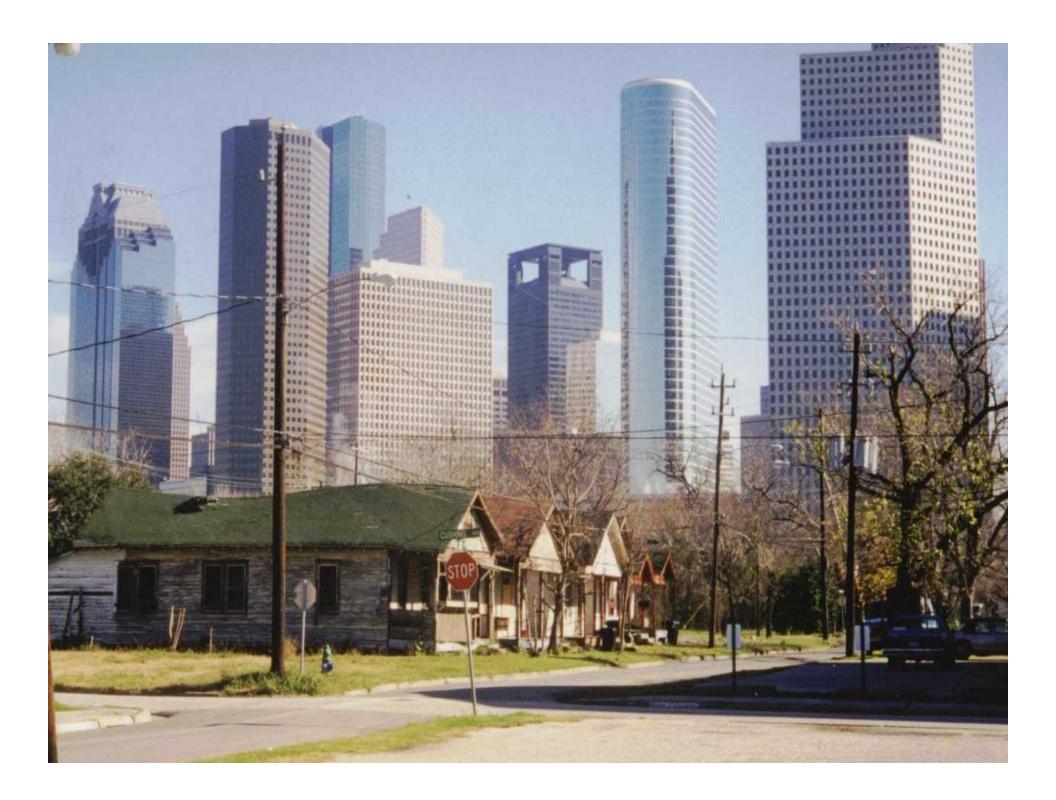
Childhood Lead Poisoning Prevention New Reference Value

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TIP OF THE ICEBERG: VISIBLE EFFECTS OF LEAD

Clinically Poisoned Children

Seizures • Coma • Mental Retardation • Death

INVISIBLE EFFECTS OF LEAD

U.S.

ECONOMIC

PRODUCTIVITY

KNOWN COGNITIVE, NEUROLOGICAL, & HEALTH EFFECTS

Lower IQ = Lower lifetime earnings

More ADHD = Increased special education costs

Damage to critical part of brain affecting impulse control

Behavior problems, drug abuse, violence, & criminal justice

Higher maternal blood pressure

Revolving healthcare
costs (more monitoring visits,
danger preterm delivery or miscarriage)

Poorer birth
outcomes (decreased
birth weight, length, head
circumference)

(NICU & early intervention costs; studies show that low birthweight & prenatal lead exposure may increase likelihood of adult diseases: obesity, hypertension, cardiovascular disease) COST ESTIMATE PER BIRTH COHORT

\$190-\$268 billion

\$297-\$413 million

\$1.7 billion

Total health-related costs of elevated lead levels for all children born in a given year are estimated to be between \$10.8 and \$53.1 million

Source for cost estimates: Pew Center on the States Partnership for America's Economic Success • Issue Brief #14 • February 2010 "Cutting Lead Poisoning and Public Costs"

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ESTIMATED U.S. ECONOMIC

COST OF LEAD EXPOSURE

PER BIRTH COHORT:

\$192 to \$270

BILLION

BIRTH COHORT

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d to be

million

EZISCHIONISHIPZISMOHOLISM

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ACCLPP Recommendations

- Focus attention back into prevention of lead poisoning,
- **■** Elimination, Reduction of lead hazards
- Develop Nationwide policies for Lead Primary Prevention
- Education federal states, local and community
- Data Sharing
- Research



Recommendation

Clinicians should be a reliable source of information on lead hazards and take the primary role in educating families about preventing lead exposures. This includes recommending environmental assessments PRIOR to blood lead screening of children at risk for lead exposure

"Lead screening questionnaires showed a wide range of sensitivity and specificity and performed little better than chance at predicting lead poisoning risk among children."

The Journal of Public Health Management Practice, 2012, 00(00), 1–00, published "A Systematic Review of Screening Questionnaires for Childhood Lead Poisoning" by Dr. Eric M. Ossiander



Impact on the States Cities and other Organizations

Recommendation 13

Additional research priorities should include improving the use of data from screening programs, developing next generation point-of-care lead analyzers, and improving the understanding of epigenetic mechanisms of lead action.



