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Agenda Item: ID17-486 (9:45 A.M.)

2017 APR 5 PM 4 58

Date: 4/6/17

CITY CLERK, FRESNO, CA

FRESNO CITY COUNCIL



Supplemental Information Packet

Agenda Related Item(s) – ID17-486 (9:45 A.M.)

Contents of Supplement: Final with Table

Agenda Item Title

Briefing by the Fresno County health Department on Lead Hazards

Supplemental Information:

Any agenda related public documents received and distributed to a majority of the City Council after the Agenda Packet is printed are included in Supplemental Packets. Supplemental Packets are produced as needed. The Supplemental Packet is available for public inspection in the City Clerk's Office, 2600 Fresno Street, during normal business hours (main location pursuant to the Brown Act, G.C. 54957.5(2)). In addition, Supplemental Packets are available for public review at the City Council meeting in the City Council Chambers, 2600 Fresno Street. Supplemental Packets are also available on-line on the City Clerk's website.

Americans with Disabilities Act (ADA):

The meeting room is accessible to the physically disabled, and the services of a translator can be made available. Requests for additional accommodations for the disabled, sign language interpreters, assistive listening devices, or translators should be made one week prior to the meeting. Please call City Clerk's Office at 621-7650. Please keep the doorways, aisles and wheelchair seating areas open and accessible. If you need assistance with seating because of a disability, please see Security.

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CITY CLERK, FRESNO, CA

The Public Health Significance of Lead

To Your
HEALTH
Fresno County

Bringing you public health issues and ways to improve personal, family, neighborhood and community health

Department of Public Health, 1000 Fresno Street, Fresno, CA 93721



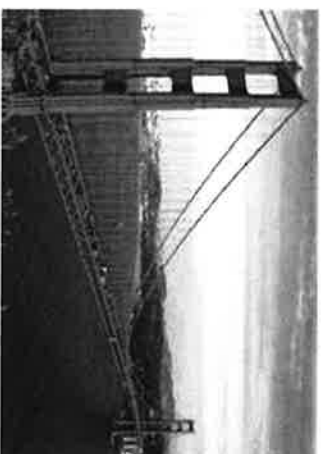
Department of Public Health
www.fcdph.org

Dr. Ken Bird, Fresno County Health Officer
[@DrKenBirdHealthOfficer](https://www.facebook.com/DrKenBirdHealthOfficer)



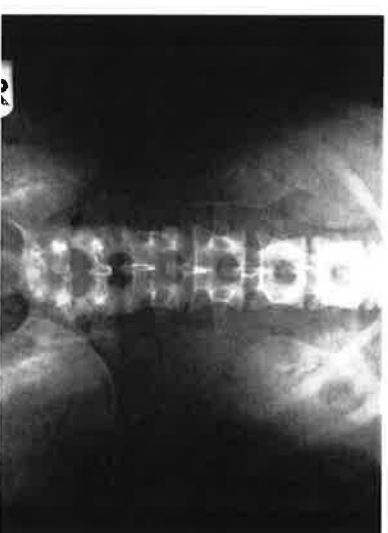
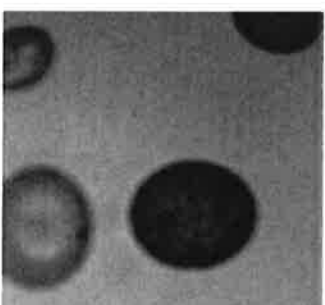
Why is Lead a Problem

Lead is a very common heavy metal used extensively in automobile fuel (until 1985) and paints (until 1978) that poisons by inhibiting a wide variety of cellular functions, especially those requiring calcium (which the lead replaces).



Lead is Toxic to Humans

Lead affects a multitude of organs and body systems resulting in a wide range of symptoms and adverse effects.



Health Effects of Lead Poisoning

- High exposure levels: coma, seizures, kidney failure, and death.
- At moderate levels: high blood pressure, anemia, kidney damage, irritability, depression, forgetfulness, and infertility.
- At lower levels: reduction of IQ on developing brains, coordination problems, poor hearing, speech and language problems.



Lead poisoning
Lead buildup in the body causes serious health problems

Symptoms <ul style="list-style-type: none">- Headaches- Irritability- Reduced sensations- Aggressive behavior- Difficulty sleeping- Abdominal pain- Poor appetite- Constipation- Anemia	Additional complications for children: <i>Lead is more harmful to children as it can affect developing nerves and brains</i> <ul style="list-style-type: none">▶ Loss of developmental skills▶ Behavior, attention problems▶ Hearing loss▶ Kidney damage▶ Reduced IQ▶ Slowed body growth
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Source: *MedicinePlus, Mayo Clinic* 24/03/15 AFP

Source:

*Centers for Disease Control and Prevention (CDC), <http://www.cdc.gov/niosh/topics/lead/health.html>

*Agency for Toxic Substances and Disease Registry (ATSDR, Centers for Disease Control (CDC), *Lead Toxicity*;

What Are the Physiologic Effects of Lead Exposure? <http://www.atsdr.cdc.gov/csem/csem.asp?csem=7&po=10>

Where is Lead Exposure Coming From?

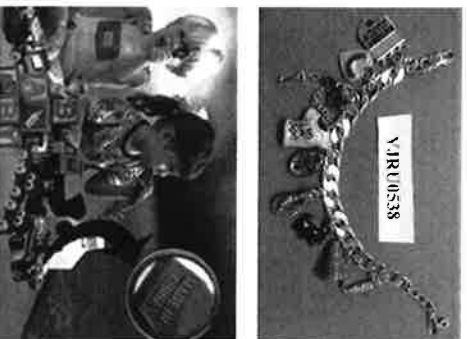
Even though lead has been removed from automobile fuels and paints, the CDC estimates that 500,000 children between the ages of 1 and 5 have blood lead levels over 5 mcg/dl. Most of this exposure is from paint chips and paint dust from pre-1978 homes.

There is NO identified safe blood lead level for children.

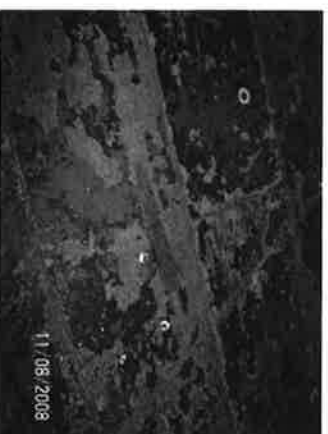
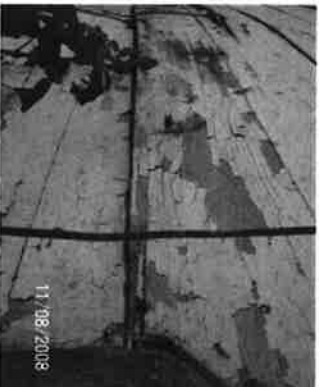


Other Possible Sources of Lead Exposure

- Soil contaminated in the past with leaded fuel exhaust (particularly near highways and urban areas)
- Hobby and occupational exposures
- Lead soldered plumbing fixtures
- Lead contaminated consumer products (such as toys and pottery)
- Old cribs
- Some imported foods

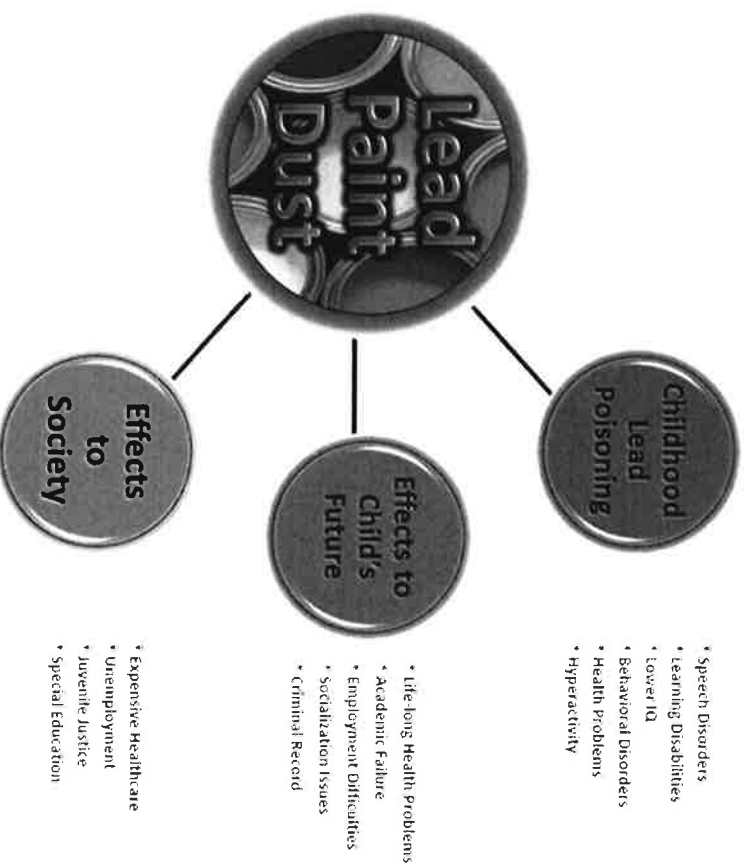


Those at Highest Risk for Lead Poisoning?



- Children under age 6 (esp. 1 to 2 years old)
- Living in pre-1978 housing (especially those with paint that is in poor condition)
- Low income
- Pica behavior (ingestion of non-food items)
- Those exposed to contaminated consumer products

Long-Term Consequences



Source:

*Centers for Disease Control and Prevention (CDC), <http://www.cdc.gov/niosh/topics/lead/health.html>

*Agency for Toxic Substances and Disease Registry (ATSDR, Centers for Disease Control (CDC), *Lead Toxicity: What Are the Physiologic Effects of Lead Exposure?* <http://www.atsdr.cdc.gov/csem/csem.asp?csem=7&po=10>

Measures to Prevent Lead Poisoning

Make sure children do not have access to peeling paint or chewable surfaces painted with lead based paint.



Measures to Prevent Lead Poisoning

- Preventing children from playing in bare soil
- Getting rid of all toys possibly painted with lead paint
- Avoiding canned goods from foreign countries
- Being wary of lead in traditional folk remedies, cosmetics, and imported foods (especially candies)
- Showering and changing clothes after finishing work or hobby activities with lead based products
- Regularly washing children's hands and toys

Measures to Prevent Lead Poisoning

- Having everyone wash their hands before eating
- Not storing wine, spirits, or vinegar based salad dressing in lead crystal for long periods of time
- Keeping homes as dust free as possible, particularly window sills that may contain lead paint dust
- Taking off shoes when entering the home to prevent lead contaminated soil from entering
- Letting tap water run for a minute before drinking or cooking with it
- Only using cold water for drinking, cooking, and baby formula

Testing

- Because the early effects of lead poisoning are difficult to detect, the only way of knowing if a child is being affected by exposure to lead is to test for lead in the blood.
- Both the Centers for Disease Control and Prevention and the American Academy of Pediatrics recommend targeted screening of all Medicaid enrolled and eligible children, as well as those born outside the United States.
- The Advisory Committee on Childhood Lead Poisoning Prevention recommends that all children enrolled in Medicaid be screened at 12 AND 24 months of age or at 36 to 72 months if not previously screened.



CHILDHOOD LEAD POISONING PREVENTION PROGRAM

Department of Public Health
Community Health Division
www.fcdph.org

SCREENING AND ASSESSMENT

Health Care Providers provide anticipatory guidance at each periodic assessment from 6 months to 6 years.

- **Screen(test):** If the child is in a publicly supported program
- **Assess:** If the child is not in a publicly supported program
- **Test based on other factors**

MANAGEMENT OF LEAD EXPOSURE

Three main components:

- Surveillance (BLL 5-9 mcg/dL)
- Management of potential and confirmed cases:
 - Health Education Specialist and PHN monitoring and PHN Case Management with Environmental Investigation (BLL 10 mcg/dL+)
- Education and Outreach:
 - Public
 - Health Care providers
 - Media



GUIDELINES FOR INTERVENTION

Blood Lead Level	5 Year BLL Average 2012-2016 All blood lead tests - 5 year total for children 5 and under - 113,910	New Standard as of July 2016
<4.5	21,746	<ul style="list-style-type: none"> • Education provided by provider • CLPPP provides education and finger stick trainings to providers throughout the year • Health fairs targeted to the general public to increase awareness of lead exposure, common sources and prevention • On-going consult with providers on blood lead testing requirements
4.5-9	821	<ul style="list-style-type: none"> • Surveillance case • Education provided by mail on lead prevention and exposure • Retest within 1-3 months
10-14	125	<ul style="list-style-type: none"> • Potential case • PHN case management • Environmental investigation • Repeat test in 1-3 months • Home visit with environmental assessment within 4 weeks of confirmed case
15-19	43	<ul style="list-style-type: none"> • PHN case management • Environmental investigation • Repeat test in 1-4 weeks • Home visit with environmental assessment within 2 weeks
>20	47	<ul style="list-style-type: none"> • PHN case management • Environmental investigation • Repeat test every 1-4 weeks • Home visit with environmental assessment within 1 week

DATA 2012-2016

- Of the total tests completed 92.6% were completed for children 5 and under
- Increase of 60% in tests completed in 2016 up to 36,925
- On average 75% (57% - 85%) of homes in our highest risk zip codes were built before 1980
- Continued average of 95% of test results fall below the CDC reference range of 5mcg/dL
- Regular review of lead testing data

PARTNERSHIPS

- Continued collaboration with Department of Public Health nursing programs to continue to educate families on blood lead testing
- Collaboration with UCSF Medical Education Program
- Upcoming changes to the State grant will allow for an increase in environmental health interventions at all levels
- On-going collaboration with City of Fresno
 - Reporting of identified homes for code enforcement
 - Assessment of homes with identified lead hazards

ON-GOING GOALS

Decrease harm to our most vulnerable populations:

- Identifying sources of lead
- Providing education to families to help identify risks
- Support health care providers in screening and assessing for elevated blood lead levels

Protect children in our community:

- Screening, surveillance, and case management
- Provide direct face to face education to health care providers

Increased interventions:

- Longer follow-up in all children with a blood lead level above 5 mcg/dL
- Home visitation and health education in the home for those in the moderate and higher blood lead level ranges

UNDUPLICATED VENOUS LEAD RESULTS AMONG CHILDREN AGE ≤5 YEARS OLD BY ZIP CODE, COUNTY OF FRESNO, 2012-2016

Unduplicated Venous Lead Results among Children Age ≤5 Years Old by Zip Code, County of Fresno, 2012-2016					
Zip Codes	Blood Lead Levels		Total	% ≥5µg/dL	No. of Children ≤5 years of age
	<5µg/dL	≥5µg/dL			
93701	541	96	637	15.1	1,257
93662	277	25	302	8.3	2,389
93702	1,775	125	1,900	6.6	4,512
93706	1,264	87	1,351	6.4	3,926
93703	1,179	55	1,234	4.5	3,413
93725	791	29	820	3.5	2,509
93654	249	9	258	3.5	2,638
93705	1,042	31	1,073	2.9	3,904
93722	1,659	44	1,703	2.6	6,839
93727	1,705	41	1,746	2.3	7,726
93726	1,199	27	1,226	2.2	4,350
Others	7,400	197	7,597	2.6	35,983
County Total	19,081	766	19,847	3.9	79,445