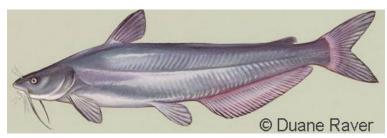


# Blue Catfish Consumption

What You Need to Know

### Background

The blue catfish (*Ictalurus furcatus*) is a large, long-lived freshwater species native to the Mississippi, Missouri, and Ohio river drainages of the central and southern United States. In recent decades, stocking programs and unauthorized human introductions have established blue catfish populations in



reservoirs and rivers of several states, including Virginia and Maryland, where it is considered an invasive species. Blue catfish are now common in Maryland and, in some cases, have become the dominant species (by number and weight) in some rivers and tributaries in the Chesapeake Bay.

Blue catfish bioaccumulate contaminants including PCBs and mercury that result in advisories for human consumption, especially for larger catfish (> 30 inches). Recent data suggests that PCBs, often the driving pollutant for advisories, can be reduced in consumable tissue up to 80% by removal of the lateral line meat (dark meat). There are currently consumption advisories in Maryland, DC, and Virginia for recreationally caught Blue Catfish that can differ due to eating preferences and exposure to pollutants (location). Advisories exist for other fish species, such as striped bass, for the same reasons.

#### Cleaning Techniques



To reduce the amount of the chemical contaminants in all fish you catch, you should:

- Gut the fish, then, remove the belly flap, skin, and dark meat of your fish prior to eating (see figure on left). If polychlorinated biphenyls (PCBs) or similar chemicals are present, they will be concentrated in these fatty portions of the fish.
- Broil, grill, or bake your fish on a rack so that fat (which is where chemicals like PCBs concentrate) can drip away from your dinner.

Avoid using batter or breading when cooking the fish.

- The general advisory recommendations are based on evenly spaced consumption patterns over time.
- The general consumption recommendations are for total allowable consumption in a month. It is not on a "per fish species basis". For example, if you have an advisory for Blue Catfish 2 meals per month, and an advisory for Bass of 3 meals per month, you may either eat 2 catfish meals OR 3 bass meals, not both.



# Blue Catfish Consumption

## What You Need to Know

### Blue Catfish Consumption Advisories

Recommended Meal Size: 8 oz. for General Population and Women, 3 oz. for Children Women are defined as women who are pregnant, may become pregnant or are nursing Children are defined as children up to age 6

**≭** = Fish where all dark meat and/or belly flap has been removed

		Recommended Meals/Month			
Waterbody			General Population	Women	Children
Anacostia			Avoid	Avoid	Avoid
Anacostia (No Dark Meat)		*	Avoid	Avoid	Avoid
Choptank River	15" - 24"		No Limit	No Limit	5
Middle River	15" - 24"		4	3	2
Nanticoke River	15" - 24"		No Limit	No Limit	7
Patuxent River	15" - 24"		No Limit	No Limit	6
Potomac - 301 Bridge to DC Line	12" - 15"		4	4	4
	15" - 24"		4	3	2
	24" - 30"		1	1	1 every other month
	> 30"		Avoid	Avoid	Avoid
	> 30"	*	2	2	1
Potomac: Mouth to 301	12" - 15"		4	4	4
	15" - 24"		2	2	1
	24" - 30"		1	1	1 every other month
	> 30"		Avoid	Avoid	Avoid
	> 30"	×	2	2	1
Wicomico River	15" - 24"		No Limit	No Limit	6

# **Public Consumption Risks**

Research has shown that blue catfish can live a long time in the Bay and can accumulate toxins in their bodies - therefore we recommend that consumers avoid fish larger than 30 inches, unless the "fatty meat" is removed. Removal of this "dark meat" or belly flap can reduce PCBs by an estimated 80%. Pollutant concentrations vary among rivers and lakes, so consumption advisories are given for specific locations within the Chesapeake Bay watershed.

As more work is done, it is expected that we will update our recreationally caught consumption advisories to include additional locations, size ranges, and meal recommendations with and without lateral (fatty) meat exclusion. In the meantime, it is recommended that the public be reasonably



# **Blue Catfish Consumption**

## What You Need to Know

cautious, generally limiting consumption of Blue Catfish to up to a pound a month, remove dark meat for larger fish (> 30"), and avoid breading and frying.

## FDA PCB Advisory Threshold versus MDE PCB Advisory Threshold

The current FDA and MDE PCB consumption advisory thresholds for any fish are very different. The FDA PCB threshold for all populations is > 2,000 ppb (parts per billion), whereas the MDE PCB threshold to avoid is > 339.99 ppb for general population and > 296.54 ppb for children and women who are pregnant or may become pregnant.

	General Population	Women and Children
MDE PCB Advisory Threshold	>339.99 ppb Avoid	>296.54 ppb Avoid
FDA PCB Advisory Threshold	>2,000 ppb Avoid	

The reason for this difference is because the FDA threshold is directed to commercial fisheries. The advisory threshold was derived by testing fish from many different locations and weighing their potential effects on <u>all</u> populations. The MDE threshold is directed specifically for Maryland's recreational fishery, and with the most vulnerable populations in mind. The vulnerable populations of concern in Maryland are subsistence fishers who may consume recreationally caught fish as their main source of protein several times per week. Recreationally caught fish should be consumed based upon MDE guidelines.

#### **Contact Information**

For more information about Maryland's Fish Consumption Advisory contact:

Maryland Department of the Environment
Water and Science Administration
Field Investigations and Environmental Response Program (410) 537-3818
<a href="https://www.mde.maryland.gov">www.mde.maryland.gov</a>

Maryland Department of Natural Resources <u>www.dnr.maryland.gov</u>

Maryland Department of Health www.health.maryland.gov