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LEAD INDUSTRIES' ROLE IN PREVENTING
LEAD POISONING IN CHILDREN

by
Jerome F. Cole
Director of Environmental Health
LEAD INDUSTRIES ASSOCIATION
New York, New York

In J.F. Cole's Absence
Presented by
P. R. LYNAM
Assistant Director of Environment
Health, Lead Industries Association

On behalf of the Lead Industries Association, I would like to express our gratitude to both the American Academy of Pediatrics and the Bureau of Community Environmental Management for their excellent work in arranging this symposium. We are ~~very~~ pleased to participate in what we hope will be a significant contribution to the understanding of the factors which constitute an effective program to combat pediatric lead poisoning.

The Lead Industries Association, Inc. is a non-profit organization of lead mining, smelting, refining and fabricating companies throughout the non-communist bloc of nations. Among other things, its purposes are to disseminate accurate information regarding lead products and how they are properly used, and to promote the serviceability of lead industries to the community at large.

As a continuing part of our interest in the community, we have for many years, both alone and in cooperation with governmental, professional, industrial and academic groups, worked towards the elimination of the tragic problem of lead poisoning in children. Since the 1920's the lead industry has supported research on the metabolism of lead and the diagnosis and treatment of lead poisoning in an effort to bring about better understanding of the problems of plumbism. Such studies have been carried out at numerous educational institutions and private laboratories throughout the world. Information developed under our sponsorship has been ~~distributed~~ ^{distributed} in medical and public health journals, and at various lead symposia conducted by LIA, both alone and in cooperation with ~~such~~ organizations ^{such} as the American Medical Association and the American Industrial Hygiene Association. Our contribution to this seminar will be to publish the

LIA-75217

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proceedings so as to further disseminate the information developed here.

Representatives of the lead industry, and, I should add of the paint industry as well, have served on the Z66 Sectional Committee on Prevention or Control of Hazards to Children since it was first organized by the American Standards Association in 1953. The American Standards Association, referred to for many years as the ASA, is now known as the American National Standards ~~Institute~~ Association or ANSI. This Sectional Committee has developed a standard (Z66.1), ^{which has been} in effect since 1955, ^{and} which specifies a limit of one percent (1%) of lead, by weight, for interior paints. This limit on the lead content of interior paints was followed by most paint manufacturers for a number of years prior to the development of the standard itself, and it is generally recognized that lead poisoning in children results mostly from the ingestion of old leaded paint applied to the interior of buildings more than 30 years ago. We ^{have} publicly supported the passage of the Federal Lead-Based Paint Poisoning Prevention Act of 1970 and also the recent moves to further reduce the lead content of interior paints ^{to levels which are} consistent with the technical and economic ability of the paint industry to produce quality products. We have cautioned, however, against the setting of arbitrary and unnecessarily low standards and against the substitution of substances which may represent a threat to public health.

As we know, remarkable progress has been made in many cities to bring the problem of pediatric lead poisoning under control and to reduce or eliminate deaths or serious disabilities ^{es} resulting from lead paint eating. However, lead problems are still occurring despite many years of effort, and will continue to occur in children who live in ~~the~~ older and poorly maintained homes that are not yet free of old leaded paint. I am afraid that ^{additional} many years of urban renewal and rehabilitation will be required before these sources of lead are ^{completely} eradicated.

In the publication, "Lead Poisoning In Children", published by the Children's Bureau of the U.S. Department of Health, Education, and Welfare, it is stated that lead poisoning was not found among children in newly constructed housing projects in New York City, even when these were in districts which had a high incidence of childhood lead intoxication. This indicates that lead poisoning is unquestionably linked to old dilapidated housing. This observation was further confirmed by a well-known study in Cleveland, where it was reported that of 801 young children in old housing, 38 children or 4.7 percent had plumbism, while not one ~~case~~ of plumbism was found among 105 children ~~studied~~ who lived in a new housing project.

The Lead Industries Association ^{has} ~~is concerned with the problem of~~
~~childhood poisoning resulting from the eating of old leaded paints. We~~
support, and encouraged the efforts of the federal government, states,
localities and community action groups in the formulation and enactment of
effective programs to eliminate the source of childhood lead poisoning. ~~In~~
~~fact, we have developed a proposed municipal ordinance, based on the~~
~~Philadelphia law and its effectiveness, which is available to communities~~
~~upon request.~~

Among other things, we have published a booklet titled, "Facts
About Lead and Pediatrics" which deals directly and extensively with this
problem. I am sure that most of you here today are by now familiar with this
publication which has been distributed without charge to public health doctors,
nurses, social workers and others concerned with coping with the problem of
childhood lead poisoning. Following an initial printing and distribution of
25,000 copies of this bulletin, together with the Children's Bureau publication,
"Lead Poisoning in Children," which was reprinted for distribution with our
bulletin, a second printing became necessary in just 1½ months because of the
demand for additional copies. ~~All in all~~ ^{we} have distributed over 100,000
copies of this booklet since it was first published. For those of you who might

not yet be familiar with our bulletin, I would like to describe it briefly. It reviews the facts leading to lead poisoning in children, lists seven steps in preventing the problem and presents data showing incidence, factors influencing the problem, and medical aspects of childhood lead poisoning. Tests for lead poisoning, including blood and urine analyses are listed in the booklet, as well as ^{a large number of} ~~42~~ reference sources for those who want more detailed information on various aspects of the problem.

I believe the Seven Steps to Prevention are worth repeating here.

They are:

1. Alert and warn parents and others who live in dwellings which have leaded paint in interiors. As with other accidents involving children, parents (and other child caretakers) can do much to keep children from eating paint and chewing painted surfaces and can keep chips off floors and out of the reach of infants. (~~Almost all cases occur in children 5 years old or under.~~)
2. Remove sources of lead that children can eat. This source is almost invariably old leaded paint on interior walls, ceilings and trim. This leaded paint must be removed or effectively covered. One city (Baltimore) reports good results from covering walls to a height of four feet with wallboard. Lead paint on woodwork should be removed. Peeling paint and old plaster should be swept from floors and scraped from walls and ceilings.
3. Take steps to keep any child suspected of eating lead from further exposure. Remove the sources of lead or keep the child from the source. From three to six months of steady lead ingestion precedes overt symptoms in almost all cases.

4. Physicians, public health nurses and others should watch for early vague, non-specific symptoms of lead absorption, such as lethargy, irritability, ~~and~~ stomach pains, and vomiting and should proceed at once to see that appropriate tests are made.
5. Quick and accurate diagnosis prevents serious consequences. This should be done by the most modern methods to be sure whether lead ingestion has taken place, and should be based on clinical findings and supported by biochemical evidence of excessive lead absorption. Blood lead tests are considered the most reliable and accurate. *Iron deficiency Anemia* is quite common in lead-poisoned children, but not all children with this ailment turn out to have plumbism. Careful diagnosis of an ailing child's problem is essential. Lead frequently is not the cause and, if such proves true, a quite different treatment may be required.
6. Proper and careful treatment should start immediately after diagnosis of lead intoxication.
7. When a case is found, check other children in the home immediately for possible signs of lead absorption.

Last summer, it was reported that a young adult member of a commune which was located on a farm in California had developed symptoms of lead poisoning. Biochemical tests revealed that indeed the youth had excessive absorption of lead. The source was traced to an old bathtub, ~~which contained plum wine.~~ *was contained in bathtub, was glass and filled with plum wine.* The commune members had gathered plums, placed them in the bathtub, mashed the plums with baseball bats and allowed the mixture to ferment in the bathtub. The individual who had developed lead poison reported

that he had consumed 50 gallons of the plum wine within a one month period. Although most people do not use their bathtubs in this manner, this example serves to introduce

another ^{that is} area in which the lead industry has been active; - lead in ceramic glazes. (not plum wine)

There have been occasional episodes of lead intoxication of children from the use of improperly fired and formulated lead containing glazes on ceramic ware. Typically these cases have resulted

A decade ago, the U. S. Potters Association and Lead Industries Association began cosponsoring research to define the parameters which influence the tendency ^{from the use of a poorly glazed vessel for acidic beverages consumed regularly and in rather large quantities for}

of lead to be released from ceramic ware. During this period, ^{significant} the following accomplish-^{ments}

ments have taken place: ^{ASTM Test} ~~ASTM Test~~, ^{USPA Dinnerware Glaze Surveillance Program} ~~USPA Dinnerware Glaze Surveillance Program~~ -

(1) Development of the ^{method of determination of lead extracted from glazed ceramic surfaces (ASTM C-555-69)} ~~method of determination of lead extracted from glazed ceramic surfaces~~

(2) ^{It is} established (and documented) fact that dinnerware manufactured by members of the USPA's "Dinnerware Glaze Surveillance Program" is ~~absolutely~~ safe for human use with respect to lead release.

3. A tremendous body of information has been compiled on the "what and how" of factors in dinnerware production that affect lead release. The manual, "Lead Glazes for Dinnerware", ILZRO Ceramics Manual No. 1, summarizes the research results and is available free of charge through the Lead Industries Association.

4. Importers, foreign dinnerware manufacturers, domestic and foreign hobby glaze manufacturers, and the public at large through news releases and publicity have been informed that ^{the} ~~these~~ data are available to all.

5. Efforts were made and have been partly successful to bring

hobby glaze producers into the Glaze Surveillance Program. ^{The pieces of} ceramic ware implicated in cases of lead intoxication have usually been manufactured by hobbyists or some "artware" ^{manufacturer} ~~manufacturer~~. In order to inform the art potter and hobbyist, a layman's ^{isn't of} ~~isn't of~~ the proper ^{to ensure products} ~~to ensure products~~ of safe glazes.

version of the Ceramics Manual has been produced, and is entitled "Facts About Lead Glazes For Art Potters and Hobbyists". This publication is ^{also} available from the Lead Industries Association. In general, it concludes that the hobbyist, in order to present no danger to the public, should refrain altogether from designing and firing cups, mugs, or other food and beverage utensils ^{OR make them useless by drilling holes in the design} and fire purely decorative pieces only.

The Lead Industries Association has amply demonstrated its concern for the problem and its willingness to participate in and encourage sound programs to eliminate pediatric lead poisoning. However, in recent years there has been a disturbing increase in the number of instances in which well intentioned but poorly informed individuals and groups who, despite the evidence, have pointed at innocuous uses of lead as health hazards. Using the catch phrase "Get The Lead Out", these persons and groups have flailed away at everything named lead and have used unconscionable scare propaganda to confuse the general public. The real danger here is that these efforts will divert public attention and public support away from the real causes of pediatric lead poisoning--old lead-based paint, slums, and children with pica. Our federal government in response to this pressure has proposed a number of anti-lead programs which have huge ~~et~~ potential costs amounting to billions of dollars to the American consumer. These programs will produce no benefit to the health or welfare of the public while at the same time, because of costs, the government has refused to spend but a fraction of the money Congress ^{authorized} ~~appropriated~~ to fight the acknowledged problem--^{which is} old lead-based paint in dilapidated housing.

In closing, I wish to state that the lead industry supports and encourages intensive, and well-planned programs ^{designed} ~~designated~~ to remove the old leaded paint, and to keep children from eating it. The Lead Industries Association will con-

tinue to cooperate with all groups sincerely working toward our mutual goal of preventing lead poisoning in children.