

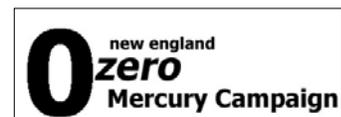
Fair Warning

Why Grocery Stores Should Tell Parents About Mercury in Fish

Summer 2005
National Fish Testing Project



**Mercury
Policy Project**



Background

Nationwide pollution from power plants, waste disposal and incinerators, chlorine plants and other sources have contaminated the fish we eat with mercury. Mercury is a dangerous neurotoxin that has been linked to learning disabilities and developmental delays in children and can damage the heart, nervous system, or kidneys of adults.

Fish can be a good, healthy food source. Fish is protein rich, low in fat and can even protect against heart disease. **Unfortunately, this otherwise healthy food has been contaminated by mercury pollution and many species can be unsafe to eat.** Forty-five states have issued advisories warning sensitive populations about the dangers of eating mercury-contaminated fish. The U.S. Environmental Protection Agency (EPA) and the Food and Drug Administration (FDA) issued a joint advisory in 2004 warning pregnant women, women of childbearing age, and young children to avoid shark, swordfish, king mackerel, and tilefish and to limit consumption of all other fish, especially albacore tuna and fresh tuna.

There are two federal standards for mercury levels in fish. **The FDA has set an “action level” of 1 ppm (part per million) mercury in fish.** The FDA can require that fish found to be higher in mercury be removed from the market, though this rarely occurs. The EPA gauges mercury levels in a different way. The EPA has set a “reference dose” as a recommended limit to how much mercury a person should consume based on the person’s body weight. **The EPA’s reference dose is 0.1 micrograms of mercury per kilogram of body weight per day.**

Based on national data on mercury levels, EPA has estimated that one in six women of childbearing age in the United States is at risk of having newborns with neurological problems from mercury exposure in the womb. This translates to 630,000 children being born each year at risk for problems from exposure to

mercury. **Much of this mercury exposure could be prevented if sensitive populations avoided the consumption of certain species of fish.**

However, many people do not know about these advisories. FDA scientists estimate that between 30% and 50% of women of childbearing age are not aware of the exposure risks of mercury from consumption of fish. **Consumers who haven’t seen these warnings may be unknowingly endangering themselves or their children with their fish choices.**

In 2004, the American Medical Association passed a resolution encouraging the FDA to require the posting of point of sale warnings wherever fish is sold. The resolution states, “Given the limitations of national consumer fish consumption advisories, the Food and Drug Administration should consider the advisability of requiring that fish consumption advisories and results related to mercury testing be posted where fish, including canned tuna, are sold.”¹

The FDA has neglected to do significant testing for mercury levels in fish. **Information obtained from the FDA reveals a seafood mercury monitoring program severely lacking in thoroughness, depth and degree, and a disturbing trend to conduct less and less testing and to altogether cease monitoring for certain species.**

The scant, but existing, FDA data show that significant quantities of seafood exceeding the agency’s action level are sold. The FDA’s data indicates that 36% of the swordfish, 33% of shark and nearly 4% of the large tuna they have sampled exceeded FDA’s 1 ppm action level. Other species acknowledged by FDA to pose a safety hazard because of high mercury levels also have

¹ Action of the American Medical Association House of Delegates 2004 annual meeting:
http://www.mercurypolicy.org/new/documents/a04CSAReportonMercury052404_AMA.pdf

extremely limited or no testing for various years, and include bonito, bluefin tuna, spanish mackerel, king mackerel, halibut and marlin.

The FDA has also gone so far as to block state efforts to educate the public.

California grocery stores are required to post warnings about mercury in fish thanks to Attorney General Bill Lockyer's enforcement of the state's law. Proposition 65 requires businesses

selling products containing chemicals that could cause cancer or reproductive harm to warn consumers about that danger. However, in August 2005, the FDA sent a letter to Attorney General Lockyer claiming that the Federal Food Drug and Cosmetic Act preempts state warnings for canned tuna. In a late August response, the Attorney General's office asserted that the federal government has no authority to prevent California, or any state, from requiring warnings.

Policy Recommendations

Mercury exposure from fish consumption is a preventable health threat. We recommend the following actions to protect public health:

1. State and federal governments should require warnings to be posted where fish covered by government advisories is sold.

State health agencies and the FDA should develop and implement more effective programs to educate the public about mercury in fish. This should include requiring stores and restaurants that sell fish covered by the FDA/EPA advisory to post warning signs.

2. In the absence of federal and state requirements, grocery stores should post signs to communicate mercury advisories.

All stores selling fish subject to the FDA/EPA mercury advisory should post signs advising women of childbearing age and children about government recommendations not to eat, or to limit consumption of those fish.

3. The FDA should regularly test commercial fish for mercury content.

The FDA should establish a comprehensive methylmercury monitoring program for seafood, such as swordfish and tuna, that are either known to have high mercury levels or are consumed on a regular basis by American families.

4. The FDA should not interfere with states' efforts to educate citizens.

The FDA should immediately discontinue its attempt to undermine the California Attorney General's efforts to protect families from unnecessary mercury exposure. This is a blatant misuse of federal authority. California Attorney General Bill Lockyer should continue to enforce the state's right-to-know law, requiring stores to post warning signs for mercury contaminated fish. Other states should follow California's lead.

Swordfish Testing Results

Location	Mercury (ppm)	Store
Portland, Maine	2.328	Shaw's
Providence, Rhode Island	2.143	Whole Foods
St. Paul, Minnesota	1.633	Whole Foods
Anne Arundel County, Maryland	1.515	Whole Foods
Ann Arbor, Michigan	1.455	Kroger
Madison, Wisconsin	1.438	Whole Foods
Austin, Texas	1.269	Whole Foods
Greenville, North Carolina	1.216	Kroger
Philadelphia, Pennsylvania	1.189	Genuardi's
Fairfield, Connecticut	1.142	Shaw's
Montpelier, Vermont	1.132	Shaw's
Missoula, Montana	1.046	Albertsons
New Orleans, Louisiana	0.940	Sav-a-Center
Boston, Massachusetts	0.920	Shaw's
Anchorage, Alaska	0.903	Carrs
Chicago, Illinois	0.887	Dominick's
Portsmouth, New Hampshire	0.886	Shaw's
Washington, DC	0.825	Whole Foods
Boise, Idaho	0.788	Albertsons
San Francisco Bay Area, California	0.781	Safeway
Anchorage, Alaska	0.668	Carrs
Tallahassee, Florida	0.653	Albertsons
Anchorage, Alaska	0.503	Carrs
Portland, Oregon	0.414	Safeway
Average Mercury Levels in Swordfish*	1.111 ppm	

* The swordfish samples tested averaged mercury levels higher than the FDA Action Level of 1.0 ppm.

Tuna Testing Results

Location	Mercury (ppm)	Store
Portland, Maine	0.684	Shaw's
Washington, District of Columbia	0.603 ^c	Whole Foods
Anne Arundel County, Maryland	0.591	Whole Foods
Missoula, Montana	0.515 ^d	Albertsons
Fairfield, Connecticut	0.463 ^b	Shaw's
New Orleans, Louisiana	0.455	Sav-a-Center
Portsmouth, New Hampshire	0.455	Shaw's
New Orleans, Louisiana	0.443	Winn-Dixie
Fairfield, Connecticut	0.421 ^b	Shaw's
New Orleans, Louisiana	0.403 ^b	Whole Foods
Chicago, Illinois	0.399	Dominick's
Anne Arundel County, Maryland	0.399	Whole Foods
Boston, Massachusetts	0.392	Shaw's
Philadelphia, Pennsylvania	0.385 ^a	Trader Joe's
Austin, Texas	0.340 ^c	Whole Foods
Providence, Rhode Island	0.315	Whole Foods
New Orleans, Louisiana	0.305	Whole Foods
Tallahassee, Florida	0.287	Albertsons
New Orleans, Louisiana	0.282 ^b	Whole Foods
New Orleans, Louisiana	0.264	Whole Foods
Ann Arbor, Michigan	0.262 ^c	Kroger
Philadelphia, Pennsylvania	0.243 ^c	Genuardi's
San Francisco Bay Area, California	0.232 ^d	Safeway
Greenville, North Carolina	0.204 ^c	Kroger
Boise, Idaho	0.194 ^d	Albertsons
Portland, Oregon	0.181	Trader Joe's
Fairfield, Connecticut	0.153	Shaw's
Greenville, North Carolina	0.151 ^c	Kroger
Montpelier, Vermont	0.119	Shaw's
St. Paul, Minnesota	0.116	Whole Foods
Madison, Wisconsin	0.088	Whole Foods
Average Mercury Levels in Tuna**	0.332 ppm	

*Species unknown unless noted a: albacore; b: sushi; c: Yellowfin; d: Ahi;

**The 2004 FDA/EPA advisory suggests limiting consumption of tuna steaks to 4 meals a month.

Summary of Key Findings from Fish Testing Project

- Fish were collected from stores in 22 locations including: Alaska, California, Connecticut, Washington DC, Florida, Idaho, Illinois, Louisiana, Massachusetts, Maryland, Maine, Michigan, Minnesota, Montana, North Carolina, New Hampshire, Oregon, Pennsylvania, Rhode Island, Texas, Vermont and Wisconsin.
- Fifty-five swordfish and tuna samples were tested for mercury content at the University of North Carolina Environmental Quality Institute laboratory between the dates of July 7, 2005 and August 11, 2005.
- The average mercury concentration for the swordfish samples was 1.11 ppm. The samples ranged from 0.41 ppm to 2.33 ppm. The average exceeds the FDA action level of 1 ppm. Additionally, 50% of the swordfish samples collected exceeded the FDA action level.
- This project analyzed and reported on mercury levels in 24 swordfish samples. This is 6 times more swordfish samples than FDA has released mercury data for in the past 5 years.²
- The mercury concentration in 31 samples of fresh or frozen tuna ranged from 0.09-0.68 ppm and averaged 0.33 ppm.
- The average mercury level for these fresh tuna samples is comparable to the levels found in canned albacore tuna. The 2004 FDA/EPA advisory specifically warns that women of childbearing age and children should limit consumption of canned albacore tuna.
- These fresh tuna data underscore an important, but underemphasized point in the 2004 FDA/EPA advisory, which advises limiting consumption of tuna steaks to 4 meals a month. This information is buried in the Q&A section on the second page of the EPA/FDA warning.
- The FDA has released mercury data for only 4 samples of fresh or frozen tuna since 1997. This project has analyzed and released data for nearly 8 times more fresh tuna samples than FDA has in the past 8 years.
- Similar monitoring of fifty New Jersey store-bought fresh tuna steaks in 2003 revealed mercury levels in fresh tuna ranging from 0.08-2.5 ppm and averaging 0.6 ppm.³ Together these two studies emphasize that more systematic government monitoring is warranted and necessary.
- A 44 pound child consuming 6 ounces of tuna a week at this mercury concentration would be exposed to 4 times the EPA reference dose for mercury.
- A 120 pound woman consuming 6 ounces of tuna a week at this mercury concentration would be exposed to one and one half times the EPA reference dose

² According to most recently publicly available data. FDA, Mercury in Fish: FDA Monitoring Program (1990-2003). Available at: <http://www.cfsan.fda.gov/~frf/seamehg2.html>

³ Burger, J., A.H. Stern and M. Gochfeld. 2005. Mercury in Commercial Fish: Optimizing Choices to Reduce Risk. Environmental Health Perspectives 113(3):1-6.