

# Mercury in Fish



A Guide to Healthy Fish  
Consumption in Oklahoma

## What You Need to Know about

# Eating Fish Caught in Oklahoma's Lakes

Fishing is a great pastime and tradition in Oklahoma. Fish provide many benefits that are essential for a healthy diet; however, some fish pose a higher risk of mercury contamination. The Oklahoma Department of Environmental Quality (DEQ) encourages Oklahomans to go fishing and enjoy eating the fish they catch. Just keep in mind that not all fish should be eaten in unlimited amounts. By following these guidelines, you can make safe, informed choices for you and your family and still enjoy the sport of fishing.

### Source of the Problem

Mercury is an element that is released to the atmosphere through man-made (mining, manufacturing processes, coal-fired utilities, or industries) or natural processes (volcanoes or weathering of rocks). It falls out of the air by sticking to dust particles or gets washed out by rain or snow and then runs off into streams and lakes. When moving through the environment, mercury goes through a series of complex changes. When these changes occur in lake and river sediments, some of the mercury can be converted to an organic form – methyl mercury. Methyl mercury enters the food chain and accumulates most readily in predator species of fish. It can then be passed to people who eat these fish.

## Catching Fish

Since mercury accumulates differently in each body of water, it is impossible to visually determine whether fish in a lake, pond, or stream are safe to eat without testing them. It is important to read DEQ's fish consumption guidelines before going out to fish. To reduce health risks, follow these guidelines:

- Eat smaller, younger fish
- Eat varieties of fish that don't feed on other fish

DEQ is in the process of testing larger lakes in the state; however, it will not be possible to test every species of fish in every body of water.

## Recommendations

The Good News: Fish provide many healthy benefits. Fish are a good source of protein, high in omega-3 fatty acids, high in vitamins and minerals, and low in fat.

The fish in these Oklahoma lakes have been tested and have lower levels of mercury. Fish from these lakes can be eaten often without excessive exposure to mercury.

- Lake Arbuckle
- Lake Arcadia
- Copan Reservoir
- Lake Eucha
- Ft. Gibson Reservoir
- Grand Lake
- Guthrie City Lake
- Hulah Reservoir
- Lake Lawtonka
- Lake Fuqua
- Lake Hudson
- Lake Murray

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- Lake Oologah
- Lake Ponca
- Robert S. Kerr Reservoir
- Sooner Lake
- Lake Spavinaw
- Lake Tenkiller

- Lake Texoma
- Lake Thunderbird
- Tom Steed Reservoir
- Wes Watkins Reservoir
- Zoo Lake (Oklahoma City)

### Advice for the General Population:

Since women beyond childbearing age and men older than 15 years of age are at less risk for the effects of mercury, these groups may continue to eat a variety of fish, including predators, as part of a healthy diet unless specifically advised otherwise.

### If your lake has not been tested then follow this advice:

If your lake is not included in the list above or in the following pages, DEQ may be testing it soon and updates will be issued.

Women of child-bearing age and children up to the age of 15 should consume no more than 1 meal per week of predator fish. Predator fish include largemouth, smallmouth, spotted, white, striped, or hybrid bass, walleye, saugeye, and flathead catfish.

### Your Drinking Water is Safe:

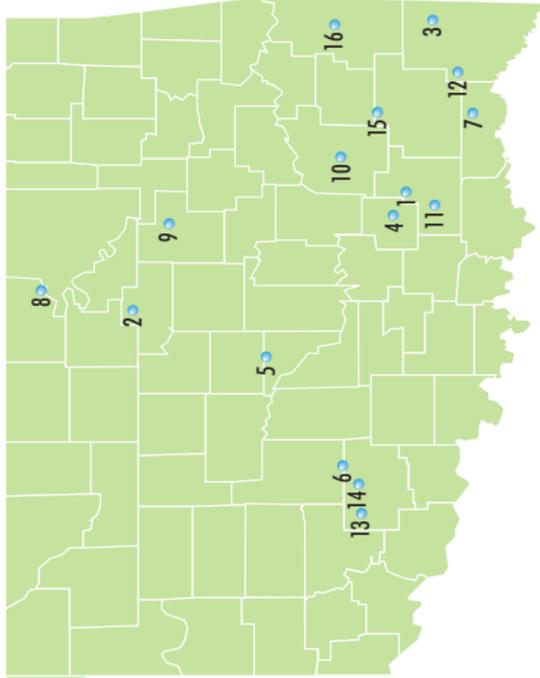
The amount of mercury found in fish does not affect water quality. Lake recreation and the consumption of your city's drinking water are both safe activities.

### Contact Information:

For more information, contact Jay Wright or Pam Baldwin at (800) 869-1400 or visit the Fish Consumption Web site at:  
[www.deq.state.ok.us/fish/](http://www.deq.state.ok.us/fish/)

# Oklahoma Lakes with Mercury Consumption Advisories

- 1 🐟 Atoka Lake
- 2 🐟 Boomer Lake
- 3 🐟 Broken Bow Reservoir
- 4 🐟 Coalgate City Lake
- 5 🐟 Draper Lake
- 6 🐟 Elmer Thomas Lake
- 7 🐟 Hugo Lake
- 8 🐟 Kaw Reservoir
- 9 🐟 Lake Heyburn
- 10 🐟 McAlester City Lake
- 11 🐟 McGee Creek Reservoir
- 12 🐟 Pine Creek Reservoir
- 13 🐟 Quannah Parker Lake
- 14 🐟 Rush Lake
- 15 🐟 Sardis Lake
- 16 🐟 Wister Lake



## Advisory Information

Fish from the following lakes have been tested and some species and size ranges have mercury levels high enough that consumption should be limited. **Only fish in the size ranges indicated have high mercury levels. Other species or smaller sized fish** are safe to eat without excessive exposure to mercury.

**NOTE:** Meal size equals 8 ounces (proportionally smaller for children).

**NOTE:** For species that are not sampled follow guidelines outlined on page 3 under "Caution Urged".

### Key

	No Consumption Advisory
Sensitive Population	Women of child bearing age, pregnant or nursing mothers, and children up to age 15
General Population	Males age 15 and older, women past childbearing age

# Atoka Lake

	Sensitive Population		General Population	
	2 meals per month	No meals per month	2 meals per month	No meals per month
Blue Catfish	✓		✓	
Bluegill Sunfish	✓		✓	
Channel Catfish	✓		✓	
White Bass	✓		✓	
White Crappie	✓		✓	
Largemouth Bass	16 inches and over		✓	
Spotted Bass	13-17 inches	17 inches and over	17 inches and over	

\* Species Not Sampled : Striped/Hybrid Bass, Smallmouth Bass, Black Crappie, Redear Sunfish, Green Sunfish, Walleye, Warmouth, Saugeye, Blue Catfish, Black Bullhead Catfish, Flathead Catfish, Common Carp, Smallmouth Buffalo

# Boomer Lake

	Sensitive Population		General Population	
	2 meals per month	No meals per month	2 meals per month	No meals per month
Channel Catfish	✓		✓	
Common Carp	✓		✓	
Redear Sunfish	✓		✓	
White Crappie	✓		✓	
Largemouth Bass	16 - 19 inches	19 inches and over	19 inches and over	

\* Species Not Sampled: White Bass, Striped/Hybrid Bass, Spotted Bass, Smallmouth Bass, Black Crappie, Bluegill Sunfish, Green Sunfish, Warmouth, Walleye, Saugeye, Blue Catfish, Black Bullhead Catfish, Flathead Catfish, Smallmouth Buffalo

# Broken Bow Reservoir

	<b>Sensitive Population</b>	<b>General Population</b>
Black Crappie	✓	✓
Bluegill Sunfish	✓	✓
Channel Catfish	✓	✓
Common Carp	✓	✓
White Crappie	✓	✓

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# Broken Bow Reservoir

continued

	Sensitive Population		General Population	
	2 meals per month	No meals per month	2 meals per month	No meals per month
Flathead Catfish	17-19 inches	19 inches and over	19-21 inches	21 inches and over
Largemouth Bass	11 - 20 inches	20 inches and over	20 inches and over	
Smallmouth Bass	11-16 inches	16 inches and over	16 inches and over	
Spotted Bass	11-16 inches	16 inches and over	16 inches and over	
Striped/ Hybrid Bass	Do Not Eat		Do Not Eat	
Walleye	Do Not Eat		14-18 inches	18 inches and over
White Bass	Do Not Eat		12 inches and over	

\* Species Not Sampled: Redear Sunfish, Green Sunfish, Warmouth, Saugeye, Blue Catfish, Black Bullhead Catfish, Smallmouth Buffalo

# Coalgate City Lake

	Sensitive Population		General Population	
	2 meals per month	No meals per month	2 meals per month	No meals per month
Channel Catfish	✓		✓	
Warmouth	✓		✓	
White Crappie	✓		✓	
Flathead Catfish	20-30 inches	30 inches and over	30 inches and over	
Largemouth Bass	14-20 inches	20 inches and over	20 inches and over	

\* Species Not Sampled: White Bass, Striped/Hybrid Bass, Spotted Bass, Smallmouth Bass, Black Crappie, Bluegill Sunfish, Redear Sunfish, Green Sunfish, Walleye, Saugeye, Blue Catfish, Black Bullhead Catfish, Common Carp, Smallmouth Buffalo

# Draper Lake

	Sensitive Population		General Population	
Bluegill Sunfish	✓		✓	
Channel Catfish	✓		✓	
Redear Sunfish	✓		✓	
White Bass	✓		✓	
	2 meals per month	No meals per month	2 meals per month	No meals per month
Largemouth Bass	14 inches and over		✓	
Spotted Bass	14 inches and over		✓	

\* Species Not Sampled: Striped/Hybrid Bass, Smallmouth Bass, White Crappie, Black Crappie, Green Sunfish, Warmouth, Walleye, Saugeye, Blue Catfish, Black Bullhead Catfish, Flathead Catfish, Common Carp, Smallmouth Buffalo

# Elmer Thomas Lake

	Sensitive Population		General Population	
	2 meals per month	No meals per month	2 meals per month	No meals per month
Black Crappie	✓		✓	
Bluegill Sunfish	✓		✓	
Green Sunfish	✓		✓	
Redear Sunfish	✓		✓	
Largemouth Bass	15 inches and over		✓	

\* Species Not Sampled: White Bass, Striped/Hybrid Bass, Spotted Bass, Smallmouth Bass, White Crappie, Warmouth, Walleye, Saugeye, Channel Catfish, Blue Catfish, Black Bullhead Catfish, Flathead Catfish, Common Carp, Smallmouth Buffalo

# Hugo Lake

	<b>Sensitive Population</b>	<b>General Population</b>
Channel Catfish	✓	✓
Common Carp	✓	✓
Green Sunfish	✓	✓
Smallmouth Buffalo	✓	✓
White Crappie	✓	✓

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# Hugo Lake

continued

	Sensitive Population		General Population	
	2 meals per month	No meals per month	2 meals per month	No meals per month
Black Crappie	10 inches and over		✓	
Blue Catfish	23 inches and over		✓	
Flathead Catfish	19 inches and over		✓	
Largemouth Bass	15 inches and over		✓	
White Bass	12 inches and over		✓	

\* Species Not Sampled: Striped/Hybrid Bass, Spotted Bass, Smallmouth Bass, Bluegill Sunfish, Redear Sunfish, Warmouth, Walleye, Saugeye, Black Bullhead Catfish

# Kaw Reservoir

	Sensitive Population		General Population	
Blue Catfish	✓		✓	
Smallmouth Buffalo	✓		✓	
White Bass	✓		✓	
	2 meals per month	No meals per month	2 meals per month	No meals per month
Largemouth Bass	16 inches and over		✓	
Spotted Bass	14 inches and over		✓	

\* Species Not Sampled: Striped/Hybrid Bass, Smallmouth Bass, White Crappie, Black Crappie, Bluegill Sunfish, Redear Sunfish, Green Sunfish, Warmouth, Walleye, Saugeye, Channel Catfish, Black Bullhead Catfish, Flathead Catfish, Common Carp

# Lake Heyburn

	Sensitive Population		General Population	
	2 meals per month	No meals per month	2 meals per month	No meals per month
Common Carp	✓		✓	
Bluegill Sunfish	7 inches and over		✓	
Channel Catfish	13-18 inches	18 inches and over	18-25 inches	25 inches and over
Largemouth Bass	11-15 inches	15 inches and over	15-18 inches	18 inches and over
White Crappie	11 inches and over		✓	

\* Species Not Sampled: White Bass, Striped/Hybrid Bass, Spotted Bass, Smallmouth Bass, Black Crappie, Redear Sunfish, Green Sunfish, Warmouth, Walleye, Saugeye, Blue Catfish, Black Bullhead Catfish, Flathead Catfish, Smallmouth Buffalo

# McAlester City Lake

	Sensitive Population		General Population	
	2 meals per month	No meals per month	2 meals per month	No meals per month
Blue Catfish	✓		✓	
Bluegill Sunfish	✓		✓	
Channel Catfish	✓		✓	
Green Sunfish	✓		✓	
White Bass	✓		✓	
White Crappie	✓		✓	
Largemouth Bass	14-18 inches	18 inches and over	18 inches and over	

\* Species Not Sampled: Striped/Hybrid Bass, Spotted Bass, Smallmouth Bass, Black Crappie, Redear Sunfish, Warmouth, Walleye, Saugeye, Black Bullhead Catfish, Flathead Catfish, Common Carp, Smallmouth Buffalo

# McGee Creek Reservoir

	Sensitive Population		General Population	
	2 meals per month	No meals per month	2 meals per month	No meals per month
Bluegill Sunfish	✓		✓	
Channel Catfish	20-24 inches	24 inches and over	24-27 inches	27 inches and over
Flathead Catfish	20-24 inches	24 inches and over	24-27 inches	27 inches and over
Largemouth Bass	10 inches and over		✓	
Spotted Bass	8-12 inches	12 inches and over	12-16 inches	16 inches and over
White Bass	Do Not Eat		12 inches and over	
White Crappie	14 inches and over		✓	

# Pine Creek Reservoir

	Sensitive Population		General Population	
	2 meals per month	No meals per month	2 meals per month	No meals per month
Bluegill Sunfish	✓		✓	
Black Crappie	10 inches and over		✓	
Channel Catfish	21-30 inches	30 inches and over	30 inches and over	

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# Pine Creek Reservoir

continued

	Sensitive Population		General Population	
	2 meals per month	No meals per month	2 meals per month	No meals per month
Largemouth Bass	less than 13 inches	13 inches and over	13-19 inches	19 inches and over
Saugeye	13-19 inches	19 inches and over	19 inches and over	
Spotted Bass	11-14 and over	14 inches inches	14-17 and over	✓
White Bass	12 inches and over		✓	
White Crappie	10 inches and over		✓	

\* Species Not Sampled: Striped/Hybrid Bass, Smallmouth Bass, Redear Sunfish, Green Sunfish, Warmouth, Walleye, Blue Catfish, Black Bullhead Catfish, Flathead Catfish, Common Carp, Smallmouth Buffalo

# Quanah Parker Lake

	Sensitive Population		General Population	
	2 meals per month	No meals per month	2 meals per month	No meals per month
Black Crappie	✓		✓	
Bluegill Sunfish	✓		✓	
Redear Sunfish	✓		✓	
Largemouth Bass	10-17 inches	17 inches and over	17 inches and over	

\* Species Not Sampled: White Bass, Striped/Hybrid Bass, Spotted Bass, Smallmouth Bass, White Crappie, Green Sunfish, Warmouth, Walleye, Saugeye, Channel Catfish, Blue Catfish, Black Bullhead Catfish, Flathead Catfish, Common Carp, Smallmouth Buffalo

# Rush Lake

	Sensitive Population		General Population	
	2 meals per month	No meals per month	2 meals per month	No meals per month
Black Crappie	✓		✓	
Redear Sunfish	✓		✓	
Bluegill Sunfish	6 inches and over		✓	
Largemouth Bass	10-13 inches	13 inches and over	13-16 inches	16 inches and over

\* Species Not Sampled: White Bass, Striped/Hybrid Bass, Spotted Bass, Smallmouth Bass, White Crappie, Green Sunfish, Warmouth, Walleye, Saugeye, Channel Catfish, Blue Catfish, Black Bullhead Catfish, Flathead Catfish, Common Carp, Smallmouth Buffalo

# Sardis Lake

	Sensitive Population		General Population	
Blue Catfish	✓		✓	
Bluegill Sunfish	✓		✓	
Channel Catfish	✓		✓	
Flathead Catfish	✓		✓	
Spotted Bass	✓		✓	
White Bass	✓		✓	
White Crappie	✓		✓	
	2 meals per month	No meals per month	2 meals per month	No meals per month
Largemouth Bass	14 inches and over		✓	
Walleye	21 inches and over		✓	

\* Species Not Sampled: Striped/Hybrid Bass, Smallmouth Bass, Black Crappie, Redear Sunfish, Green Sunfish, Warmouth, Saugeye, Black Bullhead Catfish, Common Carp, Smallmouth Buffalo

# Wister Lake

	Sensitive Population		General Population	
	2 meals per month	No meals per month	2 meals per month	No meals per month
Bluegill Sunfish	✓		✓	
Channel Catfish	✓		✓	
Spotted Bass	✓		✓	
White Bass	✓		✓	
White Crappie	✓		✓	
Largemouth Bass	14 inches and over		✓	

\* Species Not Sampled: Striped/Hybrid Bass, Smallmouth Bass, Black Crappie, Redear Sunfish, Green Sunfish, Warmouth, Walleye, Saugeye, Blue Catfish, Black Bullhead Catfish, Flathead Catfish, Common Carp, Smallmouth Buffalo



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