

Insert page 6-141, line 14

Although the NHANES II analysis using data from 1976 to 1980 suggested an increased risk of mortality at blood lead levels above 20 µg/dL, blood lead levels have dramatically decreased since the late 1970s. More recent data from NHANES have found that the geometric mean blood lead levels decreased from 12.8 µg/dL in 1976-1980 to 2.8 µg/dL in 1988-1991 (Annest et al., 1983) and 2.3 µg/dL in 1991-1994 (CDC, 1997). NHANES III data (1988-1994) were used to further analyze risk of mortality in adults (age ≥40 years) at lower blood lead levels (Schober et al., 2006). A total of 9,757 subjects were followed for a median of 8.55 years during which there were 2,515 deaths. An increased risk of cardiovascular mortality was associated with blood lead levels of 5-9 µg/dL and ≥10 µg/dL compared to <5 µg/dL. The relative risk was 1.20 [95% CI: 0.93, 1.55] for 5-9 µg/dL and 1.55 [95% CI: 1.16, 2.07] for ≥10 µg/dL, and the test for trend was statistically significant. Increased risks of all cause and cancer mortality also were observed at blood lead levels of 5-9 µg/dL compared to <5 µg/dL (relative risk of 1.24 [95% CI: 1.05, 1.48] for all cause mortality and 1.44 [95% CI: 1.12, 1.86] for cancer mortality). The authors noted that an important limitation of this study was that exposure classification was based on one blood lead level measurement taken at baseline. Older individuals were more likely to have higher cumulative lead exposure and their blood lead levels might have been disproportionately influenced by release of lead from bone stores compared to younger individuals.