

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Research Triangle Park, N. C. 27711

DATE: October 25, 1984

SUBJECT: Review of "The Relationship Between Blood Lead Levels
and Blood Pressure and It's Cardiovascular Implications"

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The assessment of the blood lead - blood pressure relationship was impressive and convincing. The persistence of the relationship through a variety of analytical approaches demonstrates that, in this data set at least, the association is unexplainable in terms of other variables. In view of physiological rationale for such an effect and the corroborative evidence from other animal and epidemiologic research, their conclusion that the relationship is probably causal seems reasonable.

I was somewhat less comfortable with other aspects of the report, viz. the shape of the curve representing the blood lead-blood pressure relationship and the estimates of benefits in terms of reductions in heart attacks, strokes, and deaths from all causes which would result from alternative strategies to reduce lead in gasoline. A number of assumptions were made in arriving at these estimates. Under other assumptions quite different estimates can (and probalby will) be derived.

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