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Science fears PCB is threat to unborn

RESEARCH TRIANGLE PARK (AP) — Researchers at the National Institute of Environmental Health Sciences say they are concerned over the possible effects of the industrial chemical PCB on human fetuses.

Scientists working on a project coodinated by the institute recently turned up evidence that PCBs (polychlorinated biphenyls) damage the nervous systems of unborn mice, in some cases causing dramatic abnormalities and in others bring about more subtle learning and coordination difficulties.

Dr. Hugh Tilson said it is possible that human fetuses exposed to low doses of PCBs in the womb might also have hidden effects that would not appear until later in life or under stress.

"You have to worry about the long-term effects," Tilson said. "We have no idea what is the effect on children in terms of longevity."

PSBs were known to cause still births and birth defects and weaken the body's normal defenses against disease and cancer-causing agents, but the new study by the institute added evidence of interference with normal development of the nervous system in the fetus.

The production of PCBs has been limited by the federal government since the early 1970s, but products such as transformer insulation and some plastics containing the substances remain in use. PCBs also have turned up in animal meat and the milk of humans.

Tilson said there has been no evidence of the effects of PCBs on the human nervous system but that experiments with mice "provide ideas on what sorts of functions could be affected in humans." The study was coordinated by Dr. John McLachan and Dr. George Lucier at the institute, with scientists in other parts of the country working on different phases of it.

Dr. James Davis of Madison, Wisc., exposed pregnant mice to a pure form of a type PCB called 4CB and found no effects of the substance on the pregnant mice. However, about 12 days after birth, some of the offspring became hyperactive "spinners," running around in circles when exposed to any kind of noise.

Studies of the "spinning" mice and their siblings showed impaired coordination and learning ability in both groups, with the effects being most dramatic in the spinners.

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