

Volunteer Mercury in Fish Collection Procedure

Purpose:

The purpose of this program is to measure the concentration of mercury in fish from lakes and rivers throughout New Hampshire to determine the need for changes to the state's fish consumption advisory, to compare values between lakes, to evaluate trends in fish-mercury concentrations and to better characterize mercury concentrations in a variety of fish species.

Species of interest:

1. *Largemouth bass, Smallmouth bass or Eastern chain pickerel*

NH's fish consumption advisory advises that the consumption of the above three species of fish from any waterbody should be limited to fish 12 inches or less in length. To determine if a more restrictive waterbody-specific advisory is needed, 10 fish of one of the above three species is required. The fish should be of assorted sizes around the 10 to 14 inch size with none less than 6 inches and none greater than 20 inches.

2. *Yellow perch*

Yellow perch are found in most waterbodies and are frequently used to compare mercury concentrations between waterbodies. In order to compare an average value between lakes, at least 5 and up to 10 yellow perch in the 6 to 10 inch size range should be collected. If five fish are collected from a pond every five years, mercury trends in that pond can be evaluated.

3. *White perch and Black crappie*

These two species are popular eating fish and tend to have somewhat elevated mercury concentrations. Up to 5 fish of either or both species of various sizes can be collected.

4. *Other species consumed*

One to two fish per waterbody of other species consumed by the public can be collected and submitted for analysis.

Fish collection priorities:

Up to 15 fish per waterbody will be accepted in a given year. The preference is in the order listed above and in the size ranges listed: 5 to 10 of either largemouth bass, smallmouth bass or pickerel; 5 to 10 yellow perch; and up to 5 white perch or black crappie.

Collection procedures:

1. Fish should be collected according to the laws and regulations listed in the NH Freshwater Fishing Digest, published by the Fish and Game Department. A valid NH fishing license is required.
2. Place each fish in a separate plastic zip-lock freezer bag or wrap in aluminum foil. Avoid contact of the fish with unclean or painted surfaces.
3. Complete a Mercury Fish Form for each fish and include in the bag. The form available on the web at <http://des.nh.gov/organization/divisions/water/wmb/vlap/mercury/sampling.htm>. If you don't have access to the form, include a label listing:
 - Waterbody name and town
 - Date of collection
 - Common name of fish
 - Name of collector
 - Fish length (optional)
4. Place fish on ice in a clean ice chest.
5. Fish should be submitted within 24 hours of collection if not frozen, or can be placed in a freezer within 24 hours of collection (preferably sooner) and submitted frozen within 14 days of collection.
6. Fish should be submitted for processing to the Limnology Center of the Department of Environmental Services at 29 Hazen Drive in Concord.
7. The Limnology Center should be notified 24 hours prior to submitting the fish. Please call 271-3414 or 271-2963.

Contacts:

For information on existing fish mercury data from specific NH waterbodies, contact Walter Henderson at 271-8802. For questions about species to collect or about the program in general, contact Walter Henderson at 271-8802 or email: walter.henderson@des.nh.gov. For information about the state fish consumption advisory, contact the Environmental Health Program at 271-1370 or email: sherry.godlewski@des.nh.gov