



TELEOSIS

MERCURY CONTAMINATION AND DETOXIFICATION

Mercury is a neuro and immuno-toxin, heavy metal that appear in the body through inhalation with the lungs, absorption through the skin, and/or ingestion in the stomach.

There are 3 types of mercury, varying in their levels of toxicity. These include elemental, inorganic, and organic mercury.

Elemental Mercury

Sources include thermometers, fluorescent light bulbs, dental amalgam fillings, and mercury containing latex paints.

Toxicity from elemental mercury is commonly due to inhalation of mercury vapors. This can occur at a one-time, large exposure or a long-term exposure over time. Elemental mercury accumulates in the brain, kidneys, lungs, and fatty tissues.

Inorganic Mercury - *Sources appear as "mercuric salts"*

Inorganic Mercury compounds are corrosive to the skin, eyes, and mucus membranes. *Sources* include products containing compounds: Calomel and cinnabar.

Sources also include a number of traditional remedies including:

Traditional Chinese Medicines:

- An Gong Niu Huang Wan
- Da Huo Luo Wan
- Dendrobium Moniliforme Night Sight Pills
- Niu Huang Chiang Hsin Wan
- Ta Huo Lo Tan
- Tsai Tsao Wan

Traditional Indian and Mexican Medicines:

- Crème de Belleza-Manning
- Tainan
- Ping-Tong
- Sin-chu

Agents used for Detoxification

CHELATION THERAPY

Agents are substances which can chemically bond with, or chelate heavy metals, minerals, or chemical toxins from the body. The chelating agent encircles a mineral or metal ion and carries it from the body via the urine and feces

Oral Chelation Therapy

Oral doses of DMSA bind to heavy metals, chemical toxins, mineral deposits, and fatty plaques (as in the arteries; the agent binds to the calcium in the plaques

Active chelating agents in combination with DMSA administered orally:

- R- lipoic acid
- certain bioflavonoids
- chlorella
- coenzyme Q10
- garlic
- L-cysteine
- methionine
- selenium
- sodium alginate
- zinc gluconate

Organic Mercury

Sources include medical products and practices that include two common antiseptics: mercurochrome (merbromin) and merthiolate (thimerosal). The former is found in various fungicides and antibiotics. The latter is a preservative found in many vaccinations including hepatitis B and haemophilus influenza, diphtheria, tetanus, and pertussis.

Sources of organic mercury also include seafoods. Toxicity in seafood is due to bioaccumulation, as a result of air pollution from industry, including medical waste. Pregnant women and children are at the highest risk for organic mercury toxicity.

Symptoms of Mercury Toxicity

determined by blood, hair, urine analysis

Nerve and muscle problems

- fainting
- blurred vision
- hyperactivity
- headache
- dizziness

General physical problems

- fatigue
- loss of former energy
- weakness
- edema
- pallor
- inappropriate chilliness or excessive warmth
- excessive perspiration without fever
- unexplained fears

Mood changes

- unexplained anxiety
- unwarranted excitability
- unexplained irritability
- hostility
- aggression
- insomnia
- restlessness
- difficulty concentrating
- difficulty thinking
- mental confusion
- grogginess
- decreased reading comprehension
- forgetfulness
- difficulty recalling words
- depression
- loss of interest in work
- crying spells
- tendency for fixed ideas
- antisocial behavior
- suicidal thoughts

Iodine Status

Total body iodide/iodine status must be checked. Proper levels will enhance excretion of heavy metals.

DETOXIFICATION AGENTS

Nutriceutical supplementation

- N-Acetyl-L-Cysteine (NAC)
- Silymarin (bioflavanoid found in Milk Thistle)
- MSM
- Selenium
- Vitamin B1
- Vitamin B6
- Zinc
- Molybdenum
- Vitamin C
- Garlic Extract
- Microactivated algae
- Probiotics
- Activated Charcoal

Nutrition / diet

- Avoid high risk seafood: tilefish, King mackerel, shark, swordfish, tuna, shellfish (especially crabs)
- Eat organic whole, fresh foods and meats
- Avoid refined sugars and flours
- Drink up to 1/2 oz. per pound of body weight of non-flouridinated water daily

Mercury Fast Facts

- 1/10 women have levels of mercury high enough to cause neurological effects in their offspring
- Dental amalgams are the single most significant source of systemic mercury toxicity in humans
- Vaccinations are the second!
- Diseases such as Autism and Alzheimer's have been linked to mercury toxicity