

Charge to the Peer Reviewers: Toxicological Review and IRIS Summary for Zinc

1. Overall document quality

The contractor shall compose a charge to reviewers that addresses the overall quality of the document(s) and provide advice on approaches to improve the assessment from both a technical and communication standpoint, including the integration of data into an overall characterization of hazard. In general, the contractor shall solicit comments on how well the data from individual studies are characterized, on the conclusions that are drawn from each study, and on how well the data are integrated into an overall conclusion and characterization of hazard as presented in the Toxicological Review for Zinc.

2. RfD derivation

a) The RfD for Zinc is based on human clinical study to establish daily nutritional requirements. This study examines dietary supplements of zinc and the interaction of zinc with other essential metals, specifically, copper to establish a safe daily intake level of zinc for children, adults and pregnant women. Do you consider this RfD to be protective of adverse health effects in children (growth and development) and pregnant women (including developmental effects in fetus and neonates)? Do you agree with the method of analysis used to evaluate dose-response data for zinc?

b) Are the appropriate uncertainty factors applied to the points of departure for zinc? Is the explanation transparent?

3) RfC derivation

Data for Zinc *is* considered inadequate for derivation an RfC. Do you agree?

4) Cancer Weight-of-Evidence Classification

The weight of evidence classification for Zinc has been discussed in Chapter 4 of the Toxicological Review documents. Have appropriate criteria been applied from the January 2001 EPA draft revised Guidelines for Carcinogen Risk Assessment?