patient becomes responsive OR

The pulse rate increases to  $\geq 60$  BPM/min OR

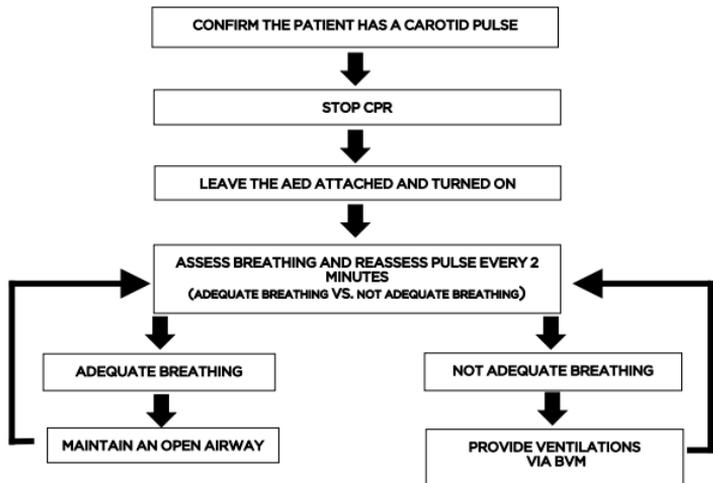
A Paramedic assumes care for the patient and directs you to stop OR

The scene becomes unsafe and immediate evacuation is necessary

## Adult Return of Spontaneous Circulation Management

- In the event a patient has a ROSC as evidenced by the presence of a carotid pulse during resuscitation efforts, the Firefighter will:
  - For the **ADULT** patient:
    - Stop CPR
    - Leave the AED attached and turned on
      - The AED will continue to “analyze” the heart rhythm every two minutes. This is valuable should the patient rearrest into a shockable rhythm.
      - The Firefighter should also reassess for a pulse at least every 2 minutes. If at any point a carotid pulse is not found OR the AED gives a “Shock Advised” prompt refer to the *Adult Cardiac Arrest Guideline*.
    - Assess respiratory effort for adequacy
    - If a carotid pulse is present but breathing is not adequate (< 10 / min and / or very shallow) provide BVM ventilations 1 breath every 5 to 6 seconds ( 10 - 12 / min)
      - Care must be taken to avoid hyperventilation. The Firefighter managing the BVM must pay close attention to rate and volume of ventilations delivered.
    - If BVM Ventilations are not required then the Firefighter should assist the unconscious patient to maintain an open airway with positioning (semi - prone / recovery if no trauma), or supine with Jaw Thrust if trauma is suspected.
    - Continue above until care is transferred to the responding Paramedics.

## Adult Return of Spontaneous Circulation Algorithm



### NOTES:

The AED will continue to "analyze" the heart rhythm every two minutes. This is valuable should the patient rearrest into a shockable rhythm.

The Firefighter should also reassess for a pulse at least every two minutes. If at any point a carotid pulse is not found OR the AED gives a "Shock Advised" prompt refer to the *Adult Cardiac Arrest Guideline*.

If a carotid pulse is present but breathing is not adequate (< 10 / min and / or very shallow) provide BVM ventilations 1 breath every 5 to 6 seconds (10 - 12 / min)

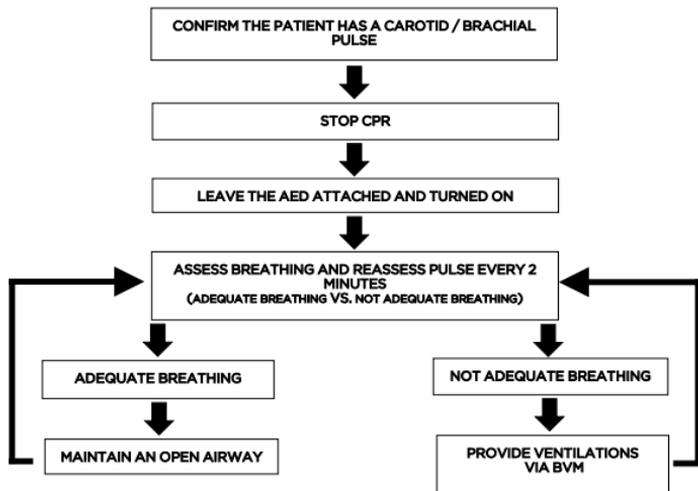
Care must be taken to avoid hyperventilation. The Firefighter managing the BVM must pay close attention to rate and volume of ventilations delivered.

# Pediatric / Infant

## Return of Spontaneous Circulation Management

- For the **Pediatric / Infant** patient:
  - Stop CPR
  - Leave the AED attached and turned on
    - The AED will continue to “analyze” the heart rhythm every two minutes. This is valuable should the patient rearrest into a shockable rhythm.
    - The Firefighter should also reassess for a pulse at least every two minutes. If at any point a carotid / brachial pulse is not found, OR is present but at a rate of < 60 BPM/min with signs of poor perfusion OR the AED gives a “Shock Advised” prompt refer to the *Pediatric Bradycardia* OR *Cardiac Arrest Guidelines*.
  - Assess respiratory effort for adequacy
  - If a carotid / brachial pulse is present but breathing is not adequate (< 20 / min for infants or < 12 / min for children and / or very shallow) provide BVM ventilations 1 breath every 3 to 5 seconds (12 – 20 / min)
    - Care must be taken to avoid hyperventilation. The Firefighter managing the BVM must pay close attention to rate and volume of ventilations delivered.
  - If BVM Ventilations are not required then the Firefighter should assist the unconscious patient to maintain an open airway with positioning (semi – prone / recovery if no trauma), or supine with Jaw Thrust if trauma is suspected.
  - Continue above until care is transferred to the responding Paramedics.

## Pediatric / Infant Return of Spontaneous Circulation Algorithm



### NOTES:

The AED will continue to “analyze” the heart rhythm every two minutes. This is valuable should the patient rearrest into a shockable rhythm.

The Firefighter should also reassess for a pulse at least every two minutes. If at any point a carotid / brachial pulse is not found, OR is present but at a rate of < 60 BPM/min with signs of poor perfusion OR the AED gives a “Shock Advised” prompt refer to the *Pediatric Bradycardia* OR *Cardiac Arrest Guidelines*.

If a carotid / brachial pulse is present but breathing is not adequate (< 20 / min for infants or < 12 / min for children and / or very shallow) provide BVM ventilations 1 breath every 3 to 5 seconds (12 - 20 / min)

Care must be taken to avoid hyperventilation. The Firefighter managing the BVM must pay close attention to rate and volume of ventilations delivered.

# Airway / Breathing

FIREFIGHTER MEDICAL DIRECTIVES



## Anaphylaxis Medical Directive

*A Firefighter may provide the treatment prescribed in this Medical Directive if authorized.*

### INDICATIONS

Anaphylaxis as recognized by the following:

Exposure to a known or likely allergen;

### AND

An acute reaction involving two or more body systems or severe symptoms to a single body system (Urticaria alone is not an indication for epinephrine administration).

- Skin or oral mucosa (urticarial/hives, swollen lips, or swollen tongue). May also have hoarse voice or difficulty swallowing)
- Respiratory (difficulty breathing, wheeze, or stridor)
- Vascular (reduced blood pressure <90 mmHg or syncope/fainting)
- Gastrointestinal (GI) (persistent vomiting, or diarrhea)

### CONDITIONS

#### Epinephrine

AGE: ≥ 2 year old

WEIGHT: ≥ 15Kg

LOA: N/A

HR: N/A

RR: N/A

SBP: N/A

Other: Known history  
of anaphylaxis

## CONTRAINDICATIONS

### Epinephrine

Allergy or sensitivity to epinephrine

## TREATMENT

Consider **epinephrine auto-injector**:

	Age ≥ 2 years - < 8 years	Age ≥ 8 years
	Route intramuscular	Route intramuscular
<i>Dose</i>	0.15 mg EpiPen Jr.	0.3 mg EpiPen
<i>Max. dose</i>	1 injection	1 injection
<i>Dosing interval</i>	Minimum 5 min.	Minimum 5 min.
<i>Max. # of doses</i>	2	2

## CLINICAL CONSIDERATIONS

A firefighter may administer a maximum of 2 doses of epinephrine regardless of doses administered prior to firefighter contact. If the patient has received epinephrine prior to firefighter contact, attempt to determine the time of administration. In an estimated 5 minutes, if the patient meets the criteria of the Anaphylaxis Medical Directive consider another administration.

A patient suspected of having an allergic reaction should be assessed by paramedics.

EpiPen Jr, is recommended for children ≥ 15Kg to < 30Kg and EpiPen is recommended for adults > 30Kg. Age based dosing is used to align with first aid training.

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# Level of Consciousness

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## Opioid Toxicity Medical Directive

*A Firefighter may provide the treatment prescribed in this Medical Directive if authorized.*

### INDICATIONS

Altered LOC;

**AND**

Respiratory depression;

**AND**

Inability to adequately ventilate OR persistent need to assist ventilations and EMS ETA is significantly delayed - use clinical judgement

**AND**

Suspected opioid overdose

### CONDITIONS

#### **Naloxone**

AGE:  $\geq 12$  years

LOA: Altered

HR: N/A

RR:  $< 10$  breaths/min

SBP: N/A

Other: N/A

### CONTRAINDICATIONS

#### **Naloxone**

Allergy or sensitivity to naloxone

## TREATMENT

Consider <b>naloxone</b>		
	Route	
	Intranasal	
<i>Dose</i>	4 mg	
<i>Max. single dose</i>	4 mg	
<i>Dosing interval</i>	2-3 minutes	Alternate nostrils with repeat doses
<i>Max. # of doses</i>	N/A	Repeat as required until EMS arrival or supply is exhausted

## CLINICAL CONSIDERATIONS

If adequate ventilation and oxygenation can be accomplished with a BVM and basic airway management, this is preferred over naloxone administration. If adequate ventilation and oxygenation cannot be accomplished as evidenced by chest rise/fall and or  $spO_2 \geq 92\%$ , consider naloxone administration.

During situations such as COVID-19 pandemic, firefighters should consider naloxone administration without the requirement of an "Inability to adequately ventilate." In the event of a declared respiratory outbreak, Firefighters should refer to OBHG for any specific outbreak direction. Please refer to Respiratory Outbreak Opioid Toxicity Algorithm, p. 39

Ventilation with a BVM is considered an AGMP (aerosol generating medical procedure). Providers should wear appropriate PPE including a N95 mask, maintain a tight mask seal with a 2 handed, 2 person technique and ventilate with a BVM equipped with an inline submicron hydrophobic filter placed as close as possible to the patient.

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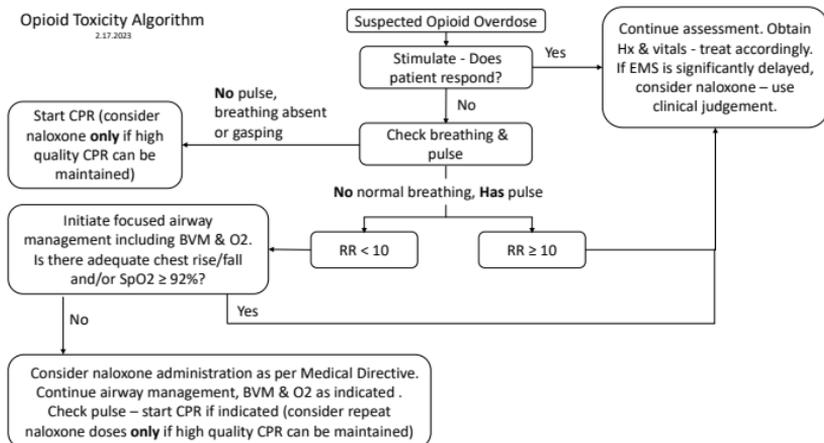
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Naloxone may unmask alternative toxidromes in mixed overdose situations (leading to possible seizures, hypertensive crisis etc.).

Naloxone is shorter acting than most narcotics and these patients are at high risk of having a recurrence of their narcotic effect. Every effort should be made to convince the patient to stay on scene until paramedics arrive.

Combative behaviour should be anticipated following naloxone administration and firefighters should protect themselves accordingly.

Opioid Toxicity Algorithm  
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## CPR Guidelines

Component	Recommendations		
	★ Adults	★ Children	★ Infants
<b>Recognition</b>	★★★ Check for responsiveness (for all ages) ★★★ No breathing or only gasping (ie, abnormal) ★★★ No pulse palpated within 10 seconds for all ages ★★ HR < 60 and signs of hypoperfusion		
<b>CPR sequence</b>	★★★ C-A-B		
<b>Compression rate</b>	★★★ 100-120/min		
<b>Compression depth</b>	★ 5.0 – 6.0 cm (2.0 - 2.4 inches)	★ At least 1/3 AP diameter ★ About 5 cm (2 inches)	★ At least 1/3 AP diameter ★ About 4 cm (1 1/2 inches)
<b>Chest wall recoil</b>	★★★ Allow complete recoil between compressions Rotate compressors every 2 minutes		
<b>Compression interruptions</b>	★★★ Minimize interruptions in chest compressions Attempt to limit interruptions to < 10 seconds		
<b>Airway</b>	★★★ Head tilt-chin lift or where trauma is suspected, jaw thrust		
<b>Compression-to-ventilation ratio</b> (until advanced airway placed)	★ 30:2 1 or 2 rescuers	★★ 30:2 Single rescuer ★★ 15:2 2 HCP rescuers  Neonates: 3:1	
<b>Ventilations with advanced airway (HCP)</b>	★★★ 1 breath every 6-8 seconds (10 breaths/min) Asynchronous with chest compressions About 1 second per breath without too much force Visible chest rise		
<b>Defibrillation</b>	★★★ Attach and use AED as soon as available. Minimize interruptions in CPR pre & post rhythm interpretation/defibrillation to < 10 seconds		

# Do Not Resuscitate Confirmation Form



Office of the  
Fire Marshal

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## Do Not Resuscitate Confirmation Form

To Direct the Practice of Paramedics and Firefighters after February 1, 2008

Confidential when completed

When this form is signed by a physician (M.D.), registered nurse (R.N.), registered nurse in the extended class (R.N. (EC)) or registered practical nurse (R.P.N.), a paramedic or firefighter **will not** initiate basic or advanced cardiopulmonary resuscitation (CPR) (see point #1) and **will** provide necessary comfort measures (see point #2) to the patient named below:

Patient's name – *please print clearly*

Surname

Given Name

1. "Do Not Resuscitate" means that the paramedic (according to scope of practice) or firefighter (according to skill level) **will not** initiate basic or advanced cardiopulmonary resuscitation (CPR) such as:

- Chest compression;
- Defibrillation;
- Artificial ventilation;
- Insertion of an oropharyngeal or nasopharyngeal airway;
- Endotracheal intubation;
- Transcutaneous pacing;
- Advanced resuscitation drugs such as, but not limited to, vasopressors, antiarrhythmic agents and opioid antagonists.

2. For the purposes of providing comfort (palliative) care, the paramedic (according to scope of practice) or firefighter (according to skill level) **will** provide interventions or therapies considered necessary to provide comfort or alleviate pain. These include but are not limited to the provision of oropharyngeal suctioning, oxygen, nitroglycerin, salbutamol, glucagon, epinephrine for anaphylaxis, morphine (or other opioid analgesic), ASA or benzodiazepines.

The signature below confirms with respect to the above-named patient, that the following condition (check one ) has been met and documented in the patient's health record.

- A current plan of treatment exists that reflects the patient's expressed wish when capable, or consent of the substitute decision-maker when the patient is incapable, that CPR will not be included in the patient's plan of treatment.
- The physician's current opinion is that CPR will almost certainly not benefit the patient and is not part of the plan of treatment, and the physician has discussed this with the capable patient, or the substitute decision-maker when the patient is incapable.

Check one  of the following:

M.D.     R.N.     R.N. (EC)     R.P.N.

Print name in full

Surname

Given Name

Signature

Date (yyyy/mm/dd)

- Each form has a unique serial number.
- Use of photocopies is permitted only after this form has been fully completed.

## EpiPen Reference

### Administration Guidelines

- The EpiPen Auto-Injector is a disposable drug delivery system with a spring activated concealed needle.
- EpiPen Auto-Injector is designed to deliver a single dose of epinephrine 0.3 mg
- EpiPen Jr. Auto-Injector is designed to deliver a single dose of epinephrine 0.15 mg
- EpiPen is stable at room temperature until the marked expiration date. It should not be refrigerated or exposed to extreme heat or direct light. The solution should be clear and colourless as observed through the viewing window of the unit.

### Procedure for Administration of EpiPen

Assuring that a primary survey, history and physical exam have indicated the patient meets the Anaphylaxis Medical Directive, the Firefighter will immediately:

- Confirm no allergies to epinephrine. Expose the lateral thigh where the injection is to be given. If removal of clothing is likely to result in a delay of more than a few seconds, apply the injector over the clothing. EpiPen will work through clothing.
- Remove the EpiPen from the case.
- Check the EpiPen label for the drug dosage and expiry date. Have a partner verify this information.
- Activate the EpiPen by removing the blue safety cap. Never put fingers over the orange tip.
- Hold the EpiPen with the orange tip against the outer, fleshy aspect of the thigh, and apply moderate pressure to release the spring activated plunger. This pushes the concealed needle into the thigh muscle and expels the dose of epinephrine.
- Hold the unit in place for three seconds after the unit activates.
- Document the time of the procedure, the name of the drug, the site used and the patient's response.
- Take pulse and respirations every 5 minutes. Monitor and manage ABC's as required.
- If there is no improvement in the patient's condition within 5 minutes of the last administration, providing the criteria of the Anaphylaxis Medical Directive are met, follow the steps previously outlined and administer another dose if available. A firefighter may administer a maximum of 2 doses of epinephrine regardless of doses administered prior to firefighter contact.
- Safely dispose of the needle in sharps container. DO NOT RECAP. Remember, it is the responsibility of the person who gave the EpiPen to safely dispose of the sharp.

“Blue to the Sky. Orange to the thigh.”

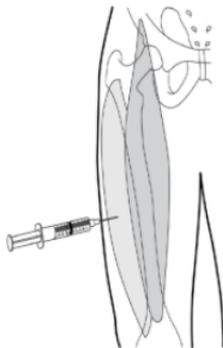


**NOTE:**

1. The effects of the medication should be evident within seconds by an increased heart rate. Within 5 – 10 minutes, blood pressure should increase and respiratory distress decrease. Effects should last 5 to 10 minutes.
2. A firefighter may administer a maximum of 2 doses of epinephrine regardless of doses administered prior to firefighter contact. If the patient has received epinephrine prior to firefighter contact, attempt to determine the time of administration. In an estimated 5 minutes, if the patient meets the criteria of the Anaphylaxis Medical Directive consider another administration.
3. In the case of children or other challenging patients, if the Firefighter encounters resistance to hands-on assessment or treatment, the crew may consider utilizing a designated and trained person to administer the EpiPen if present. The patient may be more comfortable with this individual and allow the treatment. These individuals may include a parent, sibling, teacher, educational assistant, personal support worker, etc. These individuals will in most cases make themselves known to you and may have already explained their actions prior to Firefighter arrival.
4. Urticaria (Hives) alone is not an indication for administration of epinephrine. At least one other serious sign or symptom must be present before giving epinephrine.

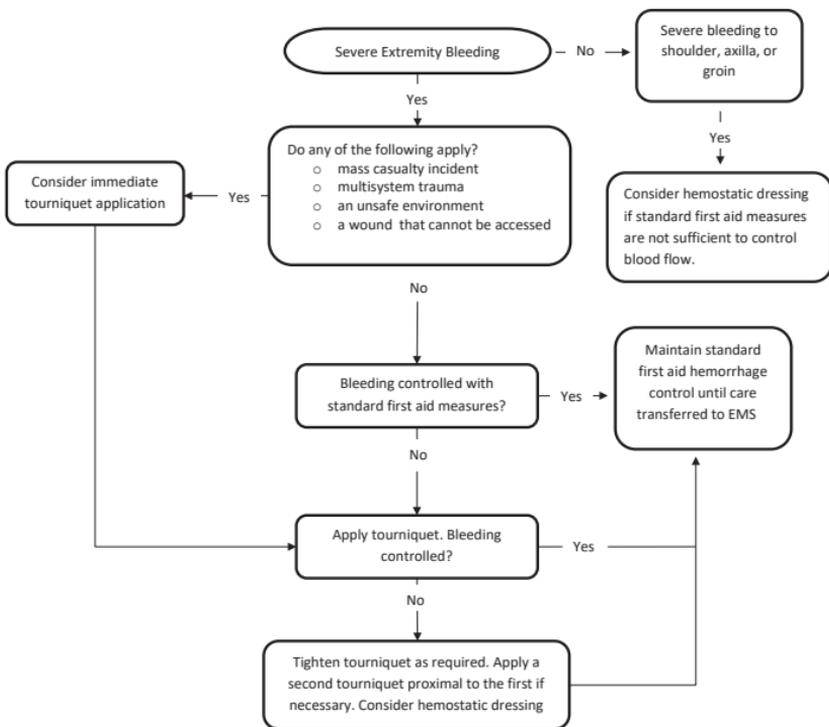
**FIREFIGHTER CAUTION:**

Accidental digital injection of epinephrine requires prompt medical attention. Report all needle stick injuries to your department.

**Intramuscular Injection Site**

Lateral Thigh

## Major Bleed Flow Chart



Intro

Cardiac /  
Circula.

Airway /  
Breathing

LOC

Medical  
Refer.

Contact

## Asherman Chest Seals for Penetrating Chest Wounds

Penetrating chest wounds can be life threatening due to the potential for tension pneumothorax. Tension pneumothorax occurs when outside air is sucked into the chest cavity during respirations after a deep puncture trauma. If that air is not also expelled, it will put pressure on the heart and lungs, compromising pulmonary and respiratory function. The one way valve on an Asherman chest seal allows air and blood to escape but does not allow air to enter the chest cavity.

There is no drawback to applying an Asherman chest seal for any penetrating trauma, even if the wound isn't deep enough to suck air into the chest cavity. If there is profuse bleeding from the puncture, use hemorrhage control techniques first.

To apply an Asherman chest seal, attempt to clean and dry the area around the wound as best as possible. The adhesive on the chest seal may not stick as well if the area is very wet or dirty. Once the area around the injury is prepared, peel the cover off of the adhesive area of the chest seal and apply over the wound. Attempt to place the valve directly over the injury. Apply some pressure all around the valve to make sure it is adhered.

If the trauma is from a gunshot, the Firefighter must look for both an entrance and an exit wound. If there is both an entrance and an exit wound, use a chest seal on both sites. If a chest seal is not available, it is appropriate to defer to Standard First Aid guidelines for care of penetrating chest wounds.

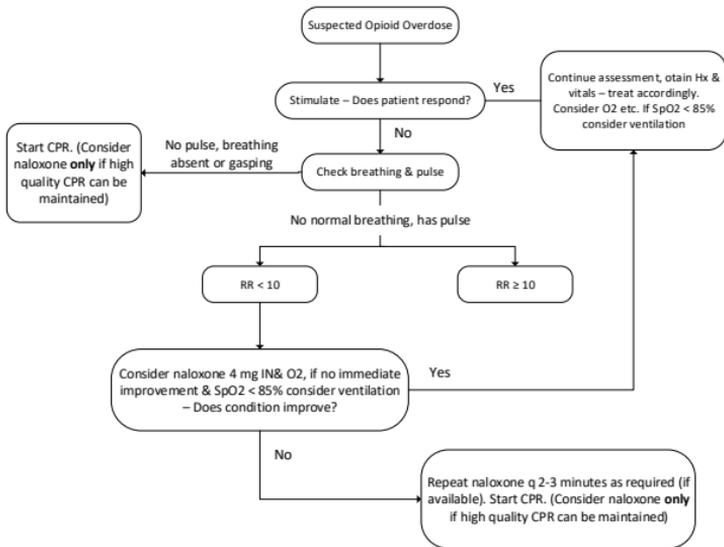
In the event that an Asherman Chest Seal is used during a call, the on scene Firefighters must notify the arriving Paramedics of the application along with other relevant information. The Paramedics should consider this administration the same as any other treatment provided by a trained allied agency. The usual transfer of care can proceed and Paramedics can take over care and use of their own Medical Directives as per normal practice. Documentation by all parties should follow established policies and standards.

Please note that if the trauma is from a gunshot, you must look for both an entrance and exit wound. If there is both an entrance and exit wound, Ashermans should be used on both sites. If an Asherman is not available on a scene with a penetrating chest trauma, it is still appropriate to follow Standard First Aid guidelines.

In the event that an Asherman chest seal is utilized during a call the on scene Firefighters must notify the arriving Paramedics of the application along with other relevant information. The Paramedics should consider this administration the same as any other treatment provided by a trained allied agency. The usual transfer of care can proceed and Paramedics can take over care and use of their own Medical Directives as per normal practice. Documentation by all parties should follow established policies and standards.

## Respiratory Outbreak Opioid Toxicity Algorithm

Please refer to prevailing medical guidance as directed by local health unit and specific OBHG guidance when in declared respiratory outbreak.





# Contact

FIREFIGHTER MEDICAL DIRECTIVES



## Contact Information

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For questions regarding any of the material in this manual  
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