

POLYCYCLIC AROMATIC HYDROCARBONS

What are polycyclic aromatic hydrocarbons?

Polycyclic aromatic hydrocarbons (PAHs) are a group of more than 100 different chemical compounds. They are formed in nature and are found in many places in the environment.

Where are PAHs found and how are they used?

PAHs are found in crude oil, coal, and gas. They can be released into the air as smoke or soot from volcanoes and forest fires. Burning tobacco or grilling meat can also release PAHs. Some PAHs are used in medicine and to manufacture dyes, plastic, and pesticides. They can also be found in asphalt, roofing tar, and creosote.

How can people be exposed to PAHs?

You could be exposed to PAHs through:

- **Breathing** smoke from tobacco or burning wood or coal in stoves or fireplaces. Exposure can also result from breathing burning garbage or leaves, or from cooking with a charcoal or gas grill. You can also breathe PAHs from car and truck exhaust, or in air near factories that release PAHs.
- **Eating** charbroiled or smoked meat.
- **Drinking** water that contacted PAHs.
- **Touching** materials containing PAHs, such as tar, soot, soil, or water. You can be exposed by touching wood preserved with creosote.

How do PAHs work and how can they affect my health?

Several PAHs cause cancer in humans. Others are considered to be probable or possible cancer-causing chemicals. Exposure to high concentrations of PAHs damages the skin and affects the body's ability to fight disease and infection.

How is PAH poisoning treated?

Most exposures to PAHs happen every day at low levels in the air we breathe and the foods we eat. Treatment for a short-term exposure is unlikely. Contact your doctor if you experience symptoms of PAHs poisoning.

Poison Control Center 24/7 Emergency Contact Number: 1-800-222-1222
DPH 24/7 Contact Number: 1-888-295-5156

What should I do if exposed to PAHs?

Remove anyone exposed to high levels of PAHs from the source of exposure. Seek medical treatment immediately.

What factors limit use or exposure to PAHs?

Most of the population is exposed to low levels of PAHs in the air and food we take in every day. Workers can be exposed to PAHs by inhaling engine exhaust, or by working in industries such as mining, oil refining, metalworking, chemical production, transportation, and the electrical industry.

Is there a medical test to show whether I've been exposed to PAHs?

Tests can determine if you were exposed to high levels of PAHs. Consult with your physician.

Resources

Agency for Toxic Substances and Disease Registry (ATSDR). 1995. *Toxicological Profile for polycyclic aromatic hydrocarbons (PAHs)*. Atlanta, GA: U.S. Department of Health and Human Services.

<https://wwwn.cdc.gov/TSP/ToxProfiles/ToxProfiles.aspx?id=122&tid=25>

U.S. E.P.A., *Health Effects Notebook for Hazardous Air Pollutants*,

<http://www.epa.gov/ttn/atw/hlthef/hapindex.html>