CAS 7440-48-4

Cobalt & Cobalt Compounds

Co

VERMONT DEPARTMENT OF HEALTH

Summary of Health Effects

Cobalt may increase a person's risk of lung cancer. It causes cancer in animals and can damage genes. Long-term exposure may cause respiratory, heart, or liver and kidney problems in humans.

How are cobalt and cobalt compounds used?

Cobalt is a naturally occurring element in the environment. It is used to strengthen alloys, and in the manufacture of pigments.[1]

Toxicity: What are its health effects?

Chronic exposure to cobalt may cause respiratory irritation, wheezing, asthma, pneumonia, fibrosis, cardiac effects, and congestion of the liver and kidneys.[1]

Cobalt exposure is also associated with an increase in risk of lung cancer.[2]

Evidence indicates that cobalt compounds produce genotoxic effects in both *in vitro* and *in vivo* assays.[3]

A two-year toxicology study of cobalt metal in rats and mice provided clear evidence of cobalt's carcinogenic activity.[4]

Exposure: How can a person come in contact with it?

A person can come in contact with cobalt and cobalt compounds by eating food, drinking contaminated water, breathing in contaminated air or tobacco smoke, or from skin contact with consumer products.[5]

Exposure to cobalt may occur through air, drinking water, and food since it is a naturally occurring element in the environment.[1]

National Health and Nutrition Examination Survey (NHANES) 2014 data show cobalt in the urine of the general population, with children having slightly higher amounts than adults.[6]

References

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