The purpose of recreational water sampling is to provide water quality information to the public at priority recreational water sites. Due to laboratory availability, the 2020 recreational water monitoring program has been reduced to Cyanobacteria monitoring only. Enterococcus sampling will resume in 2021. Priority Cyanobacteria sites may begin sampling July 2020.

Changes to the Recreational Water Monitoring program for the 2020 season:

1. The recreational water monitoring program will follow the Alberta Safe Beach Protocol.
3. Only Cyanobacteria will be monitored to assess water quality. Enterococcus will not be monitored due to reduced laboratory availability.
4. Only priority beaches that have been selected for sampling may submit recreational water samples. Criteria for priority beaches included:
   a) Beaches with high usage over the season, and
   b) Beaches with a history of poor water quality.
   Note: Samples from non-priority beaches will be rejected by the lab and will not be tested.

Before the start of the open water season, operators of priority beaches will receive an email from AHS asking them to submit weekly samples for Enterococcus and/or cyanobacteria (blue-green algae). This letter will include any site-specific requests including grab vs composite sampling and other important information. Please confirm with your public health inspector whether you are planning to participate in the 2020 sampling program and how many weeks you will be sampling.

All beach operators should continue to watch for signs of cyanobacterial (blue-green algal) blooms and report the presence of blooms to AHS, even if the site is not sampling for cyanobacteria. A Blue-Green Algae Reference Guide that includes pictures of blooms can be found in the “Frequently Asked Questions” document at www.ahs.ca/bga.

Monitoring Activities at Beaches:

Public health inspectors will work with beach operators at each priority site to:
1. Outline the types of samples requested for that site
2. Provide support on how to complete the monitoring activities
3. Distribute sampling supplies provided by AHS

A summary of routine monitoring activities is outlined in Table 1 below.
**Table 1: Summary of Monitoring Activities**

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enterococcus Sampling</strong></td>
<td><strong>Collection of either 3 grab samples or 1 composite sample (made up from 3 sites) along the length of the beach most often used by bathers. The distance between the samples varies with the length of the beach. If the beach is more than 100 meters long, consult your local public health inspector as additional sample sites may be needed.</strong></td>
</tr>
<tr>
<td><strong>Cyanobacteria Sampling</strong></td>
<td><strong>Collection of 1 composite sample (made up from 10 water samples) along the length of the beach that are mixed together.</strong></td>
</tr>
<tr>
<td><strong>Photographs (cyanobacteria sampling only)</strong></td>
<td><strong>Photographs of the recreational site capture a visual record of the lake water at the time of sample collection.</strong></td>
</tr>
<tr>
<td><strong>Visual Check</strong></td>
<td><strong>All sites should be checked for signs of a cyanobacterial bloom. If you suspect a bloom is present, take photographs and contact your local public health inspector.</strong></td>
</tr>
<tr>
<td><strong>Administrative</strong></td>
<td><strong>Complete the requisition form(s) while at the beach or prior to submitting samples.</strong></td>
</tr>
</tbody>
</table>

Additional sampling information and shipping processes are available in these resources posted under the Beaches dropdown at www.ahs.ca/ephbusiness:
- How to Collect a Grab *Enterococcus* Water Sample
- How to Collect a Composite *Enterococcus* Water Sample
- How to Collect Cyanobacteria Water Samples

**Communication of Sample Results:**

A public health inspector will share sample results with the beach operator regularly. *Enterococcus* sample results are available about 2-3 days after collection. Cyanobacteria sample results are available about 1-3 weeks after collection.

**Issuing Water Quality Advisories:**

The public health inspector will contact the beach operator as soon as possible if sample results do not meet Alberta recreational water quality standards.
To determine the need for an advisory, the public health inspector will consider:

- sample results
- photographs or site observations
- local conditions during sampling
- complaints or reports of cyanobacterial blooms

If a water quality advisory is needed, the local public health inspector will notify the beach operator and any user groups affected (e.g. local municipalities, summer camps, campgrounds). Advisory signs will be posted at the beach or water body by either the public health inspector or the operator, and the advisory messaging will be posted on the Active Health Advisories section of the AHS website.

Advisories due to high *Enterococcus* levels are localized to a single site (beach) and will remain in place until acceptable sample results are received and the public health inspector approves removal of the health advisory signs.

Advisories for Cyanobacteria remain in place until late autumn (typically November) as blooms can disappear and reappear throughout the warmer summer months. Cyanobacteria advisories are issued for an entire water body as weather and wind conditions can cause Cyanobacteria blooms to move rapidly from one location in a lake to another.

**Reporting an Adverse Event:**

Any contamination event or recreational water quality issues should be reported to AHS by contacting your local public health inspector or calling Health Link at 8-1-1. Examples include:

- Municipal sewage system discharging near a beach
- Chemical release near a beach
- **Cyanobacterial** (blue-green algae) bloom
- Reports of illness related to beach use

For more information, please contact your nearest Environmental Public Health office.

Edmonton Main Office: 780-735-1800
Calgary Main Office: 403-943-2288
Lethbridge Main Office: 403-388-6689
Grande Prairie Main Office: 780-513-7517
Red Deer Main Office: 403-356-6366

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