

Who is conducting the study?

The research is being conducted by a multidisciplinary team of researchers from the University of Michigan—one of the largest and most respected academic research organizations in the world. The team is made up of experts on environmental issues, chemical exposure and social research.

The work of the study team is overseen by two groups: the Scientific Advisory Board (SAB) and the Community Advisory Panel (CAP). The SAB is a group of internationally recognized research scientists who examine the way the study is conducted and report their suggestions. The CAP, made up of local residents, represents the voice of the local community when advising the study team. This group also relays information about the study to the community.

Who funds the study?

Financial support for the study comes from the Dow Chemical Corporation through a grant to the University of Michigan. Dow Chemical Corporation has given the University of Michigan complete independence to design, carry out and report the results of the study. The University of Michigan controls all aspects of the study. Results will be publicly released, whether they are favorable or unfavorable to the funder. They will be posted on the study's Web site (<http://www.umdioxin.org>), presented in community forums, published in academic journals and reported in the news media.

Does living in areas with high levels of dioxins in the soil put my family and me at risk of having high levels of dioxins in our bodies?

Researchers don't know if living in areas with high levels of dioxins is related to having dioxins in the body. The main purpose of this study is to find out whether or not this is the case.

What are the health effects of dioxins?

Humans who have been exposed to extremely high levels of dioxins have developed chloracne, a skin disease like severe acne. One dioxin, called TCDD, is known to cause cancer in humans. There are also concerns about possible liver damage, diabetes and effects on the nervous system. Animal studies suggest that dioxins may cause reproductive or developmental effects.

It's important to remember, however, that UMDES is not a health effects study. It is strictly an assessment of factors that can lead to higher levels of dioxin in the body.

Where can I get more information?

We will hold public meetings to discuss the study and the study findings with the involved communities. If you would like more information on dioxins, the UMDES or our updated schedule, please visit our Web site at <http://www.umdioxin.org>.

If you have high levels of dioxins in your blood, you may also wish to talk with a health professional, your personal physician or health officials at your local County Health Department:

Bay County Health Dept.:	989-895-4001
Calhoun County Health Dept.:	269-966-1210
Jackson County Health Dept.:	517-788-4420
Midland County Health Dept.:	989-832-6380
Saginaw County Health Dept.:	989-758-3800

We hope that you will consider participating in this important and valuable study. If you would like more information, please call our toll-free number: **1-888-689-0006**.

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Dioxin Exposure Study

STUDY FACTS



The University of Michigan

School of Public Health

College of Engineering

Center for Statistical Consultation
and Research

Institute for Social Research

1-888-689-0006

UMDES Web site: <http://www.umdioxin.org>

What is the study about?

The University of Michigan Dioxin Exposure Study (UMDES) is the first step in helping to address Michigan residents' concerns over dioxin levels in the soil. The study is designed to determine if there is a relationship between levels of dioxins in soil and household dust and levels of dioxins in people's bodies. It will also examine other factors—where people have lived, what they eat, their jobs and their hobbies—that may be associated with levels of dioxins in people's bodies.

Why is this important?

Elevated levels of dioxins have been found in soils in various locales in Michigan, most significantly in the Tittabawassee River flood plain (in Midland and Saginaw Counties), in the Kalamazoo River below the Morrow Pond Dam, and in other areas. Residents are very concerned about the potential exposure to dioxins, most of which are considered toxic. Residents are also concerned about the effect of elevated levels of dioxins on the use of the natural resources (game, fish, agricultural products) from the affected areas.

What are dioxins?

Dioxins are a family of 210 chemicals that can be produced by combustion and industrial processes—nearly always as an unwanted byproduct. Nowadays, it is most often dispersed through municipal and hospital waste incinerators as airborne particles after burning. In the past, it was also released onto the ground and into the water as an industrial byproduct.

Isn't this just an issue for people in the Tittabawassee River flood plain or near the Kalamazoo River?

The Tittabawassee River flood plain and the Kalamazoo River below the Morrow Pond Dam have been identified as areas with high levels of dioxins. However, the issue is broader than just these rivers and surrounding areas. The contamination issue is important for people who care about the environment and economic effects throughout the state of Michigan—a state known for its natural resources, agricultural products and outdoor sports opportunities such as hunting, fishing, water and other sports.

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Why am I being asked to participate?

Your role in the study is important, no matter where you live.

We will be sampling soil, dust and blood from people in areas known to be contaminated with dioxins. We will also be sampling soil, dust and blood from people in areas with no known industrial source of contamination, such as Jackson and Calhoun Counties. All areas included in the study have similar industrial and demographic characteristics. This allows us to compare levels of dioxins in a variety of areas with differing levels of dioxins. Only by comparing people who live in several areas can we determine if people living in areas with high levels of dioxins in the soil also have higher levels of dioxins in their bodies.

Through this broad sampling process, we will be able to answer the central question of the study: What is the relationship between dioxins in people's bodies, house dust, soil, diet, job and recreational activities?

What will I be asked to do as part of the study?

Over the course of 18 months, a team of researchers will collect data from Michigan households in five counties to try to answer these very important questions about dioxins. More than 1,300 Michigan residents will be invited to answer a questionnaire and asked to provide blood samples. Some will also be asked to allow sampling of their house dust and soil from their property.

By collecting data across a five-county area, the research team will be able to determine whether living in areas of higher environmental levels of dioxins leads to a higher level of dioxins in the blood. Knowing that is an important step in making Michigan safer.

Who is eligible for the study?

To be eligible for this study, you must be 18 years of age or older and live in the study area.

Interviewers from the University of Michigan will ask you several questions to determine if you or anyone else in your household is eligible to participate in the UMDES.

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How will the interviews be completed?

A professional interviewer will determine if your household is eligible and, if so, will invite one person to participate in the study. The selected person may choose to be interviewed right away or set up an appointment for a more convenient time.

Certified healthcare professionals will be scheduled to draw blood. Specially trained research associates will conduct house dust and soil sampling. In each case, appointments will be set at your convenience.

For security reasons, University of Michigan research staff will wear picture identification badges when making visits to homes. Our employees will be glad to comply with your request to check their badges. If you are at all uncertain about the validity of a person who contacts you, please feel free to call our toll-free number at: **1-888-689-0006**.

What happens to the answers?

We highly value the information you give us. We also value your privacy and will keep your identity strictly confidential. Your answers to the questions will be stripped of all information that might link them back to you or your property. We will only release summaries of the data; no individual will ever be identified.

Do I have to participate?

Participation is completely voluntary. You need only to respond to a few questions to see if anyone in your household is eligible to participate. If you are eligible and agree to be interviewed, you may refuse to answer any question you are asked during the study. Once you are selected and agree to participate, you will have the opportunity to help your state and community legislators, government agencies and public health officials better respond to an important environmental concern.

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