# **WHAT'S IN YOUR FISH, OKLAHOMA?**

# A study of mercury in Grand Lake and Lake Hudson fish



#### Why eat local fish?

Fish are healthy, low-fat, and full of protein and nutrients. The American Heart Association recommends eating fish at least twice a week. Plus, fishing is fun and a great way to connect with the environment and your neighbors!



#### There's WHAT in my fish?

But, fish also can have pollutants like mercury and PCBs. Federal and state agencies have come up with guidelines so that people can avoid harmful pollutants and still enjoy the benefits of fish.



#### What's the Grand Lake Watershed Mercury Study all about?

We tested over 1,100 fish from the Grand Lake watershed and Lake Hudson, including over 25 species of fish. Lots of people eat fish from these lakes, and there are nearby and distant coal-fired power plants that can be sources of mercury. We wanted to know if fish in these lakes are high in mercury.



#### Good news...

Around 97% of the fish we tested from the Grand Lake watershed and Lake Hudson had mercury levels below the US EPA's guideline for women of childbearing age and children who eat fish 2 to 3 times a *month*.

And 80% of the fish we tested were below the guideline for women of childbearing age and children who eat fish 2 to 3 times a *week*.



#### ... but a few fish had high mercury.

Around 3% of the fish we tested were above EPA's guideline. These included flathead catfish, largemouth bass, blue catfish, and drum. In general, longer fish and fish higher on the food chain tended to have higher levels of mercury.



#### Learn more!

Turn this sheet over to learn more about our study findings. You can also visit our website, which includes local and national fish consumption guidelines, at:

www.grandlakemercurystudy.org

This study was conducted by Harvard School of Public Health, LEAD Agency and OU Health Sciences Center. Funded by the National Institute of Environmental Health Sciences, grant number 1R21ES017941.

Version date: 5-20-13

## **Mercury levels in Grand Lake watershed fish**

	Average amount of mercury in one 8-ounce serving (in micrograms)	How often can women of childbearing age and children eat 8-ounce servings of this fish and stay below EPA's guideline?		
		50 lbs	150 lbs	200 lbs
flathead catfish				
30" or longer	59	once a month	twice a month	once a week
under 30"	38	once a month	once a week	once a week
drum	29	twice a month	once a week	twice a week
largemouth bass	18	twice a month	twice a week	twice a week
blue catfish	13	once a week	twice a week	4 times a week
smallmouth buffalo	11	once a week	4 times a week	4 times a week
channel catfish	11			
white bass	11			
spoonbill	9			
sunfish	7	twice a week	4 times a week	once a day
crappie	6	twice a week	once a day	once a day





higher mercury

Rule of thumb for women of childbearing age and children:

According to EPA's guideline, take your weight in pounds, and that tells you how many micrograms of mercury you can have each month from local fish.

Then use the numbers above to figure out how many servings of these fish you can have and stay below the guideline.



I weigh 150 lbs, so I can have 150 micrograms of mercury each month and stay below EPA's guideline for women of childbearing age and kids.

That means each month I can eat up to 25 servings of crappie  $(25 \times 6 = 150)...$ 

...or, 4 servings of largemouth bass and 6 servings of blue catfish (that adds up to 150 too!)

#### What does EPA's guideline mean?

EPA developed a guideline for mercury intake intended to protect women of childbearing age and children. Unborn and young children are most sensitive to mercury.

There is currently no EPA guideline for men and older women.

### Size matters!

For most types of fish, size matters: longer fish generally have higher mercury. Fish higher on the food chain tend to have higher mercury too.

Tip: Eat smaller fish. Eating fish lower on the food chain can reduce the amount of mercury in your diet.

What about Lake Hudson? We tested over 200 fish from Lake Hudson. All of these fish had mercury levels below the EPA guideline for children and women of childbearing age. We did not test any flathead catfish from Lake Hudson.