



Summary of Health Effects

Carbon disulfide can affect the reproductive system and the nervous system in both animals and humans, as well as how babies develop.

How is carbon disulfide used?

Carbon disulfide is primarily used to make viscose rayon fibers.¹ It is also used to make cellophane and as a solvent for rubber, sulfur, oils, resins and waxes.¹

Toxicity: What are its health effects?

Carbon disulfide is considered a reproductive and developmental toxicant, based on evidence from animal testing and occupational exposure studies.^{1,2}

The nervous system is the primary target organ system in both humans and animals following inhalation of carbon disulfide.³ Adverse

neurological effects include behavioral (personality, irritability and memory)², histopathological (tissue) and neurophysiological (nervous system function) effects.³

Exposure: How can a person come in contact with it?

A person can come in contact with carbon disulfide by breathing it in, swallowing it, or from skin contact.³

Inhalation is the most common route of exposure.³ Absorption through the skin may occur through contact with substances that contain carbon disulfide.³

A breakdown product of carbon disulfide was detected in most of the population surveyed, in the urine of both smokers and nonsmokers.⁴

References

1. California Environmental Protection Agency, Office of Environmental Human Health Assessment (2002). *Chronic toxicity summary for carbon disulfide*. Retrieved from www.epa.gov/sites/production/files/2016-09/documents/carbon-disulfide.pdf
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3. Agency for Toxic Substances and Disease Registry (1996). *ATSDR Toxicological profile for carbon disulfide*. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Services. Retrieved from www.atsdr.cdc.gov/toxprofiles/TP.asp?id=474&tid=84

4. Centers for Disease Control and Prevention (2014). *Fourth report on human exposure to environmental chemicals, updated tables, (August, 2014)*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. www.cdc.gov/exposurereport/