

Deriving a health-based guidance value for antimony to support development of UK Drinking Water Standards

Agency for Toxic Substances and Disease Registry (ATSDR)

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34. While ATSDR has not derived drinking water guidelines, it has derived an intermediate-duration oral Minimal Risk Level (MRL). An MRL is an estimate of the daily human exposure to a substance that is likely to be without appreciable risk of adverse non-cancer health effects over a specified duration of exposure; the intermediate duration used in this instance covers exposures between 15 and 365 days. Oral intermediate duration MRL for antimony of 0.6 µg/kg bw/day was

derived based on the findings and NOAEL interpretation by Poon et al., 1998. This is based on a NOAEL of 60 µg Sb/kg bw/day for decreases in serum glucose levels in female rats observed in the Poon et al., with an uncertainty factor of 100 (10 for extrapolation from animals to humans and 10 for human variability) (ATSDR, 2019).