

## Toxic Element Chart

Element	Sources	Symptoms	Chelator(s)
<b>Aluminum (Al)</b>	Beverage cans; pots and pans; foil; metal alloys; water treatment; furnace linings; antacids; antiperspirant; astringents; buffered aspirin; food additives; injectables; dialysis; cosmetics; colloidal mineral products	Pulmonary Disease; Osteomalacia; Neurotoxicity; Suspected cause of Alzheimer's Disease	1. EDTA
<b>Antimony (Sb)</b>	Smelters; coal-fired plants; refuse incinerators; tobacco smoke; antihelminthic/antiprotozoal agents; Automobile batteries; solder; sheet metal; pipes; bearings; castings; ammunition; cable sheathing; pewter; semiconductors; aluminum; gallium; infrared detectors; thermoelectric devices; <b>Trioxide:</b> flame retardants; plastics; textiles; rubber, adhesives; paper; pigments; paint; ceramics; pesticides; fireworks	Topical/Respiratory Irritant; Dizziness; HA; Insomnia; Anosmia; HTN; Spontaneous Abortion; Menstrual Disturbances; ECG Abnormalities	1. DMPS/ DMSA 2. EDTA
<b>Arsenic (As)</b>	Lime manufacturing; automobile batteries; asphalt; asphalt felts and coatings; lead and copper refining (smelters); wood preservative; pesticides(primarily cotton) ; insecticides; herbicides; algicides; growth stimulants for plants and animals; lead oxide; glass; electronics; semiconductors; metallurgy; pigments; electroplating; well water; seafood and shellfish; smog; rodenticides; fungicides	Respiratory/GI Irritant; Lymphocytopenia; Anemia; Birth Defects; Anxiety; Carcinogenic (skin, lung...); Cardiac Arrhythmias; Neurotoxicity; Depression; Garlic Breath; HA; Hyperpigmentation of Skin; Keratosis; Neuralgia/ Neuropathy; PVC's; Spontaneous Abortion; Nephritis	1. DMPS 2. DMSA
<b>Bromine (Br)</b>	kelp/seaweed, nuts, citrus flavored soft drinks; water purification; pesticides; fumigants; photographic film; dyes; leaded fuel additive; brominated flame retardants: Carpet, upholstery, electronics, mattresses; bromocriptine (hyperprolactinemia), OTC antitussives	GI Inflammation; Asthma; Thyroid Dysfunction; Goiter; HA; Nephritis; Hypotension; Pharyngitis	
<b>Cadmium (Cd)</b>	Asphalt; asphalt felts and coatings; lime manufacturing; batteries; metal plating; pigments; plastics; paints;	Respiratory/GI Irritant; Nephrotoxicity; Anemia; Behavioral Changes; Cancer (lung,	1. EDTA 2. DMPS (may

	metal soldering and welding; electroplating; semiconductors; metallurgy; photography; printing; textiles; food-shellfish, liver and kidney meat; cigarette smoke; fertilizer; drinking water; fungicides; rubber; photoconductors	prostate...); Emphysema; HA; HTN; Osteomalacia; Autoimmune Disorders; Immunosuppression; Neurotoxicity; Birth Defects; Infertility	dissociate at kidney if urine not alkalized)
<b>Fluorine (F)</b>	Toothpaste; fluoridated drinking water; infant formula; processed cereals; non-organic grape juices; wine; beer; soda; tea (higher in decaf); glass etching; Freon/ refrigerants; cockroach insecticide fluoridated salt; non-stick coatings <b>Rx:</b> Anesthetics: (Enflurane, Isoflurane & Sevoflurane); fluconazole; fluoroquinolone antibiotics, and linezolid antibiotics, Prozac/fluoxetine, efavirenz, fluorouracil, flurbiprofen, fenfluramine, cerivastatin, paxil, fluvoxamine, astemizole (allergy), cisapride, fluvastatin, fluocinonide & fluocinolone (topical corticosteroids); fluticasone & flunisolide; fluocinolone acetonide (intravitreal implant); fludarabine (antiviral); fludrocortisone; antimalarial drugs	Hypocalcemia; Ligament Calcification (ribs,pelvis); Osteomalacia; Arrhythmias; HA; Neuropathy; Vertigo; Anemia; Respiratory Irritant; Male Reproductive Toxin	
<b>Lead (Pb)</b>	Lead crystal; pesticides; batteries; sheet lead; solder; pipes; roofing materials; caulking; buckles; petroleum refining; radiation protection; pigments; paints; plastics; ceramics; electrical devices; ballast; tv glass; brass; bronze; gasoline; ammunition; mining; electrical wire insulation; drinking water; fertilizer; candle wicks	GI Symptoms; Colic; Anemia; Neurotoxicity; Neuropathy; Hepatotoxicity, P-450 Enzyme Inh; ECG Abnormalities; Infertility; Gingival Lead Lines; Ototoxicity; Growth Retardation; Developmental Delay; Psychomotor impairment; Fatigue; Anxiety; HA; Immunotoxicity; Cancer	1. EDTA/ DMSA 2. DMPS
<b>Mercury (Hg)</b>	Thermometers; batteries; fish; Pigments; bactericides; antiseptic creams; skin lightening creams; fireworks; dental amalgams; pesticides; asphalt; agricultural chemical; photography; taxidermy; electrical equipment; electroplating; felt making; textiles; interior paint	Fatigue; Neurotoxicity; Emotional Disturbances; Neuropathy; Altered Libido; Birth Defects; Spontaneous Abortion; Excessive Salivation; Tremors; Irritability; Menstrual Disorders; Autoimmune Disease; Nephritis	1. DMPS/ DMSA

	before 1990; hemorrhoidal preparations; hospital wastes; waste incineration; paper industry; explosives; fungicides		
<b>Nickel (Ni)</b>	Jewelry; coins; stainless-steel; ceramics; pigments; cast iron; batteries; electroplating; metal alloys; electrical circuits; dyes; pesticides; lime manufacturing, asphalt; tobacco smoke; volcanoes; power plants; waste incinerators; diesel exhaust; cocoa; hydrogenated oils	Dermatitis; Respiratory Irritation/ Cancer; Emphysema; Colic; Excessive Salivation; Fatigue; HA; Muscle Pain; Vertigo; Hepato/ Nephrotoxicity; Male Infertility	1. EDTA 2. DMPS
<b>Tin (Sn)</b>	Anthelmintic drugs, bactericides; brass; bronze; coated wire; colored glass; dental materials; dyes; electronics; fabrics; fencing; fingernail polish; flooring; food canning; fungicide; glass; leather; mining; nuclear reactors; paints; paper; perfumes; pesticides; pewter; pharmaceuticals; pipes; polyurethane foams; rodent repellants; ropes; silicone; silverware; soaps; soft plastics; soldering material; wood preservative; food additives; toothpaste (past); plastics; paints; flame retardants; cosmetics; bleaching agents; rodenticides	Topical/Respiratory/GI Irritant; Pneumoconiosis; Neurotoxicity; Immunosuppression; Photophobia; HA; Impaired Memory; Hepato/ Nephrotoxicity; Behavioral Changes; Vertigo; Anemia; Birth Defects	1. DMPS/ DMSA 2. EDTA
<b>Tungsten (W)</b>	light bulbs; carbide tools; ammunition; fishing sinkers; golf clubs; ceramic pigments; textile dyes/waterproofing/flame retardants	Topical/Respiratory Irritant, Pneumoconiosis; Lung Cancer; Antagonism of Molybdenum	1. DMPS/ DMSA