# Award Guide Lifesaving Fitness

Training Guide for the Lifesaving Fitness Award







### Lifesaving Fitness Award Guide

Published by the Lifesaving Society. First printing 1991. Revised May 2003.

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The Lifesaving Society is Canada's lifeguarding expert. The Society works to prevent drowning and water-related injury through its training programs, Water Smart<sup>®</sup> public education initiatives and aquatic safety management services.

Annually, the Society certifies 200,000 Canadians in its lifesaving, lifeguarding, and first aid training programs—including all of Canada's lifeguards.

The Society is an independent, charitable organization educating Canadian lifesavers since the first Lifesaving Society Bronze Medallion Award was earned in 1896.

The Society represents Canada internationally as an active member of the Royal Life Saving Society and the International Life Saving Federation, and is the governing body for lifesaving sport—a sport recognized by the International Olympic Committee.

Ce manuel est disponible en français.

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### Canada's lifeguarding experts

### working to prevent drowning for over 100 years.

Almost 500 Canadians die every year in water-related incidents. Most of these are preventable and occur in unsupervised settings, which is why more Canadians need the lifesaving skills to save themselves or others in an aquatic emergency.

The Lifesaving Society has a long and proud history of teaching lifesaving to Canadians.

We trace our roots to the late 19<sup>th</sup> century in London, England where we began as The Swimmers' Life Saving Society. In 1894, Arthur Lewis Cochrance brought the lifesaving skills he learned in his homeland to Canada. And he passed them along to students at Upper Canada College in Toronto, Ontario. In June 1896, 18 of his students were recipients of our distinguished Bronze Medallion award, the first award to be created by the Society. Under the patronage of King Edward VII in 1904, we became the Royal Life Saving Society. In the 1950s, we were the first Canadian organization to adopt mouth-tomouth as the method of choice over manual methods of artificial respiration. We started our first CPR training program in the 1960s. In the 1980s, we initiated a project to design an economical CPR training manikin now known as ACTAR 911<sup>TM</sup>.

Today, we are known to Canadians simply as the Lifesaving Society, a national volunteer organization and registered charity. And while we've expanded our strengths over the past century to include research and public education, we haven't forgotten the ideals that formed the foundation of our organization.

The Lifesaving Society has always been – and will continue to be – Canada's lifeguarding experts.

### Foreword

Award Guides are designed to help instructors plan, teach, and evaluate the awards of the Lifesaving Society's training program. Award Guides are designed for use with the Society's *Instructor Notes*, which present essential teaching and learning principles. For skill descriptions and technical information, instructors should consult the *Canadian Lifesaving Manual* or *Alert: Lifeguarding in Action*.

The Award Guide begins with an at-a-glance overview of the general aim of the award and a list of test items. In test item descriptions, the word "Demonstrate" is used for items in which participants simply demonstrate skill – no rescue situation is required. The word "Perform" is used to indicate that a rescue situation is called for in which the lifesaver is expected to integrate the four elements of water rescue: judgment, knowledge, skill, and fitness.

Next, and for each test item, the Award Guide presents a detailed description including the purpose of the item, its evaluation criteria (Must See), and Notes:

**Statements of Purpose:** The Purpose statements identify the objective of each item. Purpose statements define what the item achieves when performed successfully ("to restore normal breathing in a non-breathing victim") or specify why the item is included in the training program ("to develop fitness and stroke efficiency in lifesaving emergencies").

**Notes:** The Notes present explanations or limitations of the performance of an item. Suggestions to the instructor and evaluator regarding specific evaluation problems are also offered here. Space is often provided for instructors to write in their own additional notes.

**Performance Requirements - Must See:** Details of the performance, which will achieve the purpose of each item, are found in the "Must See" section. Normally, "Must See" items do not describe skills or performances. Skill descriptions are found in the *Canadian Lifesaving Manual*). In many instances various responses are possible.

The instructor and evaluator can use the "Must See" section as a checklist for success ("fast vertical descent", "depth attained," etc.). If a lifesaver performs an item with the necessary knowledge, skill, fitness, and judgment to achieve its stated purpose, then the candidate is probably performing at or above the required standard for the award.

**Evaluation:** Items marked with an asterisk (\*) are instructor-evaluated in those provinces where examination by an examiner is compulsory. Examiners may evaluate any or all of these items at their discretion.

The Award Guide concludes with suggested learning activities including games, skill drills, and variations for both. Whatever learning activities the instructor selects, every class should be action-packed, challenging, and fun.

### Lifesaving Fitness Award

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### Lifesaving Fitness Award

### At-a-glance

The Lifesaving Society's Lifesaving Fitness Award teaches the importance of physical fitness in lifesaving. The award is designed for participants of all ages and both sexes, who learn how to measure, monitor, and maintain personal physical fitness for lifesaving emergencies.

Prerequisites: 30 years of age and under, or medical approval.

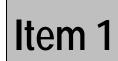
**Evaluation**: All items are evaluated by a Lifesaving Society Instructor. To achieve Bronze, Silver, or Gold candidates must successfully perform all items at that level.

### Test items

- 1. Demonstrate an understanding of how to evaluate and improve strength and endurance for lifesaving and physical activity.
- 2. Demonstrate ability to evaluate intensity and personal strength.
- 3. Demonstrate ability to perform rescue breathing for a period of 3 minutes at pool or dockside (victim and rescuer in deep water) with a victim of the candidate's choice or with a suitable device (manikin or equivalent).
- 4. Swim any stroke, dive start, 25 m or 25 yd, or 20 yd.
- 5. Swim any stroke, dive start, 200 m or 200 yd.
- 6. Demonstrate the ability to get out of the water onto a pool desk or dock using only the arms to lift self from the water and place one foot on the deck or the dock.
- 7. While treading water, hold a 4.5 kg or 10 lb object at the surface with one or two hands.
- 8. Remove a 9 kg or 20 lb object located at a depth of 3 m or yd and at a distance of 3 m or yd from dock or poolside; surface, carry, and place object on the dock of deck.
- 9. Tow a passive victim 50 m or yd with a suitable buoyant device (ring buoy, kickboard, rescue can or tube, etc.). Rescuer and victim to start in the water.

### Lifesaving Fitness

# Strength and endurance



Demonstrate an understanding of how to evaluate and improve strength and endurance fitness for lifesaving and physical activity.

### Purpose

To emphasize the physical fitness principles of the practical items in this award.

### Notes

 A medical consultation is recommended before starting this program if the participant is 30 years of age or older, and is suffering from heart or respiratory diseases, or other conditions that could be adversely affected by exercise.

CLM reference: Chapter 10: *Physical Fitness and Lifesaving* 

### Must See

Basic understanding demonstrated through performance

### Lifesaving Fitness

# Intensity and strength

Item	2
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Demonstrate ability to evaluate intensity of activity and personal strength.

	Purpose To emphasize that strength and muscular endurance can be improved with training.
Notes	
Candidate measures heart rate.	Must See
<ul> <li>Instructor may check measurements by taking candidate's carotid or radial (wrist) pulse at the same time to compare results.</li> </ul>	<ul> <li>Accurate measurement of heart rate (pulse)</li> <li>Understanding demonstrated through performance</li> </ul>
<ul> <li>Compare results.</li> <li>To indicate ability to evaluate personal strength, candidate demonstrates a strength activity (push-ups, curl-ups, arm lifts from water, weight lifting, rowing, canoeing, or other exercise) and relates current ability (number of repetitions, amount of weight/ resistance, etc.) to personal strength levels before starting the fitness training program.</li> <li>CLM reference: Chapter 10: <i>Physical Fitness and Lifesaving</i></li> </ul>	

### Lifesaving Fitness

# **Rescue breathing**

### Item 3

Demonstrate rescue breathing for a period of 3 minutes at pool or dockside (victim and rescuer in deep water) with a victim of the candidate's choice or with a suitable device (manikin or equivalent).

### Purpose

To restore normal breathing in a non-breathing victim demonstrating endurance for lifesaving emergencies.

### Notes

- A candidate may demonstrate rescue breathing with a partner or a manikin or another suitable device.
- Instructors must be familiar with, and practice, proper cleaning procedures when using manikins.
- Encourage candidates to call for help throughout the rescue breathing sequence until assistance arrives.
- Simulated rescue breathing is performed effectively throughout 3 min.
- Victim adequately secured at poolside or dockside.
- Head of victim (manikin or equivalent) above water.
- Use of barrier devices is recommended.

CLM Reference: 7.2 The ABC Priorities;

- 7.4 Rescue Breathing
- 7.5 Cardiopulmonary Resuscitation

### Must See

- □ Shout for help and EMS
- Position victim (turn if necessary)
- □ Open airway
- □ Check for breathing (no more than 10 seconds) look, listen, and feel
- □ 2 slow breaths: observe the chest rise
- Check for pulse and other signs of circulation (no more than 10 sec.)
- □ Contact EMS
- □ Continue rescue breathing: if pulseless, attempt to obtain qualified person to initiate CPR
- □ Time requirement met

## Power

### Lifesaving Fitness

### Item 4

Swim any stroke, dive start, 25 m or 25 yd or 20 yd.

	Purpose	
	To demonstrate strength over a short period of time (power).	
Notes		
<ul> <li>Notes</li> <li>Stroke is identifiable, but technique is not evaluated.</li> <li>A stopwatch should be used for evaluation as a pace clock will not give an accurate time.</li> <li>Dive starts are performed in deep water.</li> <li>CLM reference: Chapter 10: <i>Physical Fitness and Lifesaving</i></li> </ul>	Must See - 25 m : 22 - 25 yd : 22 - 20 yd : 16 Silver - 25 m : 18 - 25 yd : 16 - 20 yd : 13 Gold - 25 m : 15 - 25 yd : 13 - 20 yd : 10	

# Endurance

Lifesaving Fitness

# Item 5

Swim any stroke, dive start, 200 m or 200 yd.

	Purpose
Notes	
Notes         • Dive starts are performed in deep water.         CLM reference: Chapter 10: Physical Fitness and Lifesaving	To demonstrate endurance.          Must See         Bronze         - 200 m 5:30         - 200 yd 5:00         Silver         - 200 m 4:25         - 200 yd 4:00         Gold         - 200 m 3:20         - 200 yd 3:00

# Upper body strength

Lifesaving Fitness

### Item 6

Demonstrate the ability to get out of the water onto a pool deck or dock using only the arms to lift self from the water and place one foot on the deck or dock.

	Purpose		
	To demonstrate upper body (arm) strength.		
Notes			
• Lift is performed from deep water.	Must See		
<ul> <li>Preparatory movement (bobbing action) and leg kicks are not permissible.</li> </ul>	□ Arm press to place one foot on deck or dock		
CLM reference: Chapter 10: <i>Physical</i> <i>Fitness and Lifesaving</i>			

# Supportive kick

Lifesaving Fitness

# Item 3

While treading water, hold a 4.5 kg or 10 lb object at the surface with one or two hands.

	Purpose
	To develop a strong supportive kick and lower body (leg) endurance.
Notes	
<ul> <li>Notes</li> <li>Any leg action or combination of kicks is acceptable.</li> <li>Candidate may support the object with one or two hands.</li> <li>Start candidates with a clear, "Take your marksgo."</li> <li>Skill is performed in deep water.</li> <li>CLM Reference: Chapter 4: 4.11 Talk, Tow, or Carry, Chapter 9: Swimming Strokes and Skills; Chapter 10: Physical Fitness and Lifesaving</li> </ul>	Must See  Top of object at surface Head above surface Silver 8:00 Gold 10:00

# **Removal of object**

Lifesaving Fitness

## Item 8

Remove a 9 kg or 20 lb object located at a depth of 3 m or yd and at a distance of 3 m or yd from dock or poolside; surface, carry, and place on the dock or deck.

### Purpose

To develop recovery skill and power for use in lifesaving emergencies.

Notoc	
Notes	
<ul> <li>Object should be located at the deepest point of the facility to a maximum depth of 3 metres.</li> </ul>	Must See  Quick descent to object
Object may be a brick or manikin.	Efficient pick-up and ascent to surface

Tow

### Lifesaving Fitness

Item 9

*Tow a passive victim 50 m or yd with a suitable buoyant device (ring buoy, kickboard, rescue can or tube, etc.). Rescuer and victim to start in the water.* 

Lifesaving Fitness Award

# Learning activities

Notes		
	Strength and endurance	Measure your gains (Item 1)
	Personal fitness chart (Item 1)	Required equipment:
	<ul> <li>Required equipment:</li> <li>Sample fitness chart</li> <li>Develop a personal fitness chart to measure strength improvement by increasing the amount of physical activity over the period of the fitness program:</li> <li>Establish a minimum performance number</li> <li>Perform the skill at this level for two weeks</li> <li>Increase the performance number</li> <li>Continue to increase the performance number until final goal is reached (Overload Principle)</li> <li>Sample Personal Fitness Chart for strength:</li> <li>Push-ups (three times per week)</li> <li>Place hands on the edge of the deck. Pull your body out of the water until elbows are straight. Lower your body until shoulders are below water surface. Do not push off bottom.</li> </ul>	<ul> <li>Target heart rate zone chart</li> <li>Have candidates measure their physical endurance gains through the following suggestions:</li> <li>Establish target zone (see chart in <i>Canadian Lifesaving Manual</i>).</li> <li>Measure the minimum level of endurance fitness at the start of the program (should be close to lower limit on chart).</li> <li>Start with a minimum 10 minutes of activity, three times per week.</li> <li>Increase the activity level over the duration of the fitness program; for ex- ample, 20–30 minutes of activity, three times per week.</li> <li>Make candidates aware that the heart rate target zone must be at a lower limit at the beginning of the program. A higher level may indicate that performanc e is "too much, too soon."</li> <li>Design your own (Item 1)</li> <li>Required equipment:</li> <li>At the discretion of the candidates</li> <li>Encourage candidates to create their own endurance training program.</li> </ul>

Notes		
	Intensity and strength	Rescue breathing
	Record your pulse (Item 2)	Victim support (Item 3)
	<ul> <li>Required equipment:</li> <li>Daily log book</li> <li>Target heart rate chart</li> <li>Have students make a daily logbook to record pulse, workouts, and times.</li> <li>Resting Heart Rate: Take pulse before rising in the morning. Record. Take pulse during the day while standing. Record.</li> <li>Working Heart Rate: Take pulse immediately following 10 minutes of exercise. Record.</li> <li>Have students note and explain differences in their resting and working heart rates. Ask: Is there a difference between the resting heart rates before starting and after completing a training program? Why?</li> <li>Pulse check diversity (Item 2)</li> <li>Required equipment:</li> <li>Stop watch</li> <li>Pulse rate tracking chart</li> <li>Resting heart rate can be affected by a number of factors such as sickness and fatigue. Encourage candidates to take the resting heart rate daily at the same time each day for a one-week period, and average out the scores to obtain a "true" resting rate.</li> <li>Ensure that candidates do not press the pulse area too firmly. Blood supply will not be affected if pulse is taken correctly.</li> </ul>	Required equipment: • Rescue equipment • Barrier devices Pair candidates. Have students experiment with ways of supporting the victim in shallow water at poolside or dock. Move activity to chest deep water. When candidates can perform the skill in chest deep water, repeat in deep water. <b>Rescue breathing challenge (Item 3)</b> Required equipment: • Rescue equipment • Barrier devices Challenge candidates to perform rescue breathing in several different environments (land, shallow water, dock to water, etc.).

Notes		
	Power	Workout sets (Item 4)
	Start drill (Item 4)	Required equipment:
	Start drill (Item 4) Required equipment: • Pace clock or stop watch Present a warm -up of swimming, stretching, and in-water jumps before performing the drill. Sample warm -up: • 10 min. swimming stretches • 200 m swim • 10 "leapers" "Leapers" stand in waist or chest deep water leap as high out of the water as possible repeat while travelling into shallower (or deeper) water. Start Drill: Line up along deep end. On the whistle signal, half the class dives into water, holding glide position as long as possible. The other half follows on the next whistle, trying to outdistance first group. Repeat the drill, including four follow-up strokes. Half sprints (Item 4) Required equipment: • Pace clock or stop watch Provide a long warm -up. Then try this drill: From dive start, swim about half a length of the pool. Perform swim at full speed, face in the water without lifting head to breathe. Repeat the drill six times allowing the candidates to rest for one full minute between each sprint.	Required equipment: • Pace clock Design a workout that incorporates power activities. To increase power and em - phasize the correct physiological system, a work-to-rest ratio of 1:4 or 1:3 is required. For example: <i>Warm-up</i> • 200 m freestyle • 100 m kick • 100 m swimmer's choice <i>Power Set</i> 10 repetitions of 25 m, leaving every minute. If you swim 25 m in 15 sec., you will have a 45 sec. break between repeats. The work-rest-ratio is 1:3. <b>Endurance</b> In-training (Item 5) Required equipment: • Pace clock Warm-up: 10 x 75 m stroke drills leaving every 1:45. Endurance Set: • 5 x 200 m; 30 sec. rest between each swim • 2 x 200 m; 2 min. rest between each swim

Notes		
	Endurance (cont'd)	Guest coach (Item 5)
	Swim workout (Item 5)	If you have limited knowledge in stroke mechanics, invite a "guest coach" to attend
	Required equipment:	a session to help you. Contact Swimming/Natation Canada if you need help finding a coach.
	Warm-up: 10 x 50 m swim; 10 sec. rest between each swim. Swim 1 slow, 1 fast, etc.	Upper body strength
		Arm press drill (Item 6)
	<ul> <li>Pyramid Set:</li> <li>Swim 50 m; with 5 sec. rest</li> <li>Swim 100 m; with 10 sec. rest</li> <li>Swim 150 m; with 15 sec. rest</li> <li>Swim 200 m; with 20 sec. rest</li> <li>Swim 150 m; with 15 sec. rest</li> <li>Swim 100 m; with 10 sec. rest</li> <li>Swim 50m; Stop</li> <li>Time limit swim (Item 5)</li> <li>Required equipment:</li> <li>Stop watch</li> <li>Provide a warm-up. Then try this activity:</li> <li>Candidates swim as many lengths as they can in 5 minutes. Record number of lengths.</li> <li>Repeat drill throughout duration of fitness program. Number of lengths should increase over a period of weeks. Encourage candidates to pace themselves to lessen fatigue in the final stages of the swim.</li> </ul>	Arm press drill (Item 6) Candidates swim 1 width and then do 5 arm presses at the side. Repeat activity for 10 widths (or more). For more ideas, see <i>Swimming Coaching at the Club Level</i> , published by Swimming/Natation Canada. <b>Flexibility improvement (Item 6)</b> In order to place a foot on the deck or dock after a lift, the hip and leg extensors and flexors must be very flexible. Emphasize proper stretching techniques. Hold the stretch for 20–30 seconds WITHOUT BOUNCING. Aqua-fitness exercises for flexibility may also be performed.

Notes				
	Removal of object	Towing en	m 9)	
Notes	Removal of object         Streamlining (Item 8)         Required equipment:         • 4.5 kg or 10 lb brick         Candidates push off side with arms and/or legs apart. Repeat task in a streamlined position (legs together, arms tight to the body). Ask candidates in which position they glide farther.         Repeat the drill pushing off the bottom of the pool. Maximum depth: 3 m or yd.         Relay drill (Item 8)         Required equipment:         • 4.5 kg or 10 lb brick         Organize relay teams. Each member performs the test item requirements. Variations include:         • Continue relay for a specified time length         • Perform skill more than once         Towing experiment (Item 9)         Required equipment:         • Rescue equipment (ring buoys, rescue can or tube, flutter boards)         Encourage candidates to experiment with rescue equipment:	Required ea • Rescue e can or tub Activity: Too	quipment (rin be, flutter boa w passive vic ctive tows are	g buoys, rescue rds tim
	can or tube, flutter boards) Encourage candidates to experiment with			

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