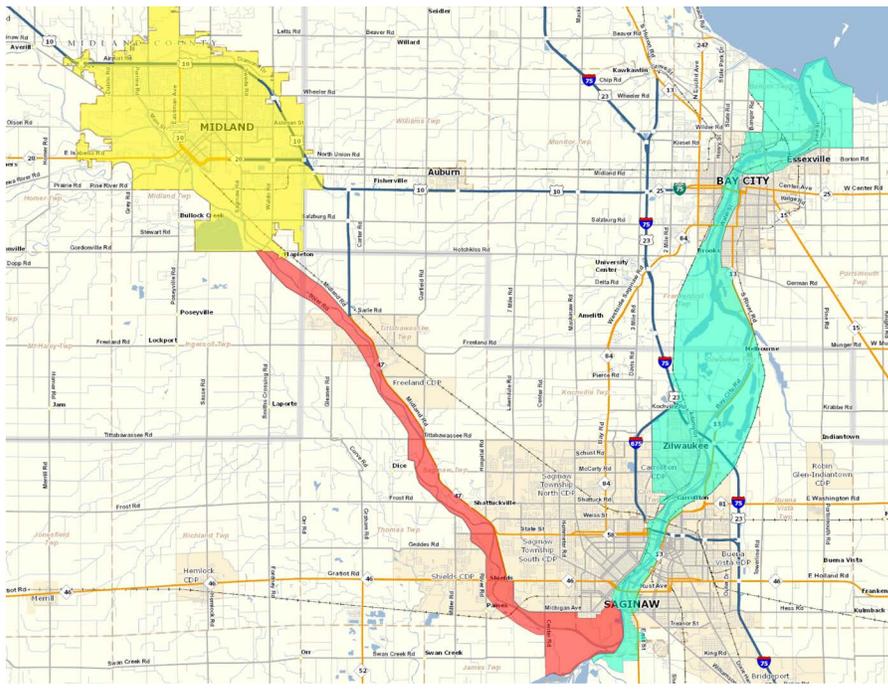




Chickens & Livestock

Know Before You Grow:

Midland & Downstream River Areas



For expanded map, visit www.Michigan.gov/EGLEDioxin

This factsheet is for people who want to raise chickens or other livestock in the City of Midland, and downstream of Midland along the Tittabawassee and Saginaw Rivers where flooding occurs. Learn about the risk of eating eggs and animals raised in these areas.

It is *not recommended* to eat eggs or animals raised in these areas.

What's the problem?

In Midland and along the Tittabawassee and Saginaw Rivers, dioxins got into the soil and river sediment because of old waste handling practices at The Dow Chemical Company. The waste that was burned put dioxins into the air and they came down around the City of Midland. The waste that was discharged to the river moved downstream and settled on the bottom. When the rivers flood, the water picks up the sediment and dioxins and moves it onto the land.

The Michigan Department of Environment, Great Lakes, and Energy has measured **high amounts of dioxins** in the soil in some of these areas. Although Dow is no longer releasing these chemicals, dioxins stay in the environment for a very long time.

What are dioxins?

Dioxins are chemicals that are linked to health issues, including problems with **fertility, thyroid function, brain development, and cancer.**

Why shouldn't we raise chickens and livestock in these areas?

Chickens can consume dioxins when they peck at the soil and eat insects from the ground. Goats, sheep, pigs, and cows can also be exposed through soil, if they are grazing on a contaminated pasture. The dioxins in the soil and on the plants can end up in the eggs, milk, and meat from these animals.

Some areas in the City of Midland and along the Tittabawassee and Saginaw Rivers have high amounts of dioxins in the soil. Eggs, meat, and milk from livestock and chickens raised in these areas could have high amounts of dioxins, making it unsafe for people to eat them. For example, chickens raised in these areas could have eggs with more than 100 times the level of dioxins than you would find in a typical grocery store egg.

What do I do if I live in this area and have chickens or other livestock?

For health reasons, raising livestock for food or feed is **not recommended** in the City of Midland and areas along the Tittabawassee and Saginaw Rivers downstream of Midland.

The City of Midland has an ordinance that doesn't allow people to have livestock - including chickens - within the city limits, unless the property is zoned for agriculture. There isn't a rule against raising animals in areas along the Tittabawassee and Saginaw Rivers downstream of the City of Midland, unless you have a deed restriction on your property. If you choose to raise animals in these areas, there are some practices that can reduce your health risk from dioxins. Please contact the Michigan Department of Agriculture and Rural Development's Poultry Program Manager at **800-292-3939** to learn about these practices.

What's the health risk if I eat foods with dioxins in them?

Dioxins collect in fat. Foods from these animals that include fat, such as eggs, milk, cheese, and meat, can have dioxins in them. When we eat food with dioxins in them, the chemicals can build up in our bodies too.

The blood tested from people who ate eggs from chickens or meat from cows raised near the Tittabawassee River showed higher levels of dioxins than what is normal.

Dioxins cause issues with:

Fertility	Thyroid function
Brain development	Cancer

Is it safe to touch the soil?

Yes. The cleanup levels set by the Michigan Department of Environment, Great Lakes, and Energy are meant to protect you from contact with dioxins in the soil. This level is safe for people to live, work and play. It is always good to wash your hands when you come inside from playing or working in the soil.

General information

Please call the Michigan Department of Environment, Great Lakes, and Energy at **517-284-6576**.

Dioxin health questions and local fish and game

To learn about which fish and local game are safe to eat from the Tittabawassee River, Saginaw River, and Saginaw Bay areas, visit www.Michigan.gov/EatSafeFish or call **800-648-6942**.

Midland Animal Ordinance

www.CityofMidlandMI.gov/437/Code-of-Ordinances
Chapter 3 - Animals and Fowl

Additional information on dioxins

www.Michigan.gov/EGLEDioxin
www.bit.ly/mdhhsdioxin

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