

August 30, 1973

MEMORANDUM TO: Dr. Jerome F. Cole
International Lead Zinc Research Organization

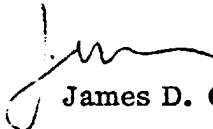
SUBJECT: Paper by Dan Darrow and Henry Schroeder

As you know, Dan Darrow and Dr. Henry Schroeder presented a paper at the American Chemical Society annual meeting which linked childhood lead poisoning to lead in gasoline.

After discussions with Cap Hall of Ethyl I had our Chicago affiliate obtain a copy of the paper and the press release that went with it. The paper was telecopied to Cap Hall who will give it to Hesselberg and our copy, received this morning, is enclosed, together with a press release that went with it and a UPI wire story that was serviced on August 29.

It appears to me that this is pretty much a rehash of Darrow's submission to EPA on the lead-in-gasoline question.

[If this story runs in major newspapers we should consider a follow-up letter to the editor of important newspapers, especially those in Washington.]


James D. Callaghan

JDC:sdd
Enclosures

cc: P. Robinson ✓
J. Smith
D. Lynam
C. Thompson
M. Swetonic

LIA-76443

UPI069

(LEAD INTOXICATION)

CHICAGO (UPI) -- LEAD EMITTED IN AUTOMOBILE EXHAUST FUMES HAS INCREASED THE NUMBER OF LEAD-RELATED DEATHS OF YOUNG CHILDREN, ACCORDING TO A DARTMOUTH RESEARCHER.

IN A PAPER PREPARED FOR DELIVERY AT AN AMERICAN CHEMICAL SOCIETY SYMPOSIUM TODAY, DAN DARROW OF THE DARTMOUTH MEDICAL SCHOOL SAID THE AMOUNT OF LEAD IN CHILDREN'S BLOOD STREAMS IS INCREASING.

"THIS INCREASED BLOOD LEAD AND HIGH PERCENTAGE OF DEATHS IS THE RESULT OF ENVIRONMENTAL LEAD POLLUTION AND IS NOT NATURAL," DARROW SAID.

HE SAID LEAD INTOXICATION IN CHILDREN WAS OF "EPIDEMIC PROPORTIONS."

"I WOULD SAY THAT 1 TO 2 PER CENT OF ALL URBAN CHILDREN HAVE BLOOD LEAD LEVELS WHICH, BY CURRENT STANDARDS, INDICATE THAT THEY SHOULD BE RECEIVING HOSPITAL TREATMENT," DARROW SAID.

HOWEVER, HE SAID, MOST THOSE CHILDREN PROBABLY WERE NOT RECEIVING ANY TREATMENT BECAUSE OF EXPENSE OR OTHER FACTORS.

IN ADDITION TO CAUSING DEATH, DARROW SAID, INCREASED LEAD IN THE BLOOD STREAM CAN AFFECT A CHILD'S PHYSICAL AND MENTAL ABILITIES AND EVEN BRING ABOUT BEHAVIORAL ABNORMALITIES, SUCH AS NEGATIVISM, DISTRACTABILITY AND CONSTANT NEED FOR AFFECTION.

UPI 08-29 12:27 PED

LIA-76444

N 955.01

Corrected

Trace Element Lab

CHILDHOOD EXPOSURE TO ENVIRONMENTAL LEAD

Studies have shown that urban children have more lead in their blood than urban adults. Over half of the reported deaths from lead poisoning occur in two year old children. This increased blood lead and high percentage of deaths is the result of environmental lead pollution and is not natural.

The epidemic proportions of lead intoxication in children cannot be supported on the basis of eating lead paint alone. Fall-out of lead from the exhaust of automobiles burning leaded gasoline is increasingly implicated in this childhood disease. There are 38 million cars in the U.S. emitting four pounds of lead in the environment yearly.

A critical review of the literature suggests that children are more sensitive to lead intoxication; they may absorb more lead into their bodies after eating or inhaling lead, and they are probably exposed to more environmental lead than an adult.

Studies in Brattleboro, Vermont show more lead in the air below the four foot level where a child might breathe it than at higher levels. Studies in the past have sampled air at heights at five feet and above. Dirt and dust on streets, sidewalks, porches and inside homes where children play contain sufficient lead to account for increased lead values in children.

There is accumulating evidence that the increased lead burdens in children may result in impaired neurological function, which show up as hyperactivity, impaired fine motor control and behavioral abnormalities such as negativism, distractability and constant need of attention.

LIA-76445

N 955.02

Studies on the brains of mice exposed to low levels of lead throughout developmental stages showed abnormalities in DNA and protein.

There is need for more research on that segment of the population at greatest risk. There is enough evidence to implicate lead in gasoline as a major contributory source of lead for children. Lead should be removed from gasoline to minimize childhood exposure.

LIA-76446