



CDC's Third National Report on Human Exposure to Environmental Chemicals

Spotlight on Organochlorine Pesticides

Organochlorine pesticides were introduced in the 1940s and persist in the environment long after they are applied. The U.S. Environmental Protection Agency banned many of the uses of these chemicals during the 1970s and 1980s, but other countries still use them.

How People Are Exposed to Organochlorine Pesticides

People can be exposed to organochlorine pesticides by

- Eating fatty foods, such as milk, dairy products, or fish that are contaminated with these pesticides.
- Eating foods imported from countries that still allow the use of persistent pesticides.
- Passing these pesticides through the placenta to the unborn child or by breastfeeding.
- Absorbing these pesticides through the skin. One organochlorine pesticide, commonly known as lindane, is used to treat lice and scabies and is readily absorbed through skin.

How Organochlorine Pesticides Affect People's Health

- Organochlorine pesticides can produce reproductive and neurologic effects in animals.
- People who work with organochlorine pesticides for a long time have shown changes consistent with liver injury.
- Organochlorine pesticides can build up in a person's body over time, but the health effects associated with such exposure are not known.

Levels of Organochlorine Pesticides in the U.S. Population

- For the *Third Report*, scientists tested blood samples in people aged 12 years and older and urine samples in people aged 6-59 years who took part in CDC's national study known as the National Health and Nutrition Examination Survey.
- The *Third Report* provides encouraging findings on three organochlorine pesticides: aldrin, endrin, and dieldrin. These three pesticides were used widely in agriculture, but in the mid to late 1980s, their use ended or was discontinued in the United States.

Although these pesticides are no longer used in the United States, they are still used in other countries. Results from the *Third Report* show undetectable or very low levels of these three organochlorine pesticides.

Information about levels of specific organochlorine pesticides in the U.S. population is available in the *Report* at <u>http://www.cdc.gov/exposurereport</u>.

For More Information

 Agency for Toxic Substances and Disease Registry Toxicological Profile Information Sheet: <u>http://www.atsdr.cdc.gov/toxpro2.html</u>
Public Health Statements: <u>http://www.atsdr.cdc.gov/phshome.html</u>
ToxFAQs: <u>http://www.atsdr.cdc.gov/toxfaq.html</u>

 U.S. Environmental Protection Agency Recognition and Management of Pesticide Poisonings, 5th Edition, Chapter 6: <u>http://www.epa.gov/pesticides/safety/healthcare/handbook/contents.htm</u> Types of Pesticides: <u>http://www.epa.gov/pesticides/about/types.htm</u>

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