



Blood study ongoing; too soon for conclusions

Sunday, February 13, 2005 DAVID GARABRANT

GUEST COLUMNIST

In mid- to late-February, letters will be going out to some residents of the Midland-Saginaw area. The letters give the results of University of Michigan blood tests for the presence of dioxins. But these results are very preliminary -- and people who receive them should not jump to conclusions.

Here's why:

Beginning last fall, our team of University of Michigan scientists began studying dioxins in the Midland and Saginaw areas. We are studying the level of toxic dioxin compounds in soil, household dust and the blood of residents we have contacted. Our goal is to find out whether elevated levels of dioxins in the environment are getting into people's bodies.

We've received excellent cooperation with the residents we have contacted. Among those eligible to provide blood samples, more than 90 percent agreed to have blood drawn.

Those blood samples have been analyzed. Now we are sending out letters to the participants in the study, giving them their individual results.

We are not making these individual results public, and we have taken effective safeguards to protect their privacy. But because some individuals may decide to make the information public themselves, and that could lead to public discussions, I believe it is important to explain why these preliminary results do not yet give us a basis for drawing any conclusions.

Almost everyone has some measurable level of dioxins in his or her blood, and most persons in the United States have been exposed to small amounts of dioxins in food. What we want to know is whether the level of dioxins is higher among residents of the Tittabawassee River flood plain than the dioxin level among residents elsewhere in Michigan. And, if the level is higher, we want to find out whether that's due to dioxins in the environment in the Midland-Saginaw area.

In our letters that are going out to the individual participants in the University of Michigan study, we tell each participant the combined total of 29 dioxin-like compounds in that person's blood. In technical terms, we use the scientific measurement of picograms of dioxins per gram of blood lipids, which is the same as parts per trillion.

And we tell each participant how his or her level compares with those of people in other parts of the country, based on four separate, earlier U.S. studies.

But that's not the whole story.

We need to know the relationship between levels of dioxins in soil, household dust and blood for all the study participants, both those in the Midland-Saginaw area and a separate

group, for comparison, in Jackson and Calhoun counties. Only then can we draw scientifically valid conclusions as to whether any increased levels of dioxins in people are directly due to increased levels in their environment.

This spring we will conduct tests in the Jackson-Calhoun areas, and also we will continue tests in Midland-Saginaw. More than 1,000 Michigan residents will have participated in our study when it's completed. Not all have done so yet, so we still have a way to go before we get the entire picture.

That means it's not yet possible to make any judgment about whether or not dioxins in the environment explain why any one individual has higher dioxins in his or her blood. And it's not yet possible to make such a judgment about Midland-Saginaw residents in general.

Not yet.

But we will have the answers to these questions by the end of next year. That's when we will make public the results of our University of Michigan study. We'll make them public in a variety of ways, including as a published scientific report, as information posted on our Web site (www.umdioxin.org), and at public meetings.

All of this takes patience, but it's worth the wait. By the end of next year we'll have solid scientific conclusions, based on facts, as to whether or not dioxins in the environment are ending up in people's bodies in this part of Michigan. Until then, it's too soon to tell.

David Garabrant is a University of Michigan professor of environmental health sciences, professor of epidemiology and associate professor of emergency medicine. His team is leading a study of dioxin exposure in Midland and Saginaw counties.

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