## **Bronze Cross**

### At-a-glance



Bronze Cross is designed for lifesavers who want the challenge of more advanced training including an introduction to safe supervision in aquatic facilities. Bronze Cross is a prerequisite for all advanced training programs including National Lifeguard and Instructor certification.

#### H<sub>2</sub>0 Proficiency

- Starting on a deck, dock, or beach, demonstrate an entry and swim a 50 m or yd. head-up approach with a shoulder loop and line or rescue tube to a passive victim or manikin, and then tow the victim 50 m or yd. to safety.
- 2. \* Swim head-up for two sets of 6 x 25 m or yd. while maintaining a consistent pace and work-torest ratio. Rest for one minute between sets. Check your pulse after the last repeat in each set.
- Swim 600 m or 650 yd. in 18 minutes or better using any combination of strokes of the candidate's choice.

#### First Aid

Notes

\* Asterisk indicates instructor-

evaluated item (see Foreword).

- Demonstrate primary assessment of a conscious victim and an unconscious victim, including:
  - Level of consciousness
  - Airway
  - Breathing
  - Circulation
  - Major bleeding
  - Mechanism of injury
  - Demonstrate secondary assessment of a victim, including:
    - Vital signs
    - Head-to-toe survey
    - History
- 5. \* Demonstrate single-rescuer adult, child and infant cardiopulmonary resuscitation (CPR) on a manikin including:
  - Complications in resuscitation (vomiting/ drowning)
  - Adaptations (mouth-to-nose, stoma)
- 6. \* Demonstrate two-rescuer adult, child, and infant cardiopulmonary resuscitation (CPR) on a manikin.
- 7. \* a) Simulate the treatment of a conscious adult or child with an obstructed airway.
  - b) On a manikin, demonstrate the treatment of a conscious infant with an obstructed airway.
  - c) Simulate the treatment of an unwitnessed unconscious adult, child, or infant with an obstructed airway.
- Demonstrate the care and treatment of a victim suffering from hypothermia.

#### **Recognition & Rescue**

- Walk an aquatic environment scene, evaluate the ongoing activities, and demonstrate how to educate peers about safe aquatic leisure choices. Evaluate and correct, where appropriate, hazardous conditions in unsupervised areas.
- 10. Recover and immobilize a face-down breathing victim with a suspected cervical spinal injury found in deep water. Transport to shallow water. Recruit and direct a trained bystander to assist. Demonstrate the ability to manage vomiting while maintaining immobilization.
- 11.\* Using bystanders, organize a logical underwater search of an area with both shallow and deep water to maximum depth of 3 metres.
- 12. Perform a rescue involving two or more victims. One victim requires rescuer assistance, while the other victim(s) can follow directions for selfrescue and assist as bystanders once at the point of safety. The situation is designed to emphasize communication skills, victim care, removals, and follow-up including contact with
- 13. Perform a rescue of a submerged, non-breathing victim. The situation is designed to emphasize victim care, removal, and follow-up including contact with EMS.
- 14.\* Perform a rescue of an injured victim in a situation in which there are two rescuers. The rescue requires a 50 m or yd. approach and a 50 m or yd. return. The situation is designed to emphasize either contact or non-contact rescues, victim care, removals, and follow-up including contact with EMS.
- 15. Perform a rescue of a victim suffering injuries or conditions in a situation that emphasizes rescuer response to deteriorating circumstances and requires the use of bystanders. The rescue requires a 20 m or yd. approach and a 20 m or yd. return.

## Item 5

## One-rescuer CPR

#### Notes

- · Send bystander to phone EMS. If alone with an adult victim, call EMS right away. If alone with a child or infant victim, rescuer calls EMS after 2 minutes (5 cycles of 30:2) of CPR. Unconscious victims are left in the recovery position.
- Rescuers should understand the importance of early defibrillation and how to use an AED (components, activation and pad application).
- Push Hard, Push Fast: compress the chest at a rate of at least 100/minute allowing for full chest recoil. Compress at least 5 cm (2 in.) for an adult, and up to but not more than 5 cm (2 in.) for a child. On an infant, compress at least 4 cm (11/2 in.).
- AED pad placement: The upperright chest pad should not go over the sternum, clavicle or nipple. The lower-left pad should wrap around the rib cage - not on the abdomen or in the arm
- On a child, if the pads are going to be less than 2 inches apart, place one on the centre of the chest and the other on the back between the shoulder blades.
- The need for defibrillation on infants is uncommon, and the preferred treatment involves the use of a manual defibrillator by trained health care professionals. In an emergency, an AED could be used on an infant. If so, use pediatric pads if available. Otherwise, use adult pads.
- Use of barrier device is recommended.

#### Reference:

CLM Chapter 7.2 The ABC Priorities; 7.4 Rescue Breathing: 7.5 Cardiopulmonary Resuscitation Appendix B

Demonstrate single-rescuer adult, child and infant cardiopulmonary resuscitation (CPR) on a manikin including:

- Complications in resuscitation (vomiting/drowning)
- Adaptations (mouth-to-nose, stoma)

#### **Purpose**

To restore breathing and circulation in an unconscious victim with absent or abnormal breathing.

#### **Must See**

- Assess environment for hazards
- Establish unresponsiveness
- ☐ Activate Emergency Medical System (EMS)
- Attempt to obtain an AED and an AED-trained responder
- Position victim on back
- Open airway and quick, visual check for breathing (5 sec.)
  - ☐ If breathing, victim placed in recovery position
  - ☐ If breathing is absent or abnormal, CPR started with 30 chest compressions (or with 2 rescue breaths for drowning victims)
- ☐ Immediately application of AED by an AED-trained responder (if available)
- ☐ CPR and/or AED use continued until EMS takes over treatment or the victim begins to show signs of life
- If victim shows signs of life, reassess ABCs and treat appropriately

## Two-rescuer CPR

**Bronze Cross** First Aid

Item 6

Demonstrate two-rescuer adult, child, and infant cardiopulmonary resuscitation (CPR) on a manikin.

#### **Purpose**

To restore breathing and circulation in an unconscious victim with absent or abnormal breathing.

#### Notes

- One rescuer performs CPR while the second calls EMS and returns with an AED and AEDtrained responder if available.
- Trained rescuers have two options: take turns doing onerescuer CPR or one rescuer performs compressions while the other provides rescue breaths. To minimize fatigue, rescuers switch roles about every 2 min. (5 cycles of 30:2)
- · Rescuers communicate and cooperate in decision-making and CPR performance.
- The need for defibrillation on infants is uncommon, and the preferred treatment involves the use of a manual defibrillator by trained health care professionals. In an emergency, an AED could be used on an infant. If so, use pediatric pads if available. Otherwise, use adult pads.
- Use of barrier device is recommended.

#### Reference:

CLM Chapter 7.2 The ABC Priorities; 7.4 Rescue Breathing; 7.5 Cardiopulmonary Resuscitation Appendix B

#### Must See

#### Rescuer #1

Performs one-rescuer adult, child or infant CPR

#### Rescuer #2

- ☐ Identifies self as CPR trained
- Confirms EMS activation, presence of an AED and an AED-trained responder

#### **Both rescuers**

- ☐ If an AED-trained responder is available, AED pads applied by one rescuer while other performs CPR
- ☐ CPR continued and roles switched with as little interruption as possible
- Procedure continued until EMS takes over treatment or the victim shows signs of life
- ☐ If the victim shows signs of life, reassess ABCs and treat appropriately

Item 7a

# **Obstructed airway:** conscious adult or child

#### Notes

- · Discuss common causes of airway obstruction.
- · Supervise candidates carefully during training in obstructed airway techniques. Caution rescuers to simulate abdominal or chest thrusts. Misplaced or excessive thrusts can be dangerous.
- Conscious victim simulates either mild or severe airway obstruction. To signal the type of assistance needed, teach the universal choking signal.
- Rescuer assumes severe obstruction if victim nods "yes" when asked "Are you choking?" or if victim clutches neck or victim cannot speak or
- Back blows, abdominal thrusts or chest thrusts are effective for relieving severe airway obstruction in conscious adults and children. These techniques should be applied in rapid sequence until the obstruction is relieved or the victim becomes unconscious. More than one technique may be needed; there is insufficient evidence to determine which should be used first.

Some jurisdictions follow a standardized protocol. E.g., for **Emergency or Standard First** Aid in Quebec, abdominal thrusts or chest compressions are used; while in Ontario, 5 back blows alternate with 5 abdominal thrusts. Follow provincial protocols.

#### Reference:

CLM Chapter 7.2 The ABC Priorities; 7.3 Coping with Complications during the ABCs; 8.3 Airway and Breathing Problems Simulate the treatment of a conscious adult or child with an obstructed airway.

#### **Purpose**

To enable lifesavers to recognize a conscious victim with an obstructed airway and to perform appropriate lifesaving techniques.

#### **Must See**

- Assess the environment for hazards
- Assess degree of obstruction ask "Are you choking?"
- ☐ Rescuer identifies self ask "Can I help?"
- Selection of appropriate procedures:

#### Mild obstruction

- Coughing encouraged
- Reassurance for victim

#### Severe obstruction

- Shout for help
- Careful landmarking
- Appropriate obstructed airway technique(s)
- If successful, victim directed to see a physician to rule out complications from the obstruction or treatment

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## Item 7b

## **Obstructed airway:** conscious infant

On a manikin, demonstrate the treatment of a conscious infant with an obstructed airway.

#### **Purpose**

To enable lifesavers to recognize a conscious infant with an obstructed airway and to perform appropriate lifesaving techniques.

#### Notes

- Assessing degree of obstruction includes sudden onset of breathing difficulty, coughing or gagging, high-pitched noise, weak cry or cyanosis.
- · Rescuer assumes severe obstruction if victim cannot cough or make any sound.

#### Reference:

CLM Chapter 7.2 The ABC Priorities; 7.3 Coping with Complications during the ABCs; 8.3 Airway and Breathing Problems

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- Assess the environment for hazards
- Assess degree of obstruction ask "Are you choking?"
- ☐ Rescuer identifies self ask "Can I help?"
- Selection of appropriate procedures:

#### Mild obstruction

- Coughing encouraged
- Reassurance for victim

#### **Severe obstruction**

- Shout for help
- Careful landmarking
- Appropriate obstructed airway technique(s)
- If successful, caregiver directed to see a physician to rule out complications from the obstruction or treatment

## Item 7c

## Obstructed airway: unconscious victim

Simulate the treatment of an unwitnessed unconscious adult, child, or infant with an obstructed airway.

To clear airway obstruction and restore normal breathing to an unconscious victim.

· Whenever possible, use a manikin to practice chest compressions. If practicing this skill item on a person, rescuers *simulate* compressions to prevent injury.

Notes

- Send bystander to phone EMS. If alone with an adult victim, call EMS right away. If alone with a child or infant, rescuer calls EMS after 2 minutes (5 cycles or 30:2) of CPR. Unconscious victims are left in the recovery position.
- Push Hard, Push Fast: compress the chest at a rate of at least 100/minute allowing for full chest recoil. Compress at least 5 cm (2 in.) for an adult, and up to but not more than 5 cm (2 in.) for a child. On an infant, compress at least 4 cm ( $1^{1/2}$  in.).
- The need for defibrillation on infants is uncommon, and the preferred treatment involves the use of a manual defibrillator by trained health care professionals. In an emergency, an AED could be used on an infant. If so, use pediatric pads if available. Otherwise, use adult pads.
- Use of barrier devices is recommended.

#### Reference:

CLM Chapter 7.2 The ABC Priorities; 7.3 Coping with Complications during the ABCs; 8.3 Airway and Breathing Problems

Appendix B

Must	See

**Purpose** 

- Assess the environment for hazards
- Establish unresponsiveness
- ☐ Activate Emergency Medical Services (EMS)
- ☐ Attempt to obtain AED and an AED-trained responder if available
- ☐ Position victim on back
- Open airway and quick, visual check for breathing (5 sec.)
  - If breathing, victim placed in recovery position
  - If breathing is absent or abnormal, CPR started with 30 chest compressions (or with 2 rescue breaths for drowning victims)
- ☐ Immediate application of AED by an AED-trained responder (if available)
- ☐ Attempt to ventilate
- ☐ If unsuccessful, reposition the airway and re-attempt to ventilate
- ☐ If unsuccessful, careful landmarking and 30 chest compressions
- ☐ Foreign body check: look in mouth and if object can be seen, attempt to remove it
- ☐ Attempt to ventilate: if successful continue CPR sequence
- If unsuccessful, repeat sequence (30 compressions, check the mouth, attempt to ventilate, reposition head, re-attempt to ventilate) until successful
- ☐ CPR and/or AED use continued until EMS takes over treatment or the victim begins to show signs of life
- ☐ If victim shows signs of life, reassess ABCs and treat appropriately

# **Hypothermia**

**Bronze Cross** First Aid

Item 8

Demonstrate the care and treatment of a victim suffering from hypothermia.

#### **Purpose**

To provide care and treatment for a victim suffering from hypothermia.

#### Notes

- · Explore the implications of cold water for rescuers. When should they not enter the water for a rescue? What are the alternatives to entering the water?
- · Victims with impaired consciousness or who are unresponsive are in an immediate life-threatening condition and require immediate activation of
- Stress that hypothermia does not always involve exposure to cold water.
- If normal breathing is not present after 5 seconds, rescuer starts CPR immediately (and deals with drowning complications where appropriate).
- · Use of barrier devices is recommended.

#### Reference:

CLM Chapter 7.2 The ABC Priorities; 8.9 Heat/Cold Disorders

#### **Must See**

- Victim and scene assessment
- Victim reassured
- ☐ Determine cause of injury and remove victim from cause
- Attempt to prevent further cooling and increase core temperature
- ☐ Rescuer understands the risks of cold water rescues
- Contact with EMS

### Rescue 1

## **Item 12**

Perform a rescue involving two or more victims. One victim requires rescuer assistance, while the other victim(s) can follow directions for self-rescue and assist as bystanders once at the point of safety. The situation is designed to emphasize communication skills, victim care, removals, and follow-up including contact with EMS.

#### **Purpose**

To prevent loss of life in an aquatic emergency with minimum risk to the rescuer.

#### Notes

- Realistic victim simulation will assist accurate rescuer recognition and appropriate rescuer response for the victim type(s).
- Victims may be non-swimmers, distressed swimmers, or injured.
- Rescuers are not required to perform unassisted removals. Bystanders are untrained and
- Use of bystanders involves: clear identification of the bystander being recruited, effective twoway communication, clear directions for bystander tasks, and confirmation of understanding.
- Candidates should have a basic understanding of critical incident stress and its implications for them as rescuers.
- As additional development of their skills and knowledge, encourage candidates to design their own situations and rescue strategies.
- Rescue breathing, if required, is initiated as soon as the candidate can effectively deal with vomit. Rescue breathing in deep water is not expected.
- Barrier devices include surgical gloves and rescue breathing mask.
- The goal of the rescue is to exercise appropriate decision-making.

CLM Chapter 4 The Rescue of Others; 5.8 Multiple-Victim Rescues: Chapter 6 First Aid: The Rescue Process: Chapter 7 Lifesaving Priorities: The ABCs; Chapter 8 First Aid: The Treatment of Illness and Injury, Appendix A Stress Reaction to Rescues

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- Quick, accurate recognition
- ☐ Appropriate assessment of situation call for help
- Lowest risk rescue possible under the circumstances and concern for personal safety throughout
  - Appropriate choice and use of aid
  - Safe and effective entry, approach (maintaining visual contact), reverse and ready
- Victim(s) secured at nearest point of safety
- Safe and effective removals with bystander assistance
- ☐ Activate Emergency Medical Services (EMS)
- ☐ Victim assessment (ABCs) and appropriate victim care (including CPR/AED if appropriate)
- ☐ Effective use and direction of bystanders where appropriate
- ☐ Effective use of barrier devices where appropriate
- ☐ Appropriate care of victim(s) throughout including constructive communication

## Rescue 2

## Item 13

Perform a rescue of a submerged, non-breathing victim. The situation is designed to emphasize victim care, removal, and follow-up including contact with EMS.

#### Purpose

To prevent the loss of life in an aquatic emergency with minimum risk to the rescuer. To provide care until relief of responsibility is obtained.

#### Notes

- · Realistic victim simulation will assist with accurate rescuer recognition and appropriate response.
- Victim is located at a maximum depth of 3 m.
- Rescue breathing is initiated as soon as the candidate can effectively deal with vomit. Rescue breathing in deep water is not expected.
- Rescuers are not required to perform unassisted removals. Bystanders can be trained or untrained.
- Candidates should have a basic understanding of critical incident stress.

#### Reference:

CLM Chapter 4 The Rescue of Others; 7.2 The ABC Priorities; 7.4 Rescue Breathing, 7.5 Cardiopulmonary Resuscitation; Appendix A Stress Reaction to Rescues Appendix B

#### **Must See**

- Quick, accurate recognition
- ☐ Appropriate assessment of situation call for help
- ☐ Lowest risk rescue possible under the circumstances and concern for personal safety throughout
  - Appropriate choice and use of aid
  - Safe and effective entry, approach (maintaining visual contact), reverse and ready, and carry
- Protection of victim's airway during ascent and thereafter
- Victim secured at nearest point of safety
- Safe and effective removals with bystander assistance
- ☐ Activate Emergency Medical Services (EMS)
- Attempt to obtain an AED and an AED-trained responder
- ☐ Appropriate care of victim: CPR (started with 2 rescue breaths) and application of AED by AED-trained responder (if available)
- CPR and/or AED use continued until rescuer relieved of responsibility or victim shows signs of life
- ☐ If victim shows signs of life, reassess ABCs and treat appropriately
- ☐ Appropriate care of victim throughout including contructive communication
- Effective use and direction of bystanders where appropriate
- Effective use of barrier devices where appropriate

## Rescue 3

## Item 14

Perform a rescue of an injured victim in a situation in which there are two rescuers. This rescue requires a 50 m or yd. approach and a 50 m or yd. return. The situation is designed to emphasize either contact or non-contact rescues, victim care, removals, and follow-up including contact with EMS.

#### **Purpose**

**Must See** 

To prevent the loss of life in an aquatic emergency with minimum risk to the rescuer. To provide care until relief of responsibility is obtained.

#### Notes

- · Injured victim suffers from one of the following: external bleeding, arm or leg injury, or hypothermia.
- Realistic victim simulation will assist with accurate rescuer recognition and appropriate rescue response for the victim type.
- Rescuers are not required to perform unassisted removals. Bystanders are untrained but cooperative.
- Use of bystanders involves clear identification of the bystander being recruited, effective twoway communication, clear directions for bystander tasks, and confirmation of understanding.
- Barrier devices include surgical gloves and rescue breathing
- Only simple treatment is required for injuries, for example, direct pressure for bleeding, support injured arm or leg, removal from water, and warming for hypothermia.
- Candidates should have a basic understanding of critical incident stress and its implications for them as rescuers.

#### Reference:

CLM Chapter 4 The Rescue of Others; 5.9 Multiple-Rescuer Procedures; 7.2 The ABC Priorities; 7.4 Rescue Breathing; 7.5 Cardiopulmonary Resuscitation; Chapter 8 First Aid: The Treatment of Illness or Injury, 9.3 Swimming Skills; Appendix A Stress Reaction to Rescues

Quick, accurate recognition			
Appropriate assessment of situation – call for help			
Lowest risk rescue possible under the circumstances and concern for personal safety throughout			
	Appropriate choice and use of aid		
	Safe and effective entry, approach (maintaining visual contact), reverse and ready, and tow or carry for the circumstances		
Victim secured at nearest point of safety			
Safe and effective removals with bystander assistance			
Activate Emergency Medical Services (EMS)			
Victim assessment (ABCs) and appropriate care (including effective CPR/AED if appropriate)			

until rescuer relieved of responsibility or victim shows signs of life

☐ Appropriate care of victim throughout including constructive communication

☐ If victim shows signs of life, reassess ABCs and treat appropriately

☐ Effective use and direction of bystanders where appropriate

☐ Good teamwork – both rescuers involved with the rescue

☐ Effective use of barrier devices where appropriate

## Rescue 4

## Item 15

Perform a rescue of a victim suffering injuries or conditions in a situation that emphasizes rescuer response to deteriorating circumstances and requires the use of bystanders. The rescue requires a 20 m or yd. approach and a 20 m or yd. return.

#### Notes

- · Injured victim suffers from one of the following: respiratory distress, external bleeding, arm or leg injury, or hypothermia.
- Realistic victim simulation will assist with accurate rescuer recognition and appropriate rescuer response for the victim type.
- Deteriorating circumstances could involve changes in level of consciousness, shock, increased or decreased respiratory rate, increased pain, etc. or changes in environmental conditions such as weather, waves, or other hazards.
- Rescuers are not required to perform unassisted removals.
- Use of bystanders involves clear identification of the bystander being recruited, effective twoway communication, clear directions for bystander tasks, and confirmation of understanding.
- Only simple treatment is required for injuries, for example, direct pressure for bleeding, support injured arm or leg, removal from water, and warming for hypothermia.
- Barrier devices include surgical gloves and rescue breathing mask.
- Candidates should have a basic understanding of critical incident stress and its implications for them as rescuers.

Reference: CLM Chapter 4 The Rescue of Others; 7.2 The ABC Priorities; 7.4 Rescue Breathing, 7.5 Cardiopulmonary Resuscitation; Chapter 8 First Aid: The Treatment of Illness or Injury, 9.3 Swimming Skills; Appendix A Stress Reaction to Rescues

#### **Purpose**

To prevent the loss of life in an aquatic emergency with minimum risk to the rescuer. To provide care until relief of responsibility is obtained.

#### **Must See**

- Quick, accurate recognition
- ☐ Appropriate assessment of situation call for help
- Lowest risk rescue possible under the circumstances and concern for personal safety throughout
  - Appropriate choice and use of aid
  - Safe and effective entry, approach (maintaining visual contact), reverse and ready, and tow or carry for the circumstances
- Victim secured at nearest point of safety
- ☐ Safe and effective removals with bystander assistance
- ☐ Activate Emergency Medical Services (EMS)
- ☐ Victim assessment (ABCs) and appropriate care (including effective CPR/AED if appropriate) until rescuer relieved of responsibility or victim shows signs of life
- ☐ If victim shows signs of life, reassess ABCs and treat appropriately
- Systematic head-to-toe survey
- ☐ Appropriate care of victim throughout including constructive communication
- ☐ Effective use and direction of bystanders where appropriate
- ☐ Effective use of barrier devices where appropriate

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