

**National Institute for Occupational Safety and Health (NIOSH)**  
**Comments on the Interagency Science Consultation**  
**Draft IRIS Toxicological Review of Inorganic Arsenic**  
**November 2022**

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**Comment 1: Page 3-10, lines 24-27**

“Two toenail biomarker studies conducted in the U.S. Farzan et al. (2015a); Farzan et al. (2015a) and Inner Mongolia, China Wade et al. (2015); Wade et al. (2015) provide additional supporting evidence that arsenic is a contributing risk factor for IHD and CVD, respectively, particularly among long-term smokers.”

Please correct the sentence to reflect that the Wade et al. [2015] study showed that arsenic is associated with a higher increased risk for cardiovascular disease (CVD) in those who quit smoking when compared to non-smokers (adjusted odds ratio (AOR) 8.37) than in current smokers when compared to non-smokers (AOR 1.99) in spite of reported higher exposure to arsenic in non-smokers and current smokers. The study could not completely control for smoking history (how long the current smokers had been smokers and how long have those who quit smoking had been smokers) and if arsenic exposure alone resulted in CVD incidence in the study population.

**Comment 2: Page 3-24, lines 5-8**

“Further, in a subsequent cross-sectional analysis of this cohort the risk of hypertension was higher among those with skin lesions related to arsenic exposures compared to those without skin lesions Rahman and Axelson (2001); Rahman and Axelson (2001).”

Please remove the repetition of Rahman and Axelson (2001).

**Comment 3: Page 3-30, lines 28-32**

“Arsenic exposure estimated based on the sum of arsenic metabolite concentrations in urine, was associated with decreased SBP and DBP among women (18–65 years of age) in northern Argentina Ameer et al. (2015); Ameer et al. (2015), however. Concentrations of arsenic in drinking water ranged from 10 to 200 µg/L in the villages studied.”

Please check the sentence formation.