

## Sources of Toxic Metal Exposure

Toxins are laden in our environment. Industrial pollutants, pesticides, herbicides and insecticides all affect the air we breathe, the water we drink, and the food we consume. Our immune systems are easily compromised living under constant stress from unseen and odorless environmental pollutants that travel the globe's atmosphere and contaminate our air, water and food supply. Environmental toxins are on the rise; the Center for Disease Control (CDC) reports there are an average of 116 toxins in the human body today compared to only 27 in 2001.

On the topic of environmental toxins, Rick Smith, the Director of Environmental Defense in Canada says, "We are the guinea pigs of the largest uncontrolled science experiment in history." The following is an abbreviated list of the most common and more harmful heavy metals that make their way in to our bodies every day.

**Aluminum:** Aluminum can be found in drinking water, antiperspirant, baking powder, feminine hygiene products, cow and soy milk, baby formula, antacids, aluminum foil, old cast aluminum pots and pans and camping cookware. Aluminum accumulates in the skin, bones, brain and kidneys and can cause Alzheimer's and Parkinson's Disease.

**Arsenic:** Arsenic is found in cigarette smoke, laundry detergents, beer, seafood, and drinking water. Arsenic can cause headaches, confusion, and sleepiness and can damage the kidneys, liver and lungs.

**Barium:** Barium compounds are found in soaps, ceramics, paper, glass, plastics, textiles, dyes, fuel additives, rubber, paint and pesticides. Barium enemas were once freely given to get a good x-ray of the large intestine. Barium toxicity can cause vomiting, diarrhea and abdominal pain.

**Cadmium:** Cadmium is found in soft drinks, cigarette smoke, water softeners, seafood, rubber, motor oil, pesticides, fungicides and polyvinyl plastics. Cadmium can cause chronic fatigue syndrome, hair loss, high blood pressure, edema, arthritis, kidney stones and impotence.

**Lead:** Lead is found in cosmetics, plastics, batteries, gasoline, insecticides, pottery glaze, soldered pipes and paint. Lead accumulates in the brain, spleen, liver, kidneys and bones. For each 30 mcg of lead in a child's blood, his or her IQ drops 10 points and may be a cause of ADHD.

**Mercury:** The half life of mercury is 67 years in the human body. Mercury has gotten in to our water ways, rivers, lakes and oceans making certain fish susceptible to contamination. At higher risk are the large game fish such as swordfish, blue marlin, and tuna. Furthermore, it is used in dentistry: each amalgam dental filling releases up to 17 mcg of mercury every day increasing up to 500 mcg with the smoking of cigarettes, drinking of hot liquids, chewing of gum, acidic saliva or the grinding of teeth at night. Mercury accumulates in the neurons (nerve cell bodies), brain, heart, kidneys and endocrine glands causing depression, autoimmune diseases, memory loss, tremors, anemia, heart attacks and birth defects.

**Nickel:** Nickel is found in stainless steel cutlery, pots and pans, coins, dental fillings and batteries. Nickel accumulates in the bones, kidneys, liver, lungs, immune system and the brain. Nickel can cause genetic damage and cancer.

**Uranium:** Uranium is a radioactive element that disintegrates eventually into lead. In addition to events like Three Mile Island and Chernobyl, there have been over 2,000 nuclear detonations on our planet since Hiroshima casting uranium into our atmosphere. Radioactive materials can cause cancer and birth defects.