

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
GUIDANCE FROM HOTLINE COMPENDIUM

WSH H40
Date Issued: August 1991

SUBJECT: Wilson's Disease and Copper

SOURCE: Lonnie Finkle
Jeff Cohen

In some publications, Wilson's Disease is listed as a health effect of copper. Does copper in drinking water actually cause Wilson's Disease?

Response:

No. Wilson's Disease is an inborn disorder with copper metabolism, and is not caused by copper in drinking water. Rather, individuals born with Wilson's Disease are at a higher risk of experiencing toxic health effects due to copper metabolism, allowing accumulation of copper in the liver, brain, kidneys, and corneas causing hemolytic anemia, neurological disorders and cornea opacity (56 FR 31516). Also, the mandatory health effects language in 141.32(e)(14) of 56 FR 26460 (June 7, 1991) states that copper at high doses has been shown to cause stomach and intestinal distress, liver and kidney damage, and anemia.