



The Report on Carcinogens

Key Points



- Scientific, public health document identifying substances that pose a cancer risk
- Lists substances as either known or reasonably anticipated to be human carcinogens
- Includes information on 240 substances, including eight newly reviewed listings
- Prepared by the National Toxicology Program for the Secretary of the U.S. Department of Health and Human Services

What is the Report on Carcinogens?

The Report on Carcinogens is a scientific and public health document that identifies substances that may put people at increased risk for cancer. It is intended to help people make informed decisions about their own health. It is a congressionally mandated document prepared by the National Toxicology Program (NTP) for the Secretary of the U.S. Department of Health and Human Services.

Nearly everyone's life has been directly or indirectly affected by cancer. The Report on Carcinogens identifies environmental substances, such as some chemicals and biological agents, that pose a potential cancer hazard.

How are substances listed?

Agents, substances, mixtures, or exposures, collectively called substances, can be listed in the Report on Carcinogens, either as *known to be a human carcinogen* or as *reasonably anticipated to be a human carcinogen*. See <http://ntp.niehs.nih.gov/go/15209> for specific listing criteria.

Known to be a Human Carcinogen

This category is used primarily when there is sufficient evidence of cancer from human studies showing a cause-and-effect relationship between exposure to the substance and human cancer. Occasionally, substances are listed in this category based on human studies showing that the substance causes biological effects known to lead to the development of cancer.

Reasonably Anticipated to be a Human Carcinogen

This category includes substances where there is limited evidence of cancer in humans or sufficient evidence of cancer in experimental animals showing a cause-and-effect relationship between exposure to the substance and cancer. Alternatively, a substance can be listed in this category if there is evidence that it is a member of a class of substances already listed in the Report on Carcinogens or causes biological effects known to lead to the development of cancer.

Expert, scientific judgment, with consideration given to all relevant information, is used to review all cancer studies and to reach conclusions.

What's New in the Report on Carcinogens?

In the 12th Report on Carcinogens, eight substances were newly reviewed to determine listing status. The industrial chemical, formaldehyde, and a botanical known as aristolochic acids, are two substances added to the category *known to be a human carcinogen*. Six other substances, including captatafol, cobalt-tungsten carbide: powders and hard metals, certain glass wool fibers (inhalable), *o*-nitrotoluene, riddelliine, and styrene, are listed in the new report as substances *reasonably anticipated to be a human carcinogen*.

Access the 12th Report on Carcinogens at <http://ntp.niehs.nih.gov/go/roc12>.



Summary of Newly Reviewed Substances

Substance	Listing Status	Description of Substance
Aristolochic Acids	<i>Known to be human carcinogens</i>	Botanical
Formaldehyde	<i>Known to be a human carcinogen</i>	Industrial Chemical
Captafol	<i>Reasonably anticipated to be a human carcinogen</i>	Fungicide
Cobalt-Tungsten Carbide: Powders & Hard Metals	<i>Reasonably anticipated to be a human carcinogen</i>	Metal
Certain* Glass Wool Fibers (Inhalable)	<i>Reasonably anticipated to be human carcinogens</i>	Synthetic Fiber
o-Nitrotoluene	<i>Reasonably anticipated to be a human carcinogen</i>	Industrial Chemical
Riddelliine	<i>Reasonably anticipated to be a human carcinogen</i>	Botanical
Styrene	<i>Reasonably anticipated to be a human carcinogen</i>	Industrial Chemical
The full report including information on 240 substances, can be found at http://ntp.niehs.nih.gov/go/roc12		

* Not all glass wool fibers cause cancer. Certain refers to those fibers that can enter the respiratory tract, are more durable, and remain in the lungs for long periods of time.

Who decides what substances should be included?

Anyone can nominate a substance to the NTP for consideration of its listing in or removal from the Report on Carcinogens. A formal evaluation is conducted for the nominated substances, and candidates are selected to proceed through the scientific review process.

How are the substances reviewed?

Once candidate substances are selected, an extensive scientific review process begins with multiple opportunities for public input. The review process also includes input from both external scientific experts and government scientists from federal health and regulatory agencies. All documents are peer reviewed by external scientists in a public forum and finalized based on NTP's review of the peer review comments. See detailed information on the review process at <http://ntp.niehs.nih.gov/go/29353>.

If something is listed in the Report on Carcinogens, does it mean it will cause cancer?

A listing in the Report on Carcinogens does not by itself establish that a substance will cause cancer in an individual. Many factors, including the amount and duration of an exposure, and an individual's susceptibility to a substance, impact whether a person will develop cancer or not. Consult with your physician or other appropriate specialist if you have questions concerning current or past exposure to any substance listed in the Report on Carcinogens.

What is in the full report? What information would be most useful to me?

The 12th Report on Carcinogens contains information on 240 listings, including some classes of related chemicals or substances. These include 54 substances listed as *known to be a human carcinogen* and 186 substances listed as *reasonably anticipated to be a human carcinogen*.

It is a cumulative report. It includes information on the newly reviewed substances, as well as information on all the substances listed in previous editions of the Report on Carcinogens.

Each substance included in the Report on Carcinogens contains a substance profile, which provides information from cancer studies that support the listing, as well as information about potential sources of exposure and current federal regulations to limit exposures.

How can people access the full report?

The 12th Report on Carcinogens can be downloaded or searched on the NTP website at <http://ntp.niehs.nih.gov/go/roc12>.

The National Toxicology Program (NTP) is an interagency program established in 1978. The program was created as a cooperative effort, to coordinate toxicology testing programs within the federal government, strengthen the science base in toxicology, develop and validate improved testing methods, and provide information about potentially toxic chemicals to health, regulatory, and research agencies, scientific and medical communities, and the public. The NTP is headquartered at the National Institute of Environmental Health Sciences (NIEHS). For more information about the NTP, visit <http://ntp.niehs.nih.gov>.

NIEHS supports research to understand the effects of the environment on human health and is part of the National Institutes of Health. For more information on environmental health topics, please visit our website at <http://www.niehs.nih.gov>.