Mercury in Fish Survey

In 2007, DEQ began a survey to identify lakes in Oklahoma with fish that have elevated levels of mercury. The survey was conducted with two goals. A baseline survey of mercury in fish values was needed prior to the implementation of rules regulating the emission of mercury from coal-fired utilities and industry. Additionally, mercury levels were evaluated to determine if safe consumption levels were exceeded and if advisories were needed.

DEQ worked in cooperation with the Oklahoma Department of Wildlife Conservation to conduct the survey in two stages. In the initial screening stage, largemouth bass were sampled from 50 lakes across the state. Seventeen lakes where 14 inch largemouth bass exceeded a screening level of 0.5 mg/kg were identified. These lakes were resampled with a goal of collecting representative samples of all gamefish species available. Length vs. concentration was graphed for each species at each lake. These graphs were used to determine if advisories were needed, the size ranges included in advisories, and whether limited or no consumption would be recommended. The survey resulted in advisories being issued for 16 lakes in July 2010. In addition, 23 lakes were identified as having low mercury levels in fish.

DEQ intends to collect resamples from 11 additional lakes included in the original survey that had moderate levels of mercury in the fish. In addition, other vulnerable lakes not included in the original survey will be screened for mercury as funding allows.

A complete listing of all the advisories including those lakes testing low can be found here:
Mercury in Fish Advisory booklet
The advisory threshold levels for mercury that DEQ uses to issue consumption advice are found here:
Mercury Consumption Advisory Levels
The complete data set collected in the mercury survey is here:
All Data
For more information about the survey or advisories, please contact: Pam Baldwin at (405) 702 – 1022 or Jay Wright at (405) 702 – 1017.

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