Eating Fish from the Delaware River Watershed



Know Which Fish Are Safe To Eat & How To Prepare Them

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Delaware Riverkeeper Network's **2020 ADVISORY**

What Is A Riverkeeper?

A Riverkeeper is a full-time, privately funded, non-governmental ombudsperson, whose special responsibility is to be the public advocate for a water body. A Keeper's clients are the river resource and the citizens who fight to protect it.

The Delaware Riverkeeper's job is to advocate for the Delaware River and all of the tributaries and habitats of the watershed. Maya K. van Rossum, the Delaware Riverkeeper, has led the Delaware Riverkeeper Network for over 25 years. Supported by a committed staff and volunteers, van Rossum monitors compliance with environmental laws, responds to citizen complaints and need for support, identifies problems that affect the Delaware River Watershed, and responds accordingly. Serving as a living witness to the condition of the ecosystem, the Riverkeeper is an advocate for the people's right to protect and defend the environment.

About The Delaware Riverkeeper Network

Since its founding in 1988, the Delaware Riverkeeper Network (DRN) has championed the rights of our communities to a Delaware River and tributary streams that are free-flowing, clean, healthy, and abundant with a diversity of life. DRN works throughout the four states of the Delaware River watershed and at the federal level when issues that impact the health of our watershed play out on a national stage. DRN empowers communities with the engaged interaction and information needed to succeed in protecting our River and region, now into the future. Through independent advocacy, and the use of facts, science and law, DRN gives voice, strength, and protection to the communities and waterways of the Delaware River.





A Message From The Delaware Riverkeeper

Despite restrictions and even bans on their use, toxic contaminants continue to enter our waterways, pass through the food chain into the fish we eat, and into our bodies. Accumulation of these contaminants in our environment and in our bodies could affect our health.

We all live with risk. Some risks we have no control over; other risks are within our control. Just as quitting smoking is good for your health, reducing your exposure to toxic contaminants is a good way of protecting yourself and your family, particularly infants, young children, and pregnant women who may be at greater risk for health effects from exposure to these contaminants.

You may eat fish from the waters of the Delaware River Watershed as a matter of choice, or you may feed your catch to your family out of need. Fish can be an important part of a healthy diet, but anglers should know which fish are safe to eat and how to prepare them. The purpose of this guide is to provide anglers with the information to help make meal-planning decisions and suggest ways to minimize your exposure to contaminants in fish.

Fishing is a great way to experience our rivers and develop a connection to the natural world. And it's a great activity for the whole family. Please use this guide to reduce exposure to contaminants and protect your family's health.

Mayor 10. von Rom

Maya K. van Rossum the Delaware Riverkeeper

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Acknowledgments

This guide is an update of Eating Fish from the Delaware River Watershed: Know Which Fish Are Safe To Eat & How To Prepare Them, an advisory prepared by the Delaware Riverkeeper Network in 2005. Anglers and individuals from local, state and regional agencies involved in preparing and communicating fish consumption advisories reviewed the 2005 guide.

For this update, the Delaware Riverkeeper Network (DRN) reviewed recent state advisories from the Delaware River Watershed states of New York, New Jersey, Pennsylvania, and Delaware as well as the U.S. EPA and the U.S. FDA. We gathered recent information to update our 2005 guide and present the most protective advisories for anglers and their families.

Vietnamese and Khmer (Cambodian) translations prepared by the Nationalities Services Center.

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Photos & Illustrations

Front cover - P. Goodman

Facing page i - photo, T. Carluccio

Page i - photo, K. Black

Page iv - map, Delaware River Basin Commission

Page 1 - photo, T. Carluccio

Page 5 - illustration, *P. Tran*

Page 6 - illustration, P. Tran

Page 8 - illustration, Alabama Fish Consumption Advisories 2019

Page 14 - photo, ckaras, Pixabay

Page 15 - top photo, A. Nguyen, bottom photo, R. Wood

Page 19 - clockwise from top left, W. Selopouchin, F. Stine, V. Burnett,

DRN staff photo

Page 21 - photo, E. Rodgers

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Delaware River Watershed Map



How This Guide Was Prepared

The Delaware Riverkeeper Network (DRN) reviewed recent state advisories from the Delaware River Watershed states of New York, New Jersey, Pennsylvania, and Delaware to gather the information presented in this guide. Our review focused on advisories for sportfish (fish you catch) and shellfish taken from local waterways.

Many people believe that you can tell if a fish is safe to eat by its appearance, or by its by smell or taste. This is not true.

Determining the presence of toxic contamination in fish and shellfish is a complex process requiring sophisticated equipment. To develop their advisories, states may compare levels of contaminants in fish to limits adopted by the U.S. Food and Drug Administration (FDA) for commercial fish, or they may conduct risk assessments based on methods developed internally or on methods developed by the U.S. Environmental Protection Agency (EPA). Fish consumption advisories may also consider complex health issues, fish contamination, and the important role fish play in a healthy diet.

- New York compares contaminant levels to FDA marketplace standards and also considers factors such potential health risks.
- Pennsylvania uses EPA-based risk assessment methods for mercury and FDA Action Levels for other contaminants.
 Pennsylvania's advisories are based on cleaned and cooked fish (See Cleaning Fish To Reduce Risk).
- Delaware and New Jersey use the EPA-based risk assessment method.

When we found differences between state advisories for shared waterways, we included the more stringent recommendations in order to give the most protection to anglers and their families.



State Contact Information

This guide was compiled from information presented in recent fish advisories for the Delaware River Watershed states. To check for updates to these advisories, please use the contact information below.

Delaware

Delaware River Fish Consumption Advisories - PDF http://bit.ly/DE2018FishConsumption

Department of Natural Resources and Environmental Control

Fisheries Section: 302-739-9914

Department of Health and Social Services Division of Public Health 302-744-4700

New Jersey

2019 Fish Smart, Eat Smart - PDF http://bit.ly/NJ2019FishConsumption

Department of Environmental Protection

Division of Science and Research: 609-984-6070

New Jersey Department of Health

609-826-4935

New York

Health Advice on Eating Sportfish and Game - PDF https://www.health.ny.gov/publications/2800.pdf

Department of Environmental Conservation

Phone 518-402-8924 | Email: fwfish@dec.ny.gov

Department of Health

Phone: 518-402-7800 or 800-458-1158 | Email: BTSA@health.ny.gov

Pennsylvania

Pennsylvania Public Health Advisory: 2020 Fish Consumption - PDF http://bit.ly/PA2020FishConsumption

Department of Environmental Protection

717-787-9637 | website: www.dep.pa.gov

Department of Health

717-787-3550 | website: www.health.pa.gov

Fish and Boat Commission

814-359-5147 | website: www.fishandboat.com

Glossary

Arsenic: A naturally occurring element that is usually found in the environment combined with other elements such as oxygen, chlorine, and sulfur. Combined forms are used in used in wood preservatives and pesticides, primarily on cotton plants.

Carcinogen: Something that is cancer producing.

Chlordane: A toxic chemical, manufactured in the U.S. from 1948 to 1988, used as an insecticide on agricultural crops and gardens, and as a termiticide on buildings and homes. The U.S. banned all uses of Chlordane in 1988, but residue may be present in buildings and soil.

Contaminant: Something that infects or pollutes, or makes unfit for use.

Crustacean: An aquatic invertebrate animal with jointed and segmented body and limbs, and a shell-like exoskeleton. Examples include lobsters, shrimp, and crabs.

DDT: A widely manufactured chlorinated pesticide used on agricultural crops and to control insects that carry diseases like malaria and typhus. This persistent toxin and its related compounds were banned in the U.S. in 1972, although it is still used in some other countries.

Dieldrin: A toxic chemical banned in the U.S. in 1987. Dieldrin was also used as an insecticide and a termiticide.

Dioxins: A family of persistent toxic chemicals that may form during the chlorine bleaching process at pulp and paper mills and during chlorination by waste and drinking water treatment plants. Dioxins are also released into the air in emissions from municipal solid waste and industrial incinerators.

Drainage: The land area drained by a particular stream and its tributaries. Also referred to as Watershed or Basin.

Estuary: Rivers, streams, bays, and marshes affected by tide fluctuations where fresh water meets and mixes with salt water; estuaries can have fresh water, brackish water, and salt water zones.

Finfish: The term used to distinguish between true fish and shellfish, crayfish, jellyfish, etc. True fish are cold blooded, have a backbone, and basic limbs represented by fins.

Fish Consumption Advisories: Guidelines prepared by state and federal agencies to help people plan what fish to keep, as well as how often and how much of their catch to eat.

Food Chain: Path of food from a given producer (e.g., algae or plant) to a consumer (e.g., fish).

Hepatopancreas: Commonly known as the mustard, tomalley, liver, or green gland. The hepatopancreas is the yellowish green gland under the gills of crustaceans.

High Risk Individual: Women of childbearing age, pregnant women, nursing mothers, infants, and children under 15.

Meal Portion: Among the states of the Delaware River Watershed, advisories describe one meal for a 150-pound person as 6 ounces of cooked fish or 8 ounces uncooked fish. For a young child, one meal is considered 2 ounces of cooked fish or 3 ounces of uncooked fish.

Mercury: A naturally occurring element that can enter the air from mining ore deposits, burning coal and waste, and from manufacturing plants.

Mirex: A persistent man-made chemical used as an insecticide on citrus trees and tobacco, and added to paint and plastics as a flame retardant. The use or manufacture of Mirex was banned in the U.S. 1978.

PCBs or Polychlorinated Biphenyls: A family of persistent manufactured chemicals used as coolants and lubricants in transformers and other electrical equipment because PCBs don't burn easily and are good insulators. PCBs have no known smell or taste. There are no known natural sources of PCBs. The U.S. banned the manufacture of PCBs in 1977, but they are still in use in closed applications in the U.S. and around the world.

PFAS or Perfluoroalkyl and polyfluoroalkyl substances: Also called PFCs or Perfluorinated Compounds. A family of persistent man-made chemicals used in non-stick cookware, stain-resistant fabrics, food packaging, and firefighting foams. PFAS have been linked to birth defects, disrupting hormones, and increasing the risk of cancer. Although some governments have begun to regulate PFAS, their use remains widespread.

Pesticides: Chemicals used to kill insects, weeds, molds, rodents or algae.

Risk Assessment: A process that estimates the likelihood that exposed people may have health effects.

Shellfish: Aquatic invertebrate animals with a shell, not necessarily on the outside. The term is used in reference to edible mollusks and crustaceans.

Toxic: The quality of being poisonous or harmful to plant or animal life. The degree to which something is considered harmful or poisonous is referred to as its Toxicity.

Watershed: The land area drained by a particular stream and its tributaries. Also referred to as Drainage or Basin.

Contaminants in Fish and Shellfish

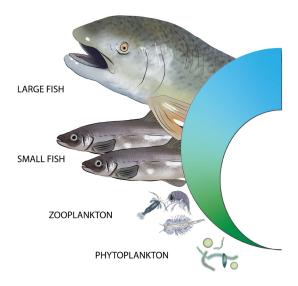
Toxic contaminants, such as mercury, PCBs, chlorinated pesticides (chlordane and DDT), dioxins, and PFAS are present in our environment. Some of these contaminants were originally developed for use as pesticides or fire retardants, or to make the materials to which these chemicals were applied more resistant to water, oil, and grease. Some toxic contaminants were developed intentionally. Others are by-products of industrial processes, or released during the burning of coal or other waste.

Despite restrictions or even bans on their use, these toxic contaminants continue to enter and move through the food chain.

Many toxic contaminants break down very slowly. For example, Chlordane can stay in the soil for over 20 years. PFAS are sometimes referred to as "forever chemicals" because of their extremely long persistence. Though its form can be changed, arsenic cannot be destroyed in the environment.

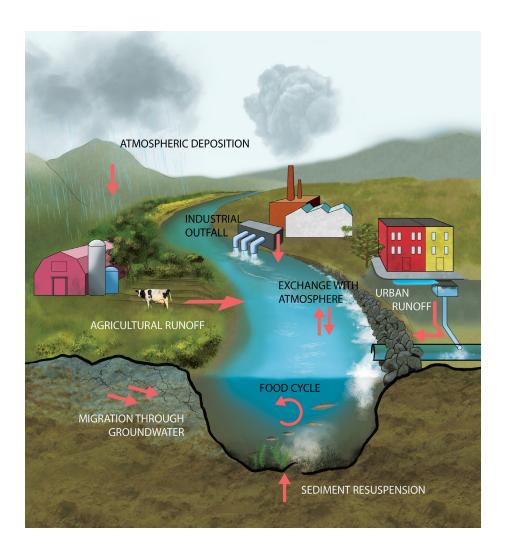
Toxins Accumulate in the Food Chain

Toxins in sediment and in the water can be taken up by plankton and other organisms at the base of the food chain. At each stage in the food chain, as smaller organisms are eaten by larger ones, toxins accumulate in their bodies, concentrating more and more. As a result, older, larger fish are likely to have more chemicals in their bodies than younger, smaller fish.



Contaminant Pathways into Our Waterways

Some toxic contaminants travel long distances, even around the globe. Most do not break down in water. Rather, they stick to soil particles and are taken up into the food chain by small organisms in soil and water. The illustration on the below depicts some of the pathways by which toxic contaminants are taken up into the food chain.



Reduce Exposure To Toxins

For most people, sportfish and shellfish consumption is the principal source of exposure to methylmercury, PCBs, chlorinated pesticides (chlordane and DDT), and dioxins, but you can reduce the risk of your exposure to toxic contaminants:

- Follow advisories for the waters you fish.
- If possible, choose to fish for freshwater sportfish in waters where fish have been tested for contaminants, but where no specific advisories are in place.
- Only keep fish that act and look healthy
- Eat smaller fish of a species as long as it is of legal length.
- Older (larger) fish may be more contaminated because they have had more time to accumulate contaminants in their bodies.
- Eat smaller portions of fish and eat fewer meals of fish.
- Eat a variety of fish.
- Clean and cook fish in a manner that reduces exposure to PCBs and other organic contaminants. Fish with more fatty flesh, such as catfish (excluding farm- raised), bluefish, and striped bass, tend to collect more PCBs and chlordane because these contaminants are stored in fat.
- Space out meals of fish from waters where there are advisories. If guidance permits 4 meals per month, do not eat all 4 meals in the same week. This is particularly important for women and young children.
- Women of childbearing age, pregnant women, nursing mothers, and children under 15 may want to avoid eating any fish suspected of being contaminated.
- Anglers who want to enjoy the fun of fishing, but who wish to eliminate the potential risks associated with eating contaminated sportfish, may want to consider "catch and release" fishing.

Toxic Build-Up in Sportfish and Shellfish

Even when present in the water in extremely small amounts, some chemicals tend to accumulate in fish tissue because fish absorb contaminants from the water and sediment and from the food they eat. The amount of contaminants fish accumulate depends on the species, size, age, and sex, and the feeding area of the fish.

Generally speaking, older, larger individual fish accumulate the most contaminants.

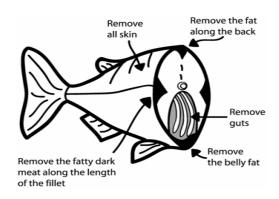
Source: Fish Consumption Advisories, n.d., Delaware Department of Natural Resources and Environmental Control, https://dnrec.alpha.delaware.gov/fish-wildlife/fishing/consumption-advisories/

Different toxins accumulate in different parts of the fish.

Mercury collects in the fish's muscle (the part you eat), instead of the fat or skin, and cannot be reduced by cleaning or cooking. The only way to reduce your mercury intake from your catch is to reduce the amount of contaminated fish you eat.

PFAS, which bind to proteins, have been detected in the blood, liver, brain, and muscle of fish. As with mercury, the only way to reduce your exposure to PFAS from your catch is to reduce the amount of contaminated fish you eat.

PCBs and organic contaminants like dioxin, mirex, DDT, chlordane and dieldrin build up in a fish's fat deposits and just underneath the skin. By removing the skin and fat before cooking, you can reduce the levels of these chemicals.



Cleaning Fish

Keep fish on ice or refrigerated below 45°F until cleaned and filleted. Then keep fish refrigerated until cooked.

Follow good sanitary practices. Bacteria, viruses, or parasites may be in or on fish. Hands, utensils, and work surfaces should be washed before and after handling any raw fish.

Wear protective gloves when preparing any fish.

Remove guts and internal organs as soon as you have the proper facilities. Be careful to not puncture the internal organs. Avoid direct contact with fish guts. Discard these. Do not eat.

Avoid directly handling or preparing fish when you have cuts or open sores on your hands.

Soaking of fish or shellfish will not remove contaminants.

Reducing Exposure To PCBs

To clean fish to reduce PCBs and other organic contaminants:

- Remove all skin.
- Slice off belly fat along the bottom of the fish.
- Cut away any fat above the fish's backbone.
- Cut away the V-shaped wedge of fat along the lateral line on each side of the fish.

Special Note for Crabs and Lobsters

Do not eat the green glands (mustard, tomalley, liver or hepatopancreas) found in the body section of crab and lobster. This tissue has been found to contain high levels of contaminants, including PCBs and heavy metals.

To prepare crab and lobster:

- Remove green glands before cooking.
- Do not eat the green glands.
- Do not use cooking water or green glands in any juices, sauces or soups.
- After cooking, discard the cooking water.

Cooking Guidelines

Please follow these cleaning and cooking directions:

- Do not eat uncooked fish or seafood.
- Cooking or soaking of fish cannot eliminate contaminants, but heat from cooking melts some of the fat in fish.
- Broil, bake, or grill the trimmed, skinned fish on a rack so that the fat drips away.
- Discard any drippings. Do not use drippings for cooking other foods or to prepare sauces or gravies.
- Don't pan fry or deep fry. Avoid batter or breading because they hold in the liquefied fat that may contain contaminants.
- Cook seafood to an internal temperature of 145°F.

The New York State Department of Health warns that fish and shellfish can be contaminated with bacteria, viruses, or parasites that can cause illness. Persons at high risk (for example, those who are immunocompromised, suffer from liver disease, or other chronic diseases) can be more susceptible to, and more severely affected by, these infectious diseases. Therefore, all of these foods should be thoroughly cooked before eating.

General Advisories

The U.S. EPA advises that women of childbearing age (about 16-49 years old), pregnant and breastfeeding women, and young children should eat more fish that is lower in mercury for important developmental and health benefits.

The U.S. EPA also recommends that women and children eat two to three servings of a variety of fish and shellfish each week.

The U.S. Food and Drug Administration advises that women who are pregnant or could become pregnant, nursing mothers, and young children, should not eat bigeye tuna, king mackerel, marlin, orange roughy, shark, swordfish, or tilefish (from the Gulf of Mexico) due to mercury contamination.

How To Use This Guide

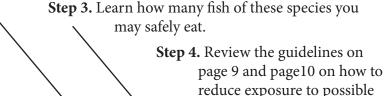
Advisories issued for the main stem of the Delaware River are presented in this guide by river section regardless of the issuing state and include the most protective recommendations.

Following the chart for the main stem Delaware River, you will find charts providing advisory information for each of the Delaware River Watershed's four states and their waterways.

To use this guide:

Step 1. In the tables starting on p. 12, find the name of the waterbody where you fish.

Step 2. See what species of fish are included in advisories.



contaminants.

Waterbody	Geographical Extent	Species	Advice
Beltzville Lake	Entire lake	Walleye	Two meals per month

Counting Meals

The New York State Department of Health advises that you consider the TOTAL number of meals that you will eat during a year.

If most of the fish you eat are in the "Eat no more than 1 meal per week" category, you should not exceed 52 meals per year. If most of the fish you eat are in the "Eat no more than 1 meal per month" category, you should not exceed 12 meals per year. You should also be aware that eating fish from the "Eat no more than 1 meal per month" category is the same as eating four fish from the "Eat no more than 1 meal per week" group.

Main Stem Delaware River Advisories

Some of the advisories below for the Main Stem Delaware are based on the State of New Jersey's fish consumption advisories for the General Population. These advisories are presented as a range of meal frequencies based on a 1 in 10,000 and 1 in 100,000 risk of developing cancer in a lifetime from regularly eating fish at the advisory level. The advisories included here are based on the 1 in 100,000 lifetime cancer exposure risk.

A cancer risk of 1 in 100,000 is the risk that one additional person in a population of one hundred thousand exposed people will develop cancer over his or her lifetime. This is in addition to the risk that 1 in 3 Americans will develop cancer over their lifetime (American Cancer Society). Contact New Jersey (see page 2) for information on its 1 in 10,000 lifetime cancer risk advisories.

Main Stem Delaware River				
Geographical Extent	Species	Advice		
		General Population	High Risk Individuals	
NJ/NY/PA Border to Morrisville Bridge	Rock Bass	Two meals per w	reek	
	American Eel	One meal per week	One meal per month	
NY Border to Water Gap	Walleye Smallmouth Bass	One meal per we	eek	
Tr. Border to Mater Eup	Muskellunge Channel Catfish	No restrictions	One meal per month	
	White Sucker	One meal per month		
	Smallmouth Bass Walleye	One meal per week	One meal per month	
At Milford/Montague	White Sucker	One meal per week		
	American Eel	One meal per month		
	Channel Catfish Smallmouth Bass	No restrictions	One meal per month	
Water Gap to Phillipsburg	Walleye	No restrictions	One meal per week	
	White Catfish	One meal per week	Do not eat	
At Phillipsburg/Easton	American Eel	One meal per month	Do not eat	
	Smallmouth Bass	One meal per we	eek	

Main Stem Delawa	re River		
Geographical Extent	Species	Advice	
		General	High Risk
		Population	Individuals
At Phillipsburg/Easton	White Sucker	One meal per week	One meal per month
	Striped Bass Channel Catfish	Four meals per year	Do not eat
	White Sucker American Eel	One meal per month	Do not eat
Phillipsburg to Trenton	Largemouth Bass	No restrictions	One meal per month
	Smallmouth Bass	One meal per week	One meal per month
	Walleye	Two meals per m	onth
	White Sucker	One meal per mo	onth
At Lambertville	American Eel	One meal per month	Do not eat
	Smallmouth Bass	One meal per week	One meal per month
At Trenton	American Eel	One meal per month	Do not eat
At Trenton/Crosswicks	White Perch	One meal per week	One meal per month
Creek	American Eel	One meal per month	Do not eat
At Tacony Palmyra	Channel Catfish	Four meals per year	Do not eat
Bridge	White Perch	One meal per month	Do not eat
	American Eel	One meal per year	Do not eat
Confluence, Raccoon Creek	Channel Catfish	Four meals per year	Do not eat
	White Perch	One meal per mo	onth
	White Perch	One meal per month	Do not eat
Confluence, Woodbury Creek/Fort Mifflin	American Eel	One meal per year	Do not eat
	Channel Catfish	Four meals per year	Do not eat
Salem River	White Perch	One meal per week	One meal per month
Jaietti Nivei	Channel Catfish	One meal per month	Do not eat
Delaware Estuary	All Finfish	Three meals per year	Do not eat

State of New York Advisories

Waterbody	Geographical Extent	Species	Advice General Population	High Risk Individuals
		Smallmouth Bass over 15 inches	One meal per month	Do not eat
Cannonsville Reservoir	Entire reservoir	Smallmouth Bass under 15 inches	Four meals per month	Do not eat
		Yellow Perch	One meal per month	Do not eat
Herrick Hollow Creek	Entire drainage	Brook Trout	One meal per month	Do not eat
	Entire reservoir	Smallmouth Bass	One meal per month	Do not eat
Neversink Reservoir		Brown Trout over 24 inches	One meal per month	Do not eat
		Brown Trout under 24 inches	Four meals per month	Do not eat
Pepacton Reservoir	Entire reservoir	Smallmouth Bass over 15 inches	One meal per month	Do not eat
		Smallmouth Bass under 15 inches	Four meals per month	Do not eat
		Yellow Perch over 9 inches	One meal per month	Do not eat
		Yellow Perch under 9 inches	Four meals per month	Do not eat
		Brown Trout over 24 inches	One meal per month	Do not eat
		Brown Trout under 24 inches	Four meals per month	Do not eat





State of New Jersey

The State of New Jersey's fish consumption advisories for the General Population are presented as a range of meal frequencies based on a 1 in 10,000 and 1 in 100,000 risk of developing cancer in a lifetime from regularly eating fish at the advisory level. The advisories included here are based on the 1 in 100,000 lifetime cancer exposure risk. Contact New Jersey (see page 2) for more information.

Waterbody	Geographical Extent	Species	Advice General Population	High Risk Individuals
		American Eel	Four meals per year	Do not eat
		American Lobster	Do not eat green glands (hepatopancreas or tomalley)	
Estuarine and Marine waters without specific advisories	Statewide	Bluefish (less than 6 lbs/24 inches)	Eat no more than 1 meal per year	Do not eat
advisories		Bluefish (over 6 lbs/24 inches)	One meal per month	Do not eat
		Striped Bass	One meal per month	Do not eat
	Statewide	Largemouth BassPumpkinseed Redbreast Sunfish Yellow Bullhead	No restrictions	One meal per week
All water bodies		Yellow Bullhead Brown Bullhead	No restrictions	One meal per month
(unless otherwise noted)		Chain Pickerel Largemouth Bass Smallmouth Bass	One meal per week	One meal per month
		Common Carp	One meal per month	Do not eat
		Trout (Brown, Brook, Rainbow)	One meal per w	reek
All water bodies (unless otherwise noted)	Pinelands Note: Portions of the Pinelands are in the Delaware River Watershed.	Bluegill Pumpkinseed Redbreast Sunfish	No restrictions	One meal per month
		Brown Bullhead Yellow Bullhead	One meal per week	Do not eat
		Largemouth Bass Chain Pickerel	One meal per month	Do not eat
Delaware Bay Tributaries	To the head of tide	American Eel	One meal per month	Four meals per year

Waterbody	Geographical Extent	Species	Advice General Population	High Risk Individuals
Accumpink Lake	Entire late	Chain Pickerel Largemouth Bass	No restrictions	One meal per month
Assunpink Lake	Entire lake	Bluegill Sunfish Brown Bullhead	No restrictions	
Big Timber Creek	Entire drainage	Pumpkinseed Largemouth Bass White Catfish	No restrictions	One meal per week
Caaran Dinan	Spillway below	Common Carp	One meal per month	Do not eat
Cooper River	Evans Pond	Bluegill	One meal per week	One meal per month
Cooper River	Entire lake	Largemouth Bass Black Crappie	No restrictions	One meal per week
Lake	LITUIE IAKE	Bluegill Common Carp	No restrictions	
	Entire drainage	Largemouth Bass	One meal per week	One meal per month
Crosswicks Creek		White Catfish	No restrictions	One meal per week
Crystal Lake	Entire lake	Black Crappie	No restrictions	One meal per week
		Largemouth Bass	No restrictions	One meal per month
Evans Pond	Entire pond	Brown Bullhead	One meal per v	veek
Hopkins Pond	Entire pond	Brown Bullhead	One meal per month	Four meals per year
Laka Hanataana	Entire lake	Chain Pickerel	No restrictions	One meal per month
Lake Hopatcong		Largemouth Bass	No restrictions	One meal per week
Mirror Lake	Entino lako	Brown Bullhead	No restrictions	One meal per week
IMILIOF LAKE	Entire lake	Largemouth Bass	Four meals per year	Do not eat
Newton Creek	Entire drainage	Brown Bullhead	One meal per week	One meal per month
Newton Creek, South	Entire drainage	Largemouth Bass	One meal per month	Do not eat
		Brown Bullhead	No restrictions	
Newton Lake	Entire lake	Channel Catfish	No restrictions	One meal per week

Waterbody	Geographical Extent	Species	Advice General Population	High Risk Individuals
		White Catfish	One meal per month	One meal per year
Pennsauken	Forked Landing to	Pumpkinseed Largemouth Bass	One meal per week	One meal per month
Creek	mouth	Channel Catfish	One meal per month	Do not eat
		Common Carp	Four meals per year	Do not eat
		Largemouth Bass		One meal per month
Strawbridge Lake	Entire lake	Brown Bullhead	One meal per week	Four meals per year
		Carp	Do not eat	
Stewart Lake	Entire lake	Bluegill Common Carp	No restrictions	
Stewart Lake		Largemouth Bass	No restrictions	One meal per month
		Smallmouth Bass	One meal per week	One meal per month
Swartswood Lake	Entire lake	Chain Pickerel	No restrictions	One meal per week
		Largemouth Bass	No restrictions	One meal per month
Union Lake	Entire lake	Bluegill Brown Bullhead White Perch White Catfish	One meal per week	Do not eat
		Chain Pickerel Largemouth Bass	One meal per month	Do not eat
		Chain Pickerel	Do not eat	
Wilson Lake		Yellow Perch Sunfish Largemouth Bass	One meal per month	Do not eat
Woodstown Memorial Lake/ Salem River	Entire lake	Black Crappie Largemouth Bass	No restrictions	One meal per month



State of Pennsylvania Advisories

The State of Pennsylvania advisories are developed to protect High Risk Individuals and are also recommended to the General Population.

Waterbody	Geographical Extent	Species	Advice
Belmont Lake	Entire lake	Rock Bass	One meal per month
Beltzville Lake	Entire lake	Walleye	Two meals per month
Due du la Lalia	Entire Labo	Chain Pickerel	Six meals per year
Brady's Lake	Entire Lake	Yellow Perch	One meal per month
Brodhead Creek	Entire basin	Rock Bass	Two meals per month
Bushkill Creek	Entire basin	American Eel All Suckers	Two meals per month
Chester Creek	Confluence of West Branch to mouth	Channel Catfish	Two meals per month
Darby Creek	Entire basin	Channel Catfish	One meal per month
Lake Wallen- paupack	Entire lake	Walleye	One meal per month
Little Bushkill Creek	Lake Maskenozha to mouth	American Eel	One meal per month
Little Neshaminy Creek	Entire basin	Carp	One meal per month
Promised Land Lake	Entire lake	Largemouth Bass	Two meals per month
Prompton	Entire lake	Largemouth Bass	One meal per month
Reservoir	Little lake	Walleye	Two meals per month
Red Clay Creek	Entire drainage	All species	Three meals per month
Schuylkill River	Confluence of Mahannon Creek at Landingville to Kernsville Dam	Brown Bullhead All Suckers	One meal per month
Schuylkill River	Kernsville Dam to Maiden Creek	All Suckers	One meal per month
		Carp Channel Catfish	Do not eat
Schuylkill River	Black Rock Dam to Fairmount Dam in Philadelphia	Channel Catfish Flathead Catfish All Suckers Asiatic clams	One meal per month
Cohundkill Discor	Confluence of Maiden Creek to Fairmount	American Eel	Do not eat
Schuylkill River	Dam	All Suckers	One meal per month

Waterbody	Geographical Extent	Species	Advice
Shohola Lake	Entire Lake	Largemouth Bass	One meal per month
	Entire pond	Largemouth Bass	Two meals per month
Tobyhanna Creek	Pocono Lake Dam to mouth	Smallmouth Bass	Two meals per month
West Branch Brandywine Creek	From Business Rt. 30 (Lincoln Highway) in Coatesville to confluence of Buck Run	American Eel	One meal per month
West Branch Schuylkill River	Entire basin	Brook Trout	One meal per month
White Clay Creek	Entire basin	American Eel	Two meals per month
White Oak Pond Lake	Entire lake	Largemouth Bass	Two meals per month



State of Delaware Advisories

The State of Delaware advisories are designed to protect the General Population and High Risk Individuals.

Waterbody	Geographical Extent	Species	Advice
Delaware River	DE/PA Line to the C&D Canal	All finfish	Three meals per year
Lower Delaware	Chesapeake &	Striped Bass, Channel Catfish, White Catfish, American Eel	Three meals per year
River and	Delaware Canal to the Mouth of the	White Perch	Six meals per year
Delaware Ray	Delaware Bay	Bluefish under 20 inches	Twelve meals per year
		Bluefish over 20 inches	Three meals per year

This advisory is a also available in Vietnamese and Khmer (Cambodian) from the Delaware Riverkeeper Network. Contact the Delaware Riverkeeper Network to request PDFs or print copies of these translations.



DELAWARE RIVERKEEPER NETWORK

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