



EPA Releases Third and Fourth Years of Data from the National Study of Chemical Residues in Lake Fish Tissue

EPA is releasing the third and fourth years of data from the National Study of Chemical Residues in Lake Fish Tissue, a four-year national survey of freshwater fish contamination in lakes and reservoirs in the lower 48 states. EPA worked with 47 states, three tribes, and two other federal agencies to collect fish from 500 lakes and reservoirs selected randomly from the estimated 147,000 target lakes and reservoirs in the 48 states. EPA completed chemical analysis of all fish samples in May 2005. The Agency will conduct a statistical analysis of the four-year data set by January 2006 and produce a final report in 2006.

Background

The U.S. Environmental Protection Agency is conducting the largest national freshwater fish contamination survey undertaken by a federal agency, the National Study of Chemical Residues in Lake Fish Tissue. Two features make this study unique. It includes the largest set of chemicals ever studied in lake fish, and it is the first national fish contamination survey to have sampling sites selected according to a statistical design. This statistical design will allow EPA to estimate the percentage of lakes and reservoirs in the lower 48 states with fish tissue concentrations above levels of potential concern for human or ecosystem health. The study will also provide the first national estimates of mean concentrations of 268 persistent, bioaccumulative, and toxic (PBT) chemicals in lake fish and define a national baseline for tracking reductions of PBT chemicals in freshwater fish as a result of pollution control activities.

EPA worked with 47 states, three tribes, and two other federal agencies for four years (2000-2003) to collect fish from 500 lakes and reservoirs selected randomly from the estimated 147,000 target lakes and reservoirs in the lower 48 states. These lakes and reservoirs are divided into six size categories, ranging from 2.5 to over 900,000 surface acres. Sampling teams used consistent methods nationwide to collect samples of a predator fish species (e.g., bass or trout) and a bottom-dwelling species (e.g., catfish or carp) from each lake or reservoir. EPA analyzed fillets for the predator samples and whole bodies for the bottom dweller samples for the chemicals listed below.

500 Sampling Locations

Target Chemicals

EPA analyzed the fish tissue for:

- 2 Metals (Mercury and Arsenic)
- 17 Dioxins and Furans
- 159 PCB congener measurements
- 46 Pesticides
- 40 Other Semivolatile Organics



Interim Data Releases

EPA is making interim data available each year before the end of the National Lake Fish Tissue Study. This data release includes results from the third and fourth years of the study. These results are quality-assured raw data from collection and analysis of fish samples from the 113 lakes and reservoirs sampled in 2002 and the 133 lakes and reservoirs sampled in 2003. Quality-assured results are also available from the 254 lakes sampled during the first and second years of the study (2000 and 2001). You can obtain CDs containing the first through fourth years of data by contacting EPA's National Lake Fish Tissue Study Manager using the contact information provided below.

Future Actions

EPA completed chemical analysis of the fish samples in May 2005. The Agency will conduct a statistical analysis of the cumulative four-year data set by January 2006 and produce a final report in 2006.

For More Information

For more information on the National Lake Fish Tissue Study, please contact Leanne Stahl, EPA's National Lake Fish Tissue Study Manager, by e-mail at stahl.leanne@epa.gov or by phone at 202-566-0404. You can find additional information about the fish study online at www.epa.gov/waterscience/fishstudy/.