

What can happen if you eat wild game with chemicals in them?

The chemicals in some of this area's wild game won't make you sick right away. But chemicals - like dioxins and PCBs - could cause health problems someday if you eat too much, too often.



These chemicals:

- are linked to the development of cancer
- are linked to the development of diabetes
- can harm fertility
- can harm thyroid function and the immune system
- can harm brain development in fetuses and children



However, not everyone will get sick from eating these chemicals. Some people might be fine after years of eating wild game with these chemicals in them. Others might have health problems.

But, if you follow the **Wild Game Guidelines** inside this brochure, you can get all the **health benefits** from eating lean game meat and have **very little risk**.



Going hunting?

For ANY WILD GAME from the Saginaw River and Tittabawassee River floodplains and nearby connected areas:

- Follow the **Wild Game Guidelines** inside this brochure.
- Trim away any fat you can see.
- Cook the meat on a rack or grill so any extra fat can drip away.
- Do not eat organs - including the liver, heart, brains, or gizzards.



Going fishing?

To find fish lower in chemicals, check the **Eat Safe Fish Guide**. For a free **Guide** call 800-648-6942 or visit Michigan.gov/EatSafeFish.



For More Information...

Call 800-648-6942 or visit us online at Michigan.gov/EatSafeGame.

For updated information on PFAS in wild game, visit Michigan.gov/PFASResponse.

To learn about diseases that may affect wildlife or humans, visit Michigan.gov/EmergingDiseases.



v. 10-2018

Eat Safe Wild Game

from the Saginaw Bay Area



Important information for people who eat wild game from Bay, Midland, and Saginaw Counties.



The Michigan Department of Health and Human Services has issued consumption guidelines for wild game taken from the floodplain areas around the Saginaw and Tittabawassee Rivers.

Map of Area Affected

These guidelines are for the floodplains and nearby connected areas surrounding the Tittabawassee and Saginaw Rivers downstream of Midland.



Why are there guidelines?

Harmful chemicals called **dioxins** and **polychlorinated biphenyls (PCBs)** are found in and around the Tittabawassee and Saginaw Rivers (south of the Midland area).



These chemicals can build up in wild game through their food chain.

The **MDHHS Wild Game Guidelines** make it easy to enjoy the wild game you and your family like to eat without getting exposed to too many chemicals.

Photos by Michigan Department of Natural Resources, Greta Fiedler, and the Michigan Department of Health & Human Services.

Wild Game Guidelines

for the Saginaw & Tittabawassee Rivers' floodplains and connected areas

Type of Game	Chemicals of Concern	MI Servings per Month
Duck (with skin)	Dioxins	6 per year
Duck (without skin)	Dioxins	2
Deer	Dioxins	8
Goose (with or without skin)	Dioxins	4
Rabbit	Dioxins	4
Squirrel	Dioxins	8
Turkey (with skin)	Dioxins	6 per year
Turkey (without skin)	Dioxins	1



NO ONE should eat any organs - like the liver, heart, brains, or gizzards - from wild game taken from the Saginaw and Tittabawassee River areas.

My Michigan, MI Serving Size

- 8 ounces = 1/2 pound of meat (large oval, slightly larger than two decks of cards)
- 4 ounces = 1/4 of pound of meat (small circle; about the size of one deck of cards)
- 2 ounces = size of half a palm of an adult's hand (rectangle)



How much is MI Serving?

Weight of Person	MI Serving Size
45 pounds	2 ounces
90 pounds	4 ounces
180 pounds	8 ounces

Weigh Less?

For every 20 pounds less than the weight listed in the table, subtract 1 ounce of meat.

For example, a 70 pound child's MI Serving size is 3 ounces of meat.
90 pounds - 20 pounds = 70 pounds
4 ounces - 1 ounce = a MI Serving size of 3 ounces

Weigh More?

For every 20 pounds more than the weight listed in the table, add 1 ounce of meat.

For example, a 110 pound person's MI Serving size is 5 ounces of meat.
90 pounds + 20 pounds = 110 pounds
4 ounces + 1 ounce = a MI Serving size of 5 ounces



Are you pregnant?

Wild game can still be a healthy meal. Use your pre-pregnancy weight to find your MI Serving size. These amounts are safe even if you're pregnant or breastfeeding.

Game Weight Totals

Because dioxins and PCBs do not cause immediate health effects, you can calculate how much wild game is safe to eat based on either monthly or yearly amounts - whichever is preferred.

The Game Weight Totals listed here are for a 180-pound adult on a yearly basis. For a monthly breakdown of MI Servings, see above.

Weigh more or less than 180? Customize your serving size, based on your weight, using "How much is MI Serving?". These guidelines are safe for children, pregnant women, and people with chronic health conditions to use, just customize the serving size based on their weight.

Type of Game	Yearly Total Amount by Weight (for a 180-pound adult)
Duck (with skin)	48 ounces or 3 pounds (6 MI Servings per Year)
Duck (without skin)	192 ounces or 12 pounds (24 MI Servings per Year)
Deer	768 ounces or 48 pounds (96 MI Servings per Year)
Goose (with or without skin)	384 ounces or 24 pounds (48 MI Servings per Year)
Rabbit	384 ounces or 24 pounds (48 MI Servings per Year)
Squirrel	768 ounces or 48 pounds (96 MI Servings per Year)
Turkey (with skin)	48 ounces or 3 pounds (6 MI Servings per Year)
Turkey (without skin)	96 ounces or 6 pounds (12 MI Servings per Year)