

Cancer questions grow around Fermi nuclear plant

State health report shows 31 percent increase in cancer rate among young people in Monroe County since 1996

By Eartha Jane Melzer 2/17/09 7:44 AM



Fermi nuclear power plant, Monroe Mich. (Photo: mandj98 via Flickr.com)

The cancer rate among people under the age of 25 in Monroe County rose at more than three times the rate of the rest of the state between 1996 and 2005, according to a report generated by the Michigan Department of Community Health (MDCH). Between 1996 and 2000, the average rate of cancer cases for this group was 18.5 cases per 100,000 people; between 2001 and 2005, the rate grew to 24.3 per 100,000. Between 1996 and 2000 the statewide rate of cancer for this group was 20.2 per 100,000; between 2001 and 2005, the rate was 21.9.

Monroe is home to DTE Energy's Fermi II nuclear power plant, which became fully operational in 1988. While industry and government experts dismiss the possibility that local cancer rates are related to the nuclear plant, critics of the plant and nuclear power say more study is needed.

The new report, compiled in response to questions submitted by

Michigan Messenger, sheds new light on the issue.

In the 1980s, the cancer rate for young people in Monroe County was below the state average. In the '90s this rate grew, and in the first half of 2000 the cancer rate for this group in Monroe was greater than the state average. For the period 1999-2004, there is data to compare the Monroe under 25 cancer rate to both the Michigan and U.S statistics. The rate was 23.5 per 100,000 in Monroe County, 21.5 per 100,000 in Michigan and 19.5 per 100,000 nationwide, according to the Centers for Disease Control (CDC).

These numbers include all types of cancers reported for this group.

In September, DTE Energy applied for a license to build a new reactor at the Fermi complex. Opponents of the plant say they want more surveillance of local health issues before the project goes forward. They point to North Elementary School (2.2 miles from Fermi) and Jefferson High School, (2.5 miles from the power plant) as reasons for particular concern.

“Anecdotally, there is a lot of cancer,” said Michael Keegan, a social scientist and spokesman for the group Don’t Waste Michigan, which is one of several groups that object to the development of a new reactor. “We need to have baseline health studies done and monitor for the occurrence of radionuclides in the environment,” he said.

“That is pretty alarming,” Keegan said when told about the cancer stats provided by MCDH. “The question is what is the causal agent.”

The answer is not known.

The federal Nuclear Regulatory Commission (NRC) is responsible for overseeing operations at nuclear plants such as Fermi and has “adopted limits for nuclear emissions and exposure established by the international scientific community,” according to spokeswoman Viktoria Mytling. Agency protocols require that plant operators submit reports about radiation levels at the plant and carry out periodic inspections of the plant.

Levels of radiation above those considered safe by the NRC have never been detected around any of the state’s five reactors, according to Bob DeHaan, chief of the Radiological Assessment Division of the state Department of Environmental Quality (DEQ). DeHaan’s division measures radiation in the air, water and cow’s milk near nuclear plants. Small amounts of radioactive iodine, an isotope associated with nuclear power plants, have been detected in cow’s milk around Fermi and across the state, he said.

“None of the environmental levels are in excess of what NRC says is allowable,” DeHaan said.

DeHaan declined to comment on the Monroe cancer statistics, saying, "I am not an epidemiologist."

Though the radiation levels may be low, they are a source of concern for some in the area.

"Sometimes we hear from patients that there are other people with similar cancers in their area," said Dr. Jeffrey Taub, a leukemia specialist at Children's Hospital in Detroit, "but it is hard to link cancer to environmental causes."

Dr. Janette Sherman, adjunct professor at Western Michigan University's Environmental Institute and author of "Life's Delicate Balance: Causes and Prevention of Breast Cancer," has spent her career researching environmental causes of cancer. She said that cancer among young people should be viewed as an indicator for radiation problems associated with nuclear plants.

Radioactive isotopes such as iodine 131, cesium 137 and strontium 90 are passed on to people through cow's milk, she said. "They come out of the stack and fall on the ground. They permeate the water and are eaten in food."



Michigan cow (Photo: Technically Nina via Flickr.com)

Children are particularly vulnerable to this radiation, she said. "It doesn't take 40 years to get leukemia if you are a kid."

Sherman said that her analysis of leukemia statistics in the United States indicates that kids living near power plants are more likely to get the disease.

Sherman said that the rise in cancer rates around Fermi is significant.

"I think people ought to be concerned," she said. "We don't need to have nuclear power. We have solar and wind and conservation."

Sherman's findings relate to those of a 2007 German study that was touted by that country's Federal Office for Radiation Protection as "the

most painstakingly designed and most exhaustive survey worldwide.”

This study, published by the German Childhood Cancer Registry in 2007, found that the rate of leukemia for children under 5 years old who live within 3.1 miles of nuclear reactors is twice the rate experienced by children in the region as a whole. But the study concluded that the increase could not be directly attributed to nuclear activity. “People in our research division have reviewed the study and concur with its conclusions,” said NRC spokeswoman Mylting.

Dr. Rebecca Head, health officer for the Monroe County Health Department, said that the health department is not involved with cancer cases.

“If there really is an increase in the rate of cancer then I would expect the state to either do their own study or call in the federal agency associated with the CDC,” she said.

The CDC’s Agency for Toxic Substances and Disease Registry “can sometimes come in and do studies to find out what is going on and whether they can attribute it to any factor,” she said “We don’t have money to do our own program much less to take on an expensive survey.”

MDCH spokesman James McCurtis said that his agency is not involved in investigating cancer trends in Monroe County and that agency epidemiologists generally only initiate investigations when asked to do so by county health departments.

John Austerberry, a spokesman for DTE Energy, told Michigan Messenger that he was unaware that state data shows rising cancer rates among young people in Monroe.

“I had not heard of that,” he said. “I don’t think that we undertake studies of that nature because it is being done by a number of government agencies.”

In comments submitted to the NRC at a recent open house about plans for a new reactor, Joe Mangano, a New Jersey-based public health expert with the Radiation and Public Health project, urged an investigation of cancer rates in Monroe County.

“Those who create a poison are responsible for demonstrating that it is safe (this is the Precautionary Principle in public health),” Mangano told Michigan Messenger in an e-mail exchange. “But instead of utilities and the NRC conducting studies, they set an arbitrary limit of radiation emissions and exposure, and declare any levels below this to be ‘safe.’ Neither utilities nor the NRC conducts health studies — they don’t even monitor local cancer rates near reactors — and they strongly criticize any studies that suggest harm.”