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Chemicals decrease fertility, study says

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American men seem to be less fertile than they were a decade ago and chemical contamination of the environment may be the cause, according to a Florida State University chemist.

A study of 123 college men supports growing evidence that sperm counts seem to have declined rapidly over the last 10 years.

"The evidence indicates that men in the U.S. seem to be less fertile now than in the '60s and '50s," said Ralph Dougherty, who conducted the study.

The median number of sperm in the Florida study was 60 million sperm per milliliter of semen. This is nearly a 50 percent reduc-

tion compared to that of the period from 1920 through the '50s, when the median sperm count was more than 100 million sperm per milliliter, he said.

Furthermore, 23 percent of the Florida males tested had a sperm count of 20 million or less, which is equivalent to being sterile, said Dougherty.

In order for conception in a woman to take place, a sufficient number of sperm have to be present so that there is an increased likelihood that one will fertilize an egg.

Analysis of the semen samples showed that all of them were contaminated with potentially harmful chemicals, including pesticides and fungicides, said Dougherty.

The most common toxic agents were polychlorobiphenyls, DDT metabolites, hexachlorobenzene and pentachlorophenol.

These chemicals get into the body through the consumption of food that has been contaminated by them. The compounds are dangerous because they can damage the genetic code inside cells, causing a slowdown in cell division or death of the cell, he explained.

"If chemical contamination is involved in the declining sperm count, we should take steps to remove them from the environment," Dougherty said.

Sperm cells are more sensitive to the harmful effects of the toxic agents because they divide more rapidly than do other cells.