

Recreational Water Protocol, 2016

Population and Public Health Division,
Ministry of Health and Long-Term Care

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Preamble

The Ontario Public Health Standards (OPHS) are published by the Minister of Health and Long-Term Care under the authority of the Health Protection and Promotion Act (HPPA) to specify the mandatory health programs and services provided by boards of health.^{1, 2} Protocols are program and topic specific documents which provide direction on how boards of health must operationalize specific requirement(s) identified within the OPHS. They are an important mechanism by which greater standardization is achieved in the province-wide implementation of public health programs.

Protocols identify the minimum expectations for public health programs and services. Boards of health have the authority to develop programs and services in excess of minimum requirements, where required, to address local needs. Boards of health are accountable for implementing the standards including those protocols that are incorporated into the standards.

Purpose

The purpose of this protocol is to assist in the prevention and reduction of water-borne illness and injury related to recreational water use by providing direction to boards of health on the delivery of local, comprehensive recreational water programs, which include, but are not limited to:

- Surveillance and inspection of recreational water facilities, public beaches and waterfronts that are part of a recreational camp;
- Investigation of, and response to, adverse events and complaints at recreational water facilities, public beaches and waterfronts that are part of a recreational camp, and communication strategies for the public and facility owner/operators;
- Promoting awareness of safe use and operation of recreational water facilities, public beaches and waterfronts that are part of a recreational camp, and training of owner/operators of pools and spas; and
- Reporting of Safe Water Program data elements to the Ministry of Health and Long-Term Care (the “ministry”) related to recreational water facilities, public beaches and waterfronts that are part of a recreational camp.

Legislation and regulations that are relevant to this protocol include:

- O. Reg. 565 (Public Pools) under the HPPA;^{2, 3}
- O. Reg. 428/05 (Public Spas) under the HPPA;^{2, 4}
- O. Reg. 568 (Recreational Camps) under HPPA;^{2, 5}
- R.S.O. 1990, Chapter H.7, s 1 (1), Health Protection and Promotion Act;² and
- Ontario Regulation 332/12 (Ontario Building Code), c.1, s.1.4.1.⁶

Definitions [†]

Throughout this protocol, the following definitions apply:

- a) **Regulated recreational water facilities** include public pools and public spas.
As defined in Section 1 of the HPPA, a public pool means a structure, basin, chamber or tank containing, or intended to contain, an artificial body of water for swimming, water sport, water recreation or entertainment, but does not include:²
 - i) one that is located on a private residential property, (e.g., backyard pool), under the control of the owner or occupant and that is limited to use for swimming or bathing by the owner or occupant, members of their family and their visitors; or
 - ii) one that is used solely for commercial display and demonstration purposes.
- b) **Non-regulated recreational water facilities** include public wading pools, splash pads/spray pads and water slide receiving basins.
- c) **Recreational camp waterfront** is a waterfront area that is used for aquatic activities as part of a Class A or Class B camp, as defined in section 1, O. Reg. 568 (Recreational Camps) under the HPPA.^{2, 5}
- d) **Public beaches** include any public bathing area owned/operated by a municipality to which the general public has access, and where there is reason to believe that there is recreational use of the water (e.g., beach signage, sectioned off swimming area, water safety/rescue equipment, lifeguard chairs, etc.), which may result in waterborne illness or injury as determined by the local medical officer of health.

This protocol replaces the *Recreational Water Protocol, 2008* and the *Beach Management Protocol, 2008*. Additional updated and technical details, formerly found in the *Beach Management Protocol, 2008*, can be found in the *Beach Management Guidance Document, 2014*.⁷

[†] Additional definitions may be found in the glossary for this Protocol as well as the Beach Management Guidance Document which provides further detail on beach sampling and surveillance.

Reference to the Standards

Table 1: identifies the standard and requirement to which this protocol relates.

Standard	Requirement
Safe Water	<p>Requirement #1: The board of health shall report Safe Water Program data elements in accordance with the <i>Drinking Water Protocol, 2008</i> (or as current); and the <i>Recreational Water Protocol, 2008</i> (or as current).</p> <p>Requirement #3: The board of health shall conduct surveillance of public beaches and public beach water illnesses of public health importance, their associated risk factors, and emerging trends in accordance with the <i>Recreational Water Protocol, 2008</i> (or as current).</p> <p>Requirement #5: The board of health shall conduct surveillance of recreational water facilities in accordance with the <i>Recreational Water Protocol, 2008</i> (or as current).</p> <p>Requirement #9: The board of health shall provide education and training for owner/operators of recreational water facilities in accordance with the <i>Recreational Water Protocol, 2008</i> (or as current).</p> <p>Requirement #10: The board of health shall ensure that the medical officer of health or designate is available on a 24/7 basis to receive reports of and respond to:</p> <ul style="list-style-type: none"> • Adverse events related to safe water, such as reports of adverse drinking water on drinking-water systems governed under the Health Protection and Promotion Act or the Safe Drinking Water Act; • Reports of water-borne illnesses or outbreaks; • Safe water issues arising from floods, fires, power outages, or other situations that may affect water safety; and • Safe water issues relating to recreational water use including public beaches in accordance with the Health Protection and Promotion Act; the <i>Drinking Water Protocol, 2008</i> (or as current); the <i>Infectious Diseases Protocol, 2008</i> (or as current); the <i>Public Health Emergency Preparedness Protocol, 2008</i> (or as current); and the <i>Recreational Water Protocol, 2008</i> (or as current). <p>Requirement #13: the board of health shall reduce risks of public beach use by implementing a beach management program in accordance with the <i>Recreational Water Protocol, 2008</i> (or as current).</p> <p>Requirement #14: The board of health shall reduce the risks of recreational water facility use by implementing a management program in accordance with the <i>Recreational Water Protocol, 2008</i> (or as current).</p>

Operational Roles and Responsibilities

1) Surveillance and inspection

Inventory of recreational water facilities, public beaches and recreational camp waterfronts

- a) The board of health shall maintain a current inventory or inventories, as follows, of all regulated and non-regulated recreational water facilities and recreational camp waterfront areas within the health unit, as defined by section 1 of the HPPA, and public beaches within the health unit, as defined in this protocol:²
 - i) Regulated recreational water facilities;
 - ii) Non-regulated recreational water facilities;
 - iii) Recreational camp waterfront areas;
 - iv) Public beaches;^{*}
 - v) Public beach areas within provincial parks.[†]

Assessment and inspection of recreational water facilities and public beaches

Regulated public pools and public spas

- b) The board of health shall:
 - i) Inspect regulated public pools and public spas prior to opening or reopening after construction, alteration, or closure of more than four weeks' duration to determine compliance with O. Reg. 565 and O. Reg. 428/05 respectively;^{3, 4}
 - ii) Inspect regulated public pools, (Class A and B), and public spas that are open year-round no less than once every three months while operating to determine compliance with O. Reg. 565 and O. Reg. 428/05 respectively;^{‡, 3, 4}
 - iii) Inspect seasonal regulated public pools, (Class A and B), and public spas that are open only part of the year at least two times per year;
 - iv) Inspect regulated public pools, (Class A and B), and public spas that are open for a short period of time (i.e., less than 4 weeks) at least once per year; and

^{*} The board of health is not responsible for routine monitoring of private residential beaches.

[†] Public beach areas within provincial parks are monitored and managed by the Ministry of Natural Resources in consultation with the board of health.

[‡] Once every three months is defined as one inspection occurring within each three month period of the calendar year, based on fixed dates (January 1 – March 31; April 1 – June 30; July 1 – September 30; October 1 – December 31).

- v) Conduct additional inspections of regulated public pools and public spas as necessary to address non-compliance with O. Reg. 565 and O. Reg. 428/05 respectively, observed during previous inspection(s); to investigate complaints and/or reports of illness, injury or death; and/or to monitor the safety of the facilities.^{3, 4}

Inspections of regulated public pools and public spas carried out by boards of health shall include but are not limited to:

- Observations to determine compliance with O. Reg. 565 and O. Reg. 428/05 respectively, including the review of test logs and response procedures,^{3, 4}
- Testing water quality parameters and collection of water samples, as deemed necessary; and
- Communication of inspection results and, if applicable, requirements to the owner or operator of the regulated public pool or public spa.

Non-regulated recreational water facilities

c) The board of health shall:

- i) Inspect public wading pools; splash pads/spray pads and other non-regulated recreational water facilities (e.g., water slide receiving basins) at least once per year while operating to monitor the safety of these facilities. The board of health shall conduct these inspections in accordance with the most current version of the *Operating Procedures for Non-Regulated Recreational Water Facilities Guidance Document*,⁸ and
- ii) Conduct additional inspections of non-regulated recreational water facilities as necessary to follow up on observations from previous inspection(s) to investigate complaints and/or reports of illness, injury or death; and/or to monitor the safety of the facilities.

Inspections of non-regulated recreational water facilities carried out by boards of health shall include but are not limited to:

- Observations to determine facility and water safety;
- Testing water quality parameters and collection of water samples, as applicable and as deemed necessary; and
- Communication of inspection results and, if applicable, recommendations to the owner or operator of the non-regulated recreational water facility.

Public beaches

d) In accordance with the *Beach Management Guidance Document, 2014*, the board of health shall:

- i) Conduct an assessment of all public beaches annually, including an environmental survey and review of historical and epidemiological data, to:
 - Confirm the inventory of beaches that require monitoring as per this protocol;

- Determine the suitability of the site for public recreational use supported by a water sampling program and appropriate level of surveillance, in collaboration with the owner/operator;
 - Analyze previous years' data on public bathing area water conditions and bacterial quality, and where appropriate, use other surveillance tools to assist in identifying predictive influences on water quality (e.g., predictive modeling);
 - Identify possible contaminant sources and where appropriate, collaborate with local stakeholders, municipalities and other surrounding landowners, to reduce or eliminate any potential impact on the safety of the water for public recreational use;
- ii) Conduct routine beach surveillance of all public beaches, including inspection of public beaches after operations commence at least once a week during the period of operation or use, to adequately monitor the safety of public bathing areas and establish strategies for management of health hazards;
 - iii) Provide ongoing communication of test results and recommended actions to public beach owners or operators; and
 - iv) Communicate to the public, information on the status of public beaches including, but not limited to, beach postings and promotion of strategies to prevent illness and injury.

2) Management and response

24/7 on-call and response policy

- a) The board of health shall have an on-call system for receiving and responding to reports of water-related emergencies, reports of injury, illness or death, outbreaks and incidents in the health unit on a 24 hours per day, 7 days per week (24/7) basis related to recreational water use.
- b) The board of health shall act on reports related to recreational water use at non-regulated and regulated recreational water facilities and public beaches/recreational camp waterfront areas, within 24 hours of notification of the report to determine the appropriate response required.
- c) Where the board of health suspects that a microbiological, chemical, physical or radiological agent has been transmitted through water intended for recreational water use, the board of health shall respond within 24 hours of receiving report of the water-related incident, illness, injury or outbreak.

Enforcement actions and procedures

- a) The board of health shall establish policies and procedures to address non-compliance with the HPPA and applicable regulations and take action with

respect to recreational water use at recreational water facilities and public beaches/recreational camp waterfront areas, where a health hazard exists or may exist during recreational water use.²

The policies and procedures shall include but are not limited to:

- Interagency collaboration, where appropriate;
- Consideration of existing, repeat and multiple infractions of regulation; and
- Enforcement actions under the HPPA.²

Liaison with owners, operators

- a) The board of health shall, upon being notified or becoming aware of new public pools, spas and where possible, non-regulated recreational water facilities, liaise with the owners/operators, to make them aware of the regulatory requirements and/or operational best practices.
- b) The board of health shall, upon being notified or becoming aware of a new public beach, liaise with the owners/operators, to make them aware of operational best practices.
- c) The board of health shall, upon being notified or becoming aware of a new recreational camp with a waterfront area to be used for aquatic activities, liaise with the owners/ operators, or their agents to make them aware of the regulatory requirements and/or operational best practices.

3) Promoting public awareness and education of operators

Community awareness and owner/operator education

- a) The board of health shall ensure the availability of information and/or educational material to private citizens regarding the safe use of recreational water facilities referred to in this protocol.
- b) The board of health shall ensure the availability of:
 - i) Information and/or educational material to owners and operators, through the inspection process and at other available opportunities, regarding applicable regulations and operational procedures relevant to recreational water facilities, public beaches and recreational camp waterfronts; and
 - ii) Training material and shall promote recreational water facility training to owners and operators of regulated pools and spas. Components of a recreational water facility training program may include, but are not limited to:
 - Public health legislation and regulations, as applicable;

- Prevention of illness, injury or death;
- Pool water chemistry;
- Sanitary operation of other amenities in the facility;
- Provision of safety equipment;
- Emergency procedures;
- Safety supervision; and
- Record keeping.

4) Reporting

Inspection activity reports

- a) The board of health shall record inspection data pertaining to recreational water facilities, public beaches and waterfront areas that are part of recreational camps under its jurisdiction, and provide information, as required by the ministry.

Recreational water and beach safety activity reports

- b) The board of health shall provide recreational water and beach safety activity reports to the ministry, on February 1, for the prior calendar year (January 1 to December 31), as identified by the ministry, that may include a minimum of data as follows:
 - i) Total number of:
 - Class A public pools;
 - Class B public pools;
 - Public spas; and
 - Non-regulated recreational water facilities;
 - ii) For each type of recreational water facility listed above, report total number of:
 - Routine inspections;
 - Re-inspections;
 - Complaints;
 - Ordered closures; and
 - Summons issued (summarized by type of violation);
 - iii) Total number of public beaches;
 - iv) For each public beach, report percentage of days the beach was posted;[§] and

[§] To calculate the percentage of days a beach is posted, divide the number of days the beach was posted by the number of days it could have been open to the public in that season. For example, Beach A was open from May 5 - September 7, 2014. This beach was posted 5/27 days in May, 3.5/30 days in June, 9/31 days in July, 4.5/31 days in August, and 0/7 days in September. Total number of days posted = $5+3.5+9+4.5+0 = 22$; Total number of days open = $27+30+31+31+7 = 126$

- v) Total number of:
- Class A and Class B recreational camps with a waterfront area used for Aquatic Activities.

Refer to the *Risk Assessment and Inspection of Facilities Protocol, 2008* (or as current) for water safety activity reporting requirements for recreational camps with a waterfront area used for aquatic activities.⁹

Recreational water facility disclosure and notification of beach posting information

- c) The board of health shall establish and implement a procedure for public disclosure of results of inspections of recreational water facilities, public beaches, and waterfront areas that are part of a recreational camp. At a minimum, the procedure must ensure public access to inspection results upon request. Reference to the process by which the public may obtain such information shall be posted on the board of health's website.

Glossary

Environmental survey: An inspection of the physical beach area to identify changes to existing structures, installation of new structures (e.g., drainage lines, storm water outfalls, signs, etc.), changes in beach landscape that affect runoff, potential pollution sources, garbage or debris collection, and any other environmental factor that has the potential to impact water quality, water safety, and/or public health.

Public wading pool: A wading pool other than a private residential wading pool or a wading pool for display or promotional purposes only.

Recreational water facilities: These include, for the purposes of this protocol, those facilities that are regulated under the HPPA (i.e., public pools and public spas), as well as non-regulated facilities that provide public access to water for recreational use, including public wading pools, splash pads/spray pads, and water slide receiving basins.²

Seasonal regulated public pools and public spas: These facilities are typically located outdoors and are open only part of the year, usually during the summer months.

Wading pool: Any structure, basin, chamber, or tank containing or intended to contain an artificial body of water having a depth of water equal to 75 centimetres (30 inches) or less at any point that is provided for the recreational or instructive use of young children.⁵

Beach A was posted 22 of 126 days (22/126); therefore Beach A was posted 17.46% of the bathing season.

References

1. Ontario. Ministry of Health and Long-Term Care. Ontario Public Health Standards. Toronto, ON: Queen's Printer for Ontario; 2008 [revised May 2016]. Available from:
http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/default.aspx?/index.html
2. *Health Protection and Promotion Act*, R.S.O. 1990, c. H.7. Available from:
http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90h07_e.htm.
3. *Public Pools*, R.R.O. 1990, Reg. 565. Available from:
http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_900565_e.htm
4. *Public Spas*, O. Reg. 428/05. Available from:
http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_050428_e.htm
5. *Recreational Camps*, R.R.O. 1990, Reg. 568. Available from:
http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_900568_e.htm
6. *Building Code*, O. Reg. 332/12, s.1.4.1. Available from:
http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_120332_e.htm
7. Ontario. Ministry of Health and Long-Term Care. Beach Management Guidance Document, 2014. Toronto, ON: Queen's Printer for Ontario; 2014. Available from:
http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/guidance.aspx
8. Ontario. Ministry of Health and Long-Term Care. Operating procedures for non-regulated water facilities guidance document, 2010. Toronto, ON: Queen's Printer for Ontario; 2010. Available from:
http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/guidance.aspx
9. Ontario. Ministry of Health and Long-Term Care. Risk Assessment and Inspection of Facilities Protocol, 2016. Toronto, ON: Queen's Printer for Ontario; 2016. Available from:
http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/ophsprprotocols.aspx

Resources

The following resources provide supplementary information and guidance regarding issues related to recreational water quality. This is not an exhaustive list and the documents listed below are subject to change.

Health Canada. Guidelines for Canadian recreational water quality. 3rd ed. Ottawa, ON: Her Majesty the Queen in Right of Canada, represented by the Minister of Health; 2012 (or as current). Available from: <http://healthycanadians.gc.ca/publications/healthy-living-vie-saine/water-recreational-recreative-eau/index-eng.php>

Ontario. Ministry of Health and Long-Term Care. The feasibility of predictive modeling for beach management in Ontario, 2013. Toronto, ON: Queen's Printer for Ontario; 2013.

Ontario. Ministry of the Environment. Technical bulletin: Is your beach a candidate for predictive modeling? Toronto, ON: Queen's Printer for Ontario; 2012.

Ontario. Ministry of Health and Long-Term Care; Ontario Ministry of Natural Resources Memorandum of Understanding. Protocol for reporting adverse water quality – Provincial Parks, 2004. Toronto, ON: Queen's Printer for Ontario; 2004.

