

CHROMIUM VI

Exposure to Chromium VI has the potential to harm your health. Contact with any hazardous substances can cause health effects and the occurrence and nature of the effects depend on how much, how long and how one comes into contact with the substance.

What is Chromium VI?

Chromium VI (Cr VI) is a naturally occurring element. It is found in rocks, animals, plants, soil along with volcanic dust and gases. Cr VI is present in the environment and can come in many different forms. Chromium VI is a known carcinogen.

How could I be exposed to Chromium VI?

People can be exposed to Cr VI by ingestion or inhalation.

What are the sources? Some people are exposed to Cr VI through their work. Activities such as making chrome plates, dyes, pigments, leather tanning, and wood preserving are common causes of Cr VI exposure. Cr VI is also found in the environment in soil and water after release from the manufacture, use and disposal of chromium based products.

The way Cr VI gets into your body is by eating food, drinking well water, or breathing in workplace air contaminated with Cr VI. You can also be exposed to Chromium VI by living near an uncontrolled hazardous waste site. People may also be exposed to chromium through tobacco smoke.

What are the health effects of Chromium VI Exposure?

Chromium VI exposure may cause nasal irritation or breathing problems, such as cough, shortness of breath, wheezing, and asthma. Ingestion may cause stomach or small intestine ulcers and anemia and may possibly be associated with stomach and liver cancer in humans. Chromium VI exposure has also been shown to cause lung cancers in workers. However, the symptoms experienced will vary from person to person, and some people who are exposed to Cr VI will not experience any health effects.

How can I limit or prevent my exposure to Chromium VI?

- Avoid chromium VI exposure sources.
- Do not allow children to play in soil near uncontrolled hazardous waste sites.
- Avoid smoking.
- Test your well water on a regular basis.

Is there a medical test to show if I have been exposed to chromium?

Exposure can be measured with a blood or urine test, which tests the level of Cr VI in your body. Levels of Cr VI in your blood or urine may not indicate the health effects experienced from the exposure.

Additional Information

Call the N.C. Department of Health and Human Services, Division of Public Health at (919) 707-5900 for additional information.

Agency for Toxic Substances & Disease Registry (ATSDR). Chromium. March 2011. Available at:

<http://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=17>

References

Agency for Toxic Substances & Disease Registry (ATSDR). ToxFAQs for Chromium. February 2013. Available at:

<http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=61&tid=17>

California Environmental Protection Agency. Public Health Goals for Chemicals in Drinking Water: Hexavalent Chromium (Cr VI). July 2011. Available at:

<http://oehha.ca.gov/water/phg/pdf/Cr6PHG072911.pdf>

State of North Carolina • Department of Health and Human Services
Division of Public Health

www.ncdhhs.gov

www.publichealth.nc.gov

N.C. DHHS is an equal opportunity employer and provider 2/15.

