

## IMMUNOLOGY

# Pregnant Women Warned

➤ A PREGNANT WOMAN and the child she carries could be harmed by live-virus vaccine such as that used against polio and smallpox, a Harvard pediatrician warns.

"Unless an epidemic threatened," Dr. Samuel L. Katz wrote in the *New England Journal of Medicine*, 270:884, 1964, "I can see no reason for the deliberate exposure of a pregnant woman (and thereby perhaps her fetus) to a live-virus vaccine."

No report has appeared to implicate polio-virus vaccines as a cause of fetal damage, Dr. Katz said, but the fact that infection of the blood stream may occasionally occur in nonimmune persons after live poliovirus vaccines have been given, "justifies the speculation."

Neither the World Health Organization nor the U.S. Public Health Service has considered pregnancy an indication that oral vaccine should not be given.

Two cases of damaged fetus resulting from smallpox vaccination were reported following the 1962 British outbreak of smallpox, when widespread vaccination was advised, however.

The pregnant woman is the target of immunization campaigns against many diseases during her pregnancy, the pediatrician notes, and whenever a list of persons of high risk is compiled, she can be found among them.

"This vigorous approach has gone unchallenged until recently," he said, "when

more attention has been devoted to the fetus she carries."

The optimistic prophesies that a number of new vaccines (including those for infectious hepatitis and German measles) are about to be achieved by laboratory workers do not evoke the immediate enthusiastic reception previously given such pronouncements, Dr. Katz said, because of a "greater awareness of potential problems."

Although praising the ultimate results of smallpox and polio vaccines in reducing the occurrence of these diseases, Dr. Katz illustrated some of the hazards that have gone along with their earlier use.

Another article (p. 870) in the same issue of the *New England Journal of Medicine* reported possible reasons for the failure of commercial polyvalent influenza vaccine to protect against Asian flu.

Studies of 180 children in two state schools in central Ohio showed that those who were vaccinated did not get any "significantly greater" protection than those who had not been vaccinated.

The most likely explanation, representatives of the Ohio Department of Health, Columbus, said, is that the current virus was not included in the vaccine. Drs. Winslow J. Bashe Jr., Domingo Leonida and Peter Greenwald, with Howard Stegmiller reported the study.

• *Science News Letter*, 85:308 May 16, 1964

## PUBLIC HEALTH

# Few Pesticide Poisonings

➤ MORE PEOPLE DIE from chemical compounds used for years in attacking insect pests than from over-exposure to all the newer pesticides combined, a University of Cincinnati health expert believes.

Arsenic, mercury, thallium, fluorine and phosphorus, or compounds of these elements were in use long before DDT or the other synthetic organic compounds, Dr. Mitchell R. Zavon told the American Medical Association's congress on environmental health problems.

DDT, which stands for dichloro-diphenyl-trichloroethane, is the most widely used insecticide, but it has not caused many cases of acute poisoning, Dr. Zavon pointed out.

"Most reports of DDT intoxication have proved to be due to the solvent, frequently kerosene," he said.

Pesticide poisoning is actually an uncommon occurrence, with no evidence of any chronic illness resulting from long-term exposure to these new or synthetic organic materials, he emphasized.

"The casual passerby, the inhabitant of the house that has been treated for termites, even the inhabitant of a house sprayed by a low flying plane does not ordinarily develop symptoms of pesticide intoxication," he said.

The most common pesticide reported

poisoning persons in the Cincinnati area is probably a form of pellet containing an arsenical for roach control, he said. Accidental exposures of children who cannot read labels on pesticides are most frequent in urban communities.

With many people attempting to "recapture rusticity" by intensive cultivation of their nine-by-nine-foot gardens, some dangerous exposures occur but are not frequent.

The effect of pesticides on the general environment will probably require many years of research to evaluate, Dr. Zavon said. New analytical methods and other new techniques may have to be developed, he said.

• *Science News Letter*, 85:308 May 16, 1964

## CHEMISTRY

# New Nylon Cement Is Super-Strong

➤ A NEW TYPE of flexible cement is 27 times as resistant to a blow as the normal variety.

Reinforced with nylon fibers, it will not break, crumble or shatter, but it will stretch. Developed by the U.S. Army, samples were struck 50 times against a steel edge, with no ill effects.

• *Science News Letter*, 85:308 May 16, 1964

# Questions

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ASTRONOMY—What are "friendly" diamonds? p. 309.

GENERAL SCIENCE—In what way has the public's attitude toward scientists changed? p. 314.

MEDICINE—Which women show less risk of breast cancer? p. 312.

METEOROLOGY—What new "whistler" has been discovered in the high atmosphere of the earth? p. 313.

PUBLIC HEALTH—What is the cause of most DDT poisoning? p. 308.

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