



Wellington • Dufferin • Guelph
HEALTH UNIT
Public Health

Outdoor Public Pool Information Manual



Manual also contains the following:

- Pool Opening Notification Form
- Inspection Checklist
- Pool Log
- Emergency Procedure Sign

205 Queen St. E.
Fergus, ON N1M 1T2
Tel: (519) 843-2460
Fax: (519) 843-2321

125 Delhi St.
Guelp, ON N1E 4J5
Tel: (519) 821-2370
Fax: (519) 836-7215

51 Zina St.
Orangoville, ON L9W 1E5
Tel: (519) 941-0760
Fax: (519) 941-1600

140 Wellington St.
Mt. Forest, ON N0G 2L0
Tel: (519) 323-2330
Fax: (519) 323-3794

500 Whites Rd.
Palmerston, ON N0G 2P0
Tel: (519) 343-2240
Fax: (519) 343-2487

211 First Ave.
Shelburne, ON L0N 1S0
Tel: (519) 925-2000
Fax: (519) 925-6743

INTRODUCTION

On May 15, 1999 the Public Swimming Pool Regulation 565/90 was amended to Ontario Regulation 270/99. Under this revised Regulation, changes were made to Section 17 that addresses the safety requirements for lifeguards, assistant lifeguards, aquatic instructors and coaches. The changes are reflected in this manual.

As a pool operator, it is your responsibility to ensure that your pool complies with all of the necessary legislation and operating standards so that bathers can safely use the pool. All pool operators must notify the Health Unit of their intention to open a pool if it has been closed for more than four weeks. An application of notification follows this page.

This manual will assist you to operate your pool in a more safe and sanitary manner. It highlights some of the more significant sections of the Public Swimming Pool Regulation 565/90 (Ont. Reg. 270/99).

Both the manual and the Regulation do not address pool problems associated with unbalanced water chemistry, equipment, and maintenance or construction requirements.

Requirements related to pool construction are set out in Ontario Regulation 61/90 under the Ontario Building Code. Should any issues arise regarding pool construction, please contact your local municipal office and ask for a building inspector.

For problems associated with equipment maintenance and unbalanced water chemistry, contact a local swimming pool company or your equipment manufacturer.

The Building Code or a full copy of the Public Swimming Pool Regulation 565/90 (Ont. Reg. 270/99) can be obtained from www.e-laws.gov.on.ca or by contacting:

Publications Ontario
880 Bay Street
Toronto, ON
M7A 1N8
1-800-668-9938

You have an important job to do this summer and together, we can achieve the results required to do the job right!

There are two classes of pools, Class A and Class B. The safety requirements for both classes are the same, except where otherwise indicated.

WHAT CLASS IS MY POOL?

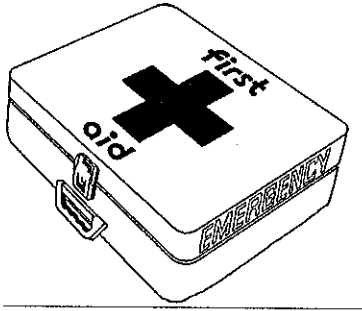
Class A

- ◆ General public admitted
- ◆ Operated in conjunction with or as part of a program of a YMCA or similar institution education, instructional, physical fitness or athletic institution supported in whole or in part by public funds
- ◆ Operated on the premises of a recreational camp, for use by campers and their visitors

Class B

- ◆ Operated on the premises of:
 - an apartment building, mobile home park
 - nurses' residence, hotel, campground,
 - private club, condominium, day nursery, day camp or an establishment or institution for the care or treatment of persons who are ill, infirm or aged or for persons in custodial care

WHAT SAFETY EQUIPMENT IS REQUIRED?

Reaching Pole	<ul style="list-style-type: none"> • 3.65 m long, electrically insulated & available on deck
Two Buoyant Throwing Aids	<ul style="list-style-type: none"> • Rope diameter to be 6 mm in diameter • Rope length to be 3 m + half the width of the pool • Available on deck and located on either side of the pool.
Spine Board	<ul style="list-style-type: none"> • To be in good condition
Emergency Telephone	<ul style="list-style-type: none"> • Class A pools - on deck • Class B pools - within 30 meters of the pool • To be fully operational and tested daily.
First Aid Kit 	Conveniently located and well marked. Must contain the following: <ul style="list-style-type: none"> • A current copy of the St. John Ambulance or Red Cross First Aid Manual • 12 safety pins • 24 adhesive dressings, individually wrapped • 12 sterile gauze pads each 7.5 cm square • 4 rolls of gauze bandages 5 cm in width • 4 rolls of gauze bandages 10 cm in width • 4 sterile surgical pads, individually wrapped • 6 triangular bandages • 2 rolls of splint padding • 1 roll-up splint
Ground Fault Detector	<ul style="list-style-type: none"> • Available if pool has underwater lights or electrical outlets within 3 m of the pool surface and tested daily

WHAT SIGNS DO I HAVE TO POST?

1. General Pool Rules
2. Shower Sign
3. Emergency Telephone
4. No Diving
5. Deck markings/black disc
6. Unsupervised Sign

General Pool Rules

A minimum of two signs is required on the deck or at the pool indicating the following:

- No person infected with a communicable disease or having open sores on his/her body shall enter the pool
- No person shall bring a glass container onto the deck or into the pool
- No person shall pollute the water in the pool in any manner and that spitting, spouting of water and blowing the nose in the pool or on the deck are prohibited
- No person shall engage in boisterous play in or about the pool
- The maximum number of bathers permitted on the deck and in the pool at any time is _____. *(Always 10 if the pool is greater than 93 sq. meters and is unsupervised)*
- The emergency telephone is located _____

Shower Sign



SHOWER

The following notice is to be posted at the entrance of every shower area and at every entrance to the pool deck:

NOTICE

Every bather shall take a shower, using warm water and soap and thoroughly rinse off all soap before entering or re-entering the deck.

Emergency Telephone



A notice must be posted above the phone that states the following:

Emergency Telephone

DIAL 911 (fire dept., ambulance)

Name of the Pool: ABC Pool

Address of Pool: 123 Swimmer's Lane

Location of Pool: South East Corner of Bldg

Phone number: 123-4567

If the phone is connected to a reception desk or is directly connected to emergency services, indicate this information on the sign. (See sample of notice sign included with this manual)

No Diving



If the pool water depth is **less than 2.5 meters**, one of the following signs must be posted with lettering that is 15 cm high. The following words can be posted on the wall or marked onto the deck:

CAUTION - AVOID DEEP DIVES OR SHALLOW WATER - NO DIVING

If at any point the water depth is **1.35 meters or less**, between 7.5 and 9 meters away from a diving area and the pool is equipped with a diving board that is 60 cm in height or less above the water, provide the following notice, clearly marked in dark letters, 15 cm high on a light background:

DANGER - AVOID DEEP OR LONG DIVES

Deck Markings/Black Disc

On the deck, clearly marked in figures 10 cm high, markings that set out the water depths indicating the:

- Deep points
- Shallow points
- Breaks between gentle and steep bottom slopes
- "DEEP AREA" and "SHALLOW AREA" at their respective locations (10 cm high)
- A black disc 15 cm in diameter at the bottom of the deepest part of the pool on a white background

Unsupervised Sign

Class A pools must always have lifeguards on duty. Therefore, unsupervised signs are not required. (Skip to page 5)

Class B pools may or may not have lifeguards on duty.

For Class B Pools Without Safety Supervision:

Only Class B pools that are greater than 93 square meters can operate without safety supervision (excluding pools operated in conjunction with day camps or day cares) provided that the following notice is posted within the pool enclosure, printed in letters at least 2.5 cm high:

The bather load is always 10 regardless of the actual calculation

CAUTION

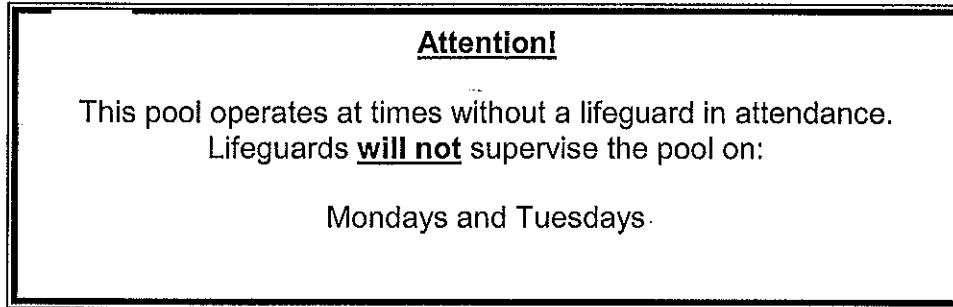
This pool is unsupervised.

Bathers under twelve years of age are not allowed within the pool enclosure unless accompanied by a parent or his or her agent who is not less than sixteen years of age. The total number of bathers on the deck and in the pool shall not exceed 10.

For Class B pools that are less than 93 square meters, the sign above is required, however, the bather load is calculated based on the formula on page 6 and stated on the sign.

For Class B Pools that have Occasional Safety Supervision:

If a Class B pool operates with and without safety supervision at different times, a sign may be posted that states when the lifeguards are on duty. The sign below is an example:



However, it is recommended that the unsupervised sign always be posted at pools where supervision is occasional.

HOW MANY LIFEGUARDS DO I NEED AT MY POOL?

You will first need to know the following parameters before using the chart below:

- The total water surface area of your pool
- The allowable bather load

To calculate these parameters, go to page 6.

The chart below indicates the minimum numbers of lifeguards and assistant lifeguards for a public pool with a water surface area of **500 square metres or less**.

Where there are assistant lifeguards and lifeguards on duty		Where there are only lifeguards on duty	
Number of bathers on the deck and in the pool	Minimum number of lifeguards and assistant lifeguards on duty	Number of bathers on the deck and in the pool	Minimum number of lifeguards on duty
0-30	1	0-30	1
31-100	2	31-125	2
101-200	3	126-250	3
201-300	4	251-400	4
300 or more	One additional lifeguard or assistant lifeguard for each additional 100 bather or fraction thereof	400 or more	One additional lifeguard for each additional 150 bathers or fraction thereof

Calculating the Area of the Pool Water Surface

- The total area of the pool water surface is calculated by measuring the shallow and deep areas of the pool separately and then adding the two results together.
- The shallow area is part of the pool that is 1.35 meters (4.5 ft) or less in depth.
- The deep area is part of the pool that is greater than 1.35 meters (4.5 ft) in depth.

Step 1 Length of shallow end _____ Width of shallow end _____

Area of shallow end \rightarrow Length x Width = _____

Step 2 Length of deep end _____ Width of deep end _____

Area of deep end \rightarrow Length x Width = _____

Step 3 Area of Shallow end + Area of Deep end = Total Surface Area

+ =

In order to calculate the total number of bathers permitted in your pool and on the deck, complete the following calculation:

Calculating Bather Load

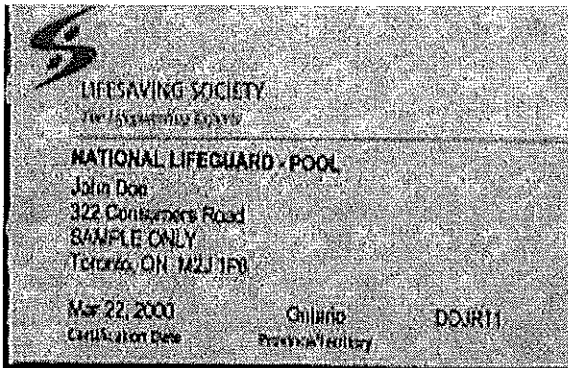
Maximum bather load = $\frac{\text{Shallow Area}}{1.4} + \frac{\text{Deep Area}}{2.5} =$ _____ people

Note: For unsupervised Class B pools with a pool water surface area of greater than 93 Sq. meters, the bather load must always be ten, regardless of the actual calculation.

WHAT QUALIFICATIONS DO LIFEGUARDS REQUIRE?

Lifeguard

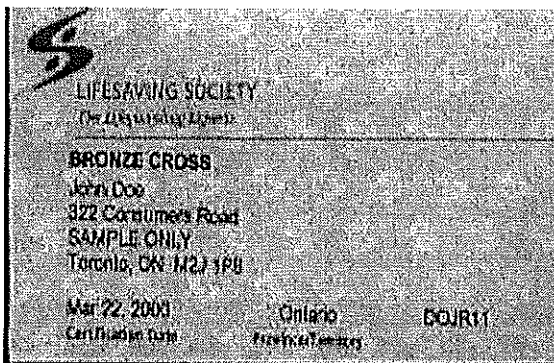
- Be trained in operational and emergency procedures (operational and emergency procedures to be available in writing at the pool)
- Be at least **16** years of age (copy of birth certificate required)
- Be appropriately attired so that they are readily identifiable.
- Have a current certificate (within two years from date of issue) as shown below:



Royal Life Saving Society
National Lifeguard Service Award

Assistant Lifeguard

- Be trained in operational and emergency procedures
- Be at least 16 years of age (copy of birth certificate required)
- Be appropriately attired so that they are readily identifiable.
- Have a current certificate (within two years from date of issue) as shown below:

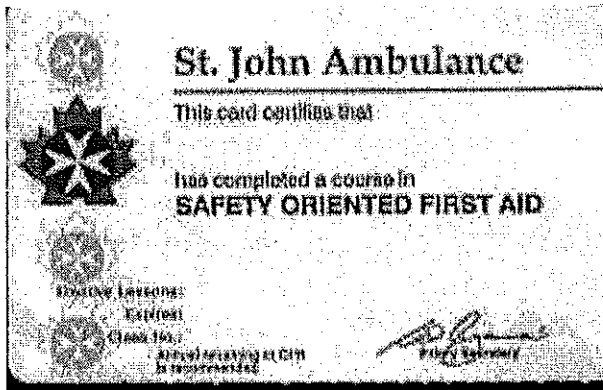


Royal Life Saving Society
Bronze Cross or Award of Distinction

- The number of assistant lifeguards cannot be greater than the number of lifeguards.
- All certificate copies to be available at the pool and signed by the operator as valid.
- Lifeguards should carry the original certificates with them while on duty.

Additional Lifeguard Qualifications For Class A Pools Only

In addition to the requirements on page 7, at least one person sixteen years of age or over, who is on duty or on the premises of a class A pool, shall be within call and be the holder of a **first-aid certificate** dated not more than three years prior to the date on which the lifeguard is on duty issued by one of the following:

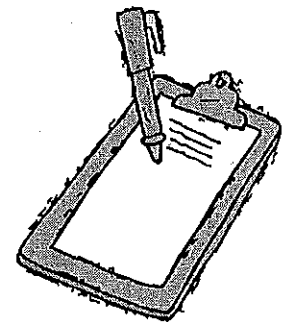


- St. John Ambulance (emergency, standard or advanced certificate)
- Canadian Red Cross Society (emergency, standard or advanced certificate)
- Royal Life Saving Society (Aquatic Emergency Care Certificate)
- Certificate that is considered equivalent as approved

WHAT TYPE OF TESTS DO I NEED TO TAKE?

CHEMICAL AND SAFETY/OPERATIONAL TESTS INCLUDE:

♦Free Available Chlorine (FAC)	Every 2 hours & ½ hr before pool opens
♦Total available Chlorine/Bromine (FAC + combined)	Daily
♦pH	Every 2 hours & ½ hr before pool opens
♦Cyanuric Acid (outdoor pools)	Weekly
♦Alkalinity	Monthly
♦Make-up water meter reading	Daily
♦Skimmer lids & drain covers inspected	Daily
♦Ground fault detector	Daily
♦Emergency phone	Daily



WHAT ARE THE REQUIRED WATER CHEMICAL LEVELS?

Test	Required level	Recommended level
Free Available Chlorine (FAC)	0.5 ppm minimum (unstabilized) 1.0 ppm (stabilized)	1.5 - 3.0 ppm
Combined Available Chlorine (CAC)		Not to exceed 0.5 ppm
Bromine	2.0 ppm minimum	
PH	7.2-7.8	7.4 and 7.6
Total Alkalinity	80 ppm minimum	80-120 ppm
Cyanuric Acid	60 ppm maximum	25-50 ppm

Record the above inspections/tests on a daily pool log. In addition, record any emergencies, rescues or breakdowns of equipment that may have occurred. Records must be kept for a minimum of one year and must be available for inspection by a Public Health Inspector.

Even though the following inspections do not need to be recorded, it is expected that they will be constantly monitored;

♦ Safety equipment

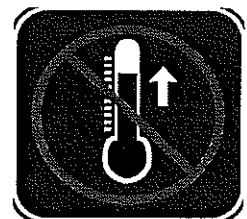
♦ Water clarity

♦ Circulation system

WHAT TYPE OF TEST KIT DO I NEED?

There are many types of test kits commercially available from a pool supply company. Some kits will measure FAC and pH and nothing else. This may be fine for a backyard pool, but for a public pool, a fully equipped test kit is recommended. It is mandatory that the kit contains the reagents to test for free available and combined chlorine levels, total alkalinity, cyanuric acid (for outdoor pools) and pH. If you use Bromine or have a special water treatment system, you can obtain the appropriate test kit from a dealer.

Any reagents left over from last summer will need to be replaced. Reagents lose their strength over time. Storing them in direct sunlight and in filter/equipment rooms where the conditions are warm and humid will ruin the reagents. Mixing various reagents from other kits won't provide accurate results either.



WHEN SHOULD A POOL BE CLOSED?

- The edges of the black disc are no longer clear
- Spine board, reaching pole, buoyant throwing aids missing
- Emergency phone not working
- Ground Fault Detector not working
- Insufficient quantity of free available chlorine in the water
- Insufficient number of lifeguards/lifeguard assistants or inadequate qualifications
- No disinfecting chemicals available on the premises
- Test kit not available or essential test chemicals missing
- Skimmer lids missing
- Pool fouling
- Circulation system not working
- Equalizer line has not been plugged (see appendix A)
- Main drain cover missing or not secured to the bottom of the pool

GENERAL MAINTENANCE

Every owner and every operator shall ensure that the pool, the deck and where provided, the dressing and locker rooms, toilets, showers and connecting corridors are:

- kept clean, free from slipperiness and disinfected
- free of hazardous obstructions
- ventilated so as to remove odours
- that no food or beverage except water is supplied or consumed in the pool or on the deck

All moveable equipment, including portable diving stands, starting platforms and swing ropes that are provided for the use of the bathers, that it be in place on the deck only during periods when aquatic personnel can directly supervise their use.



HOW DO I STORE & HANDLE CHEMICALS SAFELY?

1. Store pool chemicals in a cool, dry and well-ventilated space.
2. Keep corrosive materials such as metals and combustibles such as paper and rags away from other chemicals.
3. Keep all chemicals away from hot surfaces and flame.
4. Have personal protective equipment available (gloves, respirators, apron etc.)
5. Material safety data sheets to be made available to employees for every chemical in use.
6. Do not eat, drink or smoke in the chemical storage area.
7. Ensure the chemical storage room is inaccessible to unauthorized persons.
8. Handle chemicals with clean and dry scoops only. Each chemical should have its own scoop. Use scoops provided by the manufacturer.
9. Keep containers closed when chemicals are not in use.
10. Never re-use empty chlorine containers for storage of other chemicals and never mix contaminated chemicals with your fresh supply.
11. When mixing chemicals, add them slowly. **NEVER ADD WATER TO THE CHEMICALS, ALWAYS ADD THE CHEMICAL TO THE WATER.**

