

5th & Hill Toxic Chemicals and Metals: Health Effects

This information was compiled by Champaign County Health Care Consumers (CCHCC) from the Agency for Toxic Substances and Disease Registry (ATSDR). This handout is for informational purposes only.

Name	Description	Classified Carcinogen	Short-Term Health Effects	Long-Term Health Effects
Acetone	Colorless liquid with distinct smell and taste	NO	Irritation of nose, throat, lungs and eyes. Dizziness, headache, confusion, nausea and vomiting	Respiratory irritation, headaches, dizziness
Arsenic	White or colorless, odorless powder that does not evaporate	YES	Stomach ache, nausea, diarrhea, vomiting, fatigue, nerve damage or death	Skin discoloration. Liver, bladder and lung cancer. Circulatory, nervous system disorders
Benzene	Colorless liquid with sweet odor, quick to evaporate and dissolve in water	YES	Dizziness, rapid heart rate, tremors, confusion, convulsions or death	Damage to bone marrow and blood production, leukemia, anemia and excessive bleeding, damage to reproductive organs and immune system
Chromium	Naturally occurring element	YES	Respiratory problems, irritation of the nose and throat, and skin rashes	Damage to respiratory tract, male reproductive system and sperm, as well as cancers in the lungs, intestines and stomach
Cyanide	Colorless gas or white solid with faint, bitter odor	NO	Brain and heart damage, coma, convulsions or death	Breathing difficulty, chest pain, vomiting, blood changes, headache and enlargement of thyroid
Ethylbenzene	Colorless, flammable liquid with gasoline-like odor	YES	Irritation of the eyes, throat, and skin, dizziness and vertigo	Damage to the inner ear and hearing, as well as damage to, and cancers of the lung, liver and kidneys
Lead	Heavy, low melting, bluish-gray metal	NO*	Damage to brain, kidneys and nervous system, or death	Damage to nervous system, weakness in wrists, hands or feet, anemia, miscarriages, and kidney damage
Manganese	Naturally occurring metal	NO	Can affect behavior and nervous system	Slowed movements, clumsiness, damage to nervous system, and possible reproductive damage

Name	Description	Classified Carcinogen	Short-Term Health Effects	Long-Term Health Effects
Mercury	Naturally occurring metal in the form of a shiny, silver-white odorless liquid or a colorless, odorless gas	NO*	Damage to brain, kidneys and muscle coordination, nausea, dizziness, burning sensation in lungs, damage to airways	Brain and nervous system damage, tremors, personality changes, memory and sensation loss, kidney damage
Methylene Chloride	Colorless liquid with mild, sweet odor	NO*	Impaired hearing and vision, dizziness, unsteadiness, nausea, tingling in hands and feet	Poor balance and coordination, and impaired hearing or vision
Nickel	Naturally occurring element	NO*	Allergic reactions can cause rash or an asthmatic response	Chronic bronchitis, reduced lung function, stomach ache, kidney and lung damage
Polycyclic Aromatic Hydrocarbons**	Group of chemicals that form a white crystal-like solid	NO*	Irritation of the skin and mucous membranes	Damage to liver, kidneys, lungs and blood, possible correlation with cancer
Styrene	Colorless liquid that evaporates easily	NO*	Color blindness, tiredness, slow reaction times, difficulty with concentration and balance	Damage to the nervous system, tiredness and concentration problems
Toluene	Clear, colorless liquid with a distinctive smell	NO	Light-headedness, dizziness, sleepiness, damage to brain and kidneys or death	Brain damage, tiredness, confusion, weakness, memory loss, nausea, inability to think clearly, reproductive damage
Xylenes(total)	Colorless, sweet-smelling liquid.	NO	Irritation of skin, eyes, nose and throat, difficulty breathing, impaired memory, and damage to nervous system	Damage to kidney, lungs, heart, and nervous system; headaches, dizziness, confusion, poor coordination and balance

* While definitive evidence concerning the chemical's cancer-causing properties is not known, one or more health organizations have labeled this chemical or metal as a probable cancer-causing agent.

**Polycyclic Aromatic Hydrocarbons are composed of many chemicals, including:

Acenaphthene, Acenaphthylene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h,)anthracene, Dibenzofuran, Fluorene, Fluoranthene, Indeno(1,2,3,cd)pyrene, Naphthalene, Phenanthrene, Pyrene, 2-methylnaphthalene.

For more information, please contact:

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