

Part I: Heavy Metal Poisoning Signs & Symptoms¹

By Andrea M. Zander, eHow Contributor, last updated June 30, 2012

Though our bodies require some of them in varying amounts, overexposure to heavy metals can cause illness and even death. What constitutes overexposure depends on the type of heavy metal. A little arsenic or lead can do a lot of damage, whereas barium, nickel, and cadmium have medical uses. Toxic waste, legacy materials such as lead pipes, certain work environments, and contaminated food and water supplies all expose us to varying levels of heavy metals.

Sign or Symptom: Signs are observable indications of poisoning, such as skin discoloration or behavioral changes. Symptoms are subjective feelings a person has that cannot be felt by anyone else, such as a headache or sleepiness.

Heavy Metals: Heavy metals are metallic elements with a high atomic weight and a density at least five times greater than that of water. Of the 20-plus heavy metals, four--lead (Pb), cadmium (Cd), mercury (Hg), and inorganic arsenic (As)--cause toxicity in humans, even at low levels. Present in toxic waste, they enter the body through the food chain and accumulate in both hard and soft tissue. Other heavy metals, such as nickel, can cause toxicity, but people are less likely to encounter them at toxic levels.

Acute heavy metal poisoning occurs when a person is exposed directly to toxic levels. Signs and symptoms occur within two weeks after exposure and soon become severe. Chronic poisoning occurs when a person is exposed to non-toxic levels over a period of time, possibly even years, until they reach toxicity levels in the body. Like the exposure, signs and symptoms of chronic heavy metal poisoning may develop over years.

Signs of Heavy Metal Poisoning

Signs of acute heavy metal poisoning may include:

- Anorexia
- Arrhythmia (abnormal changes to heart rhythm)
- Arthritis
- Changes in mucous membranes
- Convulsions
- Cough
- Diarrhea

¹ http://www.ehow.com/list_5928522_heavy-metal-poisoning-signs-symptoms.html

Difficulty breathing
Fever
Hypertension
Red skin at contact point--arsenic toxicity
Renal (kidney) dysfunction
Sore throat
Tachycardia (heart rate over 100 beats per minute)
Vomiting
Weakness

Signs of chronic heavy metal poisoning may include:

Allergies
Alopecia (abnormal hair loss)--cadmium toxicity
Anemia--cadmium toxicity
Arthritis
Autism
Birth defects
Blindness
Brain damage--mercury toxicity in unborn children
Cancer
Cardiovascular disease
Cerebral palsy--mercury toxicity in unborn children
Chronic obstructive lung disease--cadmium toxicity
Cognitive and motor dysfunction--mercury toxicity
Emotional instability
Emphysema
Forgetfulness
Fragile bones--cadmium toxicity
Garlic odor to breath--arsenic toxicity
Growth impairment
Hyperactivity
Hyperkeratosis (excessive skin growth on palms and soles)--arsenic toxicity
Hyperpigmentation (excess darkening of skin)--arsenic toxicity
Inability to speak--mercury toxicity in unborn children
Insomnia
Kidney damage
Learning disorders--cadmium toxicity
Liver damage
Mental retardation

Mood swings
Muscular weakness
Neuropathy (inflammation and wasting away of nerves)--arsenic toxicity
Osteoporosis
Paralysis (starting in the forearms--lead toxicity)
Psychosis
Shaky hands
Tremors
Weight loss

Symptoms of Heavy Metal Poisoning

Symptoms of acute heavy metal poisoning may include:

Fatigue
Hallucinations
Headache
Loss of appetite
Metallic taste in the mouth--mercury toxicity
Nausea
Numbness
Severe abdominal pain
Sleeplessness
Vertigo
Visual disturbances (blind spots, halos, etc.)

Symptoms of chronic heavy metal poisoning may include:

Anxiety
Dyslexia
Lack of concentration
Loss of taste and smell
Migraines
Paresthesia ("needles and pins" sensation)

Part II: Toxic Metals and Minerals: Sources and Symptoms

All the toxic metals can be passed from mother to child via the placenta.

Toxic/Poisoning: Sources and Symptoms of Specific Heavy Metals

Aluminum:

Sources: *Table salt (aluminum is added to this mineral deficient product as an anti-caking agent), antiperspirants (including “natural crystal” and “deodorant stones”), tap water (aluminum causes dirt to settle out of the water), a drying agent added to cocoa, table salt, and baking powder, most cosmetics use aluminum as a base, all prepared foods made with tap water, uncoated aluminum cookware, foods cooked or stored in aluminum foil, aluminum cans, antacids (Maalox, Mylanta, Roloids and many others), peppermint, spearmint and wintergreen are naturally high in aluminum, many dry animal feeds are contaminated with aluminum.*

Early symptoms: flatulence, headaches, dryness of skin and mucous membranes, tendencies for burning pain in head relieved by food, loss of memory and mental confusion, some dementias, reduced sweating.

Later symptoms: Alzheimer’s disease, other dementias, amyotrophic lateral sclerosis, anemia, colitis, dental cavities, kidney and liver dysfunction, neuromuscular disorders, Parkinson’s disease

Additional Aluminum factors: Heightened sensitivity to light or darkness, Abnormal sensitivity to hot and cold temperatures, An aversion to noise, touch, movement, odors, etc., Unexplained feelings of apprehension or uneasiness, Feelings of inferiority, embarrassment or shame, Feelings of irritability, agitation or annoyance.

Arsenic:

Sources: *Pesticide residues, drinking water, some fish and other foods such as beer, table salt, paints, pigments, cosmetics, fungicides, pesticides, glassmaking, insecticides, rat poison, tanning leather and to preserve wood.*

Symptoms: anorexia, weakness, diarrhea, edema, keratosis, impaired healing, dermatitis, hair loss, sore throat, kidney damage, goiter, headache, vertigo, muscle spasms, stupor, fever, pallor, jaundice, abdominal pain, herpes

Additional Arsenic Factors:

Cadmium:

Sources:

Cigarette and marijuana smoke, tap water, food grown on cadmium contaminated soil, refined and processed foods, processed meats, cola drinks, instant coffee, occupational exposure: battery manufacture, semiconductors, dental materials. Air pollution: incineration of rubber tires, plastic and paints, large fish such as tuna, cod and haddock.

Symptoms: tends to harden and inflame the arteries leading to arteriosclerosis, atherosclerosis, impaired circulation, hypertension, heart failure, cancer, hypoglycemia, diabetes, mental illness, bone pain, osteoporosis, tendon problems, damages all body organs, loss of sense of taste, wound healing delayed, migraine headaches, psoriasis, kidney failure.

Additional Cadmium Factors: Bone and joint aches, heart /blood pressure/, fatigue, headache, anemia, seizures

Copper:

Sources: *Vegetarian diets, chocolate, avocado, some nuts, liver and kidneys, wheat germ and bran, copper water pipes, copper sulfate added to drinking water, compounds added to swimming pools, mineral supplements (especially prenatal vitamins), copper cookware, birth control pills, copper intrauterine devices, response to stress, weakened adrenal glands.*

Physical symptoms: *acne, adrenal insufficiency, allergies, alopecia, anemia, anorexia, arthritis, autism, connective tissue problems of all kinds, hair and nail conditions, epilepsy or seizures, elevated cholesterol, cancer, diabetes, estrogen imbalance, fatigue, migraine headaches, hyperthyroidism, infections, inflammation, insomnia, multiple sclerosis, myocardial infarction, nausea, premenstrual tension, scoliosis, all skin conditions, tooth decay, urinary tract infections.*

Mental emotional symptoms: *copper is often involved in most cases of anxiety, bipolar disorder, depression, fears, mind racing, mood swings, panic attacks, schizophrenia, spaciness.*

Additional Copper Factors:

Fluoride:

Sources: *Fluoridated drinking water, mouth wash, toothpaste, fluoride treatments done in the dental office, fruit juices and all foods processed with tap water*

Symptoms: hypothyroidism, hip and other fractures, brown discoloration and brittleness of teeth, birth defects, lowered IQ, cancer, neuromuscular conditions, bone diseases

Additional Factors:

Iron:

Sources: *Red meats, white flour products, vitamin and mineral supplements (especially pre-natal vitamins), organ meats, kelp, Irish moss, and green vegetables, although the iron is not utilized as well from vegetables.*

Symptoms of deficiency: fatigue, weakness, brittle or ridged nails, decreased resistance, slow oxidation, pallor, low blood pressure, anemia, dizziness.

Symptoms of excess: Anger, liver disease, cancer, iron deposits in organs, diabetes, arthritis, cirrhosis of the liver, schizophrenia, emotional problems, high blood pressure, myasthenia gravis, hemochromatosis, hemosiderosis

Additional Iron Factors: Excess iron can lead to aggressive behavior.

Lead:

Sources: *Lead arsenate and other pesticides, tap water (especially from wells with lead soldered pipes or other contamination), some hair dyes and some lipsticks, leaded glazes on ceramic plates from other nations, manufacture of batteries, mine smelting industries, cigarette smoke, food cans soldered with lead, lead based paints, colored inks.*

Symptoms: Lead has over 100 symptoms. Abnormal brain function, blindness, convulsions, deafness, dyslexia, encephalitis, epilepsy, insomnia, multiple sclerosis, muscular dystrophy, Parkinson's disease, vertigo, arteriosclerosis, atherosclerosis, colic, constipation, weight loss, spontaneous abortions, infertility, hypothyroidism, cancer, diabetes, hypoglycemia, anxiety, poor concentration, mood swings, nightmares, psychotic behavior, alopecia

Additional Lead Factors:

Manganese:

Sources: Gasoline fumes contain a very toxic form of manganese, as can some water supplies, especially in various areas of Canada as well as the Northeast USA (New England area).

Symptoms of deficiency: Allergies, hypoglycemia, diabetes, myasthenia gravis, dizziness, ringing in the ears, fatigue, weakness, muscular, fractures or osteoporosis weak ligaments and tendons

Symptoms of excess: Anorexia, neurological symptoms, ataxia, schizophrenia criminal behavior, iron deficiency, Parkinson's-like symptoms

Additional Manganese Factors:

Mercury:

Sources: *All fish, dental amalgams*, medications, diuretics, preparation H, contact lens solution, occupational exposure to felt, adhesives, fabric softener, manufactures of paper.

Symptoms: affects many organs and system of the body. Neuromuscular diseases such as multiple sclerosis, most mental illness, hair loss, ataxia, birth defects, depression, dizziness, hearing loss, insomnia, migraine headaches, mood swings, nervousness, numbness and tingling in arms and legs, pain in limbs, rashes, tremors, vision loss, muscle weakness.

Additional Mercury Factors:

Nickel:

Sources: hydrogenated vegetable oils, contaminated alcoholic beverages, margarines and imitation whip cream, commercial peanut butter, vegetable shortening, nickel-plated jewelry, kelp, unrefined grains and cereals, oysters, tea, herring, nickel plating on metallic objects, cigarette smoking, manufacture of steel, batteries, machine parts, wire, electrical parts, Rooibos tea, Himalayan salt, some ceramic dental fillings

Symptoms: kidney dysfunction, heart attack, cancer, oral, intestinal and lung, skin problems, nausea, vomiting, hemorrhages, malaise, low blood pressure, muscle tremors, tetany and paralysis

Additional Nickel Factors: Symptoms of nickel toxicity include skin rash (called nickel dermatitis), nausea, dizziness, diarrhea, headache, vomiting, chest pain, weakness and coughing. Contact with nickel vapor can lead to swelling of the brain and liver;

degeneration of the liver; irritation to the eyes, throat and nose; and various types of cancer.

ADDITIONAL SYMPTOMS OF HEAVY METAL TOXICITY:

HAIR LOSS²:

Toxic metals are naturally occurring metallic substances that disrupt vital bodily functions. Most toxic metals are considered "heavy metals" and include substances like mercury and lead. Hair loss is only one of many possible symptoms of metal toxicity. Because hair loss can occur for a variety of reasons, medical testing is the only way to determine whether metal toxicity is the cause. Understanding the connection between toxic metals and hair loss can help you identify problems sooner for a more positive prognosis.

While each toxic metal causes its own unique problems, symptoms can overlap somewhat. According to Medscape, mercury toxicity can result in a condition called Pink's disease, which causes symptoms like hair loss, rash, hypertension and mental disturbances. Mercury damages the body by interfering with vital processes like nerve transmission and cell division, according to the University of Rochester Medical Center. In some cases, tooth loss may accompany hair loss in patients with mercury poisoning.

Hair loss can also occur with arsenic poisoning and, less frequently, as a result of lead or copper toxicity. Other symptoms of metal toxicity include fatigue, weight loss, darkening of the skin and conjunctivitis.

² <http://www.livestrong.com/article/184759-toxic-metals-hair-loss/#ixzz2CaDi4FRX>