



NEWS RELEASE

Health Commissioner Dr. Gale Burstein

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BURSTEIN EMPHASIZES LEAD POISONING AWARENESS

Educational Outreach Effort Includes Lead Paint, Lead in Water, Household Items

ERIE COUNTY, NY— Erie County Health Commissioner Dr. Gale Burstein today called attention to a recent Centers for Disease Control and Prevention (“CDC”) report on the dangers of lead exposure for children and adults, advising residents to be aware of possible exposures in both their home and work environments. Lead, a pervasive environmental contaminant, has been shown to have adverse health effects on humans. Lead is highly toxic, especially to young children. It can harm a child’s brain, kidneys, bone marrow, and other body systems. At high levels, lead can cause coma, convulsions, and death. To date, no safe blood lead threshold for the adverse effects of lead on infant or child neurodevelopment has been identified.¹

“Because lead accumulates in the body, all sources of lead should be controlled or eliminated to prevent poisoning,” **said Dr. Burstein.** “The primary source of lead is found in dust from deteriorated lead paint in older housing stock, but other sources such as lead in water, lead in jewelry, ceramics, and lead in other household items can give exposure as well, so it’s important to address these to minimize childhood lead poisoning.”

The health consequences of lead exposure depend on the cumulative dose of lead and the vulnerability of the individual person. Substantial evidence has established the cognitive effects of childhood lead exposure since they were first described in 1943.² Even relatively low blood lead levels in infants, children, and pregnant women are associated with impaired cognitive function, behavior difficulties, fetal organ development, and other problems. In addition, low levels of lead in children’s blood can cause reduced intelligence, impaired hearing and reduced stature. Adverse effects of early childhood lead exposure on neurodevelopment persist into the second decade of life.³ Comorbidities such as iron deficiency can also enhance lead absorption.

¹ CDC. Preventing lead poisoning in young children. Atlanta, GA: CDC; 2005. Available at <http://www.cdc.gov/nceh/lead/publications/prevleadpoisoning.pdf>

² Byers RK, Lord EE. Late effects of lead poisoning on mental development. Am J Dis Child 1943; 66:471-94. Available at http://www.rachel.org/files/document/Late_Effects_of_Lead_Poisoning_on_Mental_development

³ Bellinger DC, Stiles KM, Needleman HL. Low-level lead exposure, intelligence and academic achievement: a long-term follow-up study. Pediatrics 1992; 90:855-61

Fergusson DM, Horwood LJ, Lynskey MT. Early dentine lead levels and educational outcomes at 18 years. J Child Psychol Psychiatry 1997; 38:471-8

Adults with occupational exposure to lead report more colds and influenza and exhibit lead-induced suppression of immunity.⁴ Adults with occupational exposure also might have neurotoxic effects, including peripheral neuropathy. Lead is also nephrotoxic and can cause progressive kidney damage leading to renal failure, gout, and hypertension.

Burstein added, “Lead is all around us in the environment and people should be aware of the danger it presents, particularly to children. Although considerable reductions in lead concentrations have occurred in air, tap water, food, dust, and soil over the past few decades, children are still being exposed to lead. All sources of lead in children’s environments should be identified and exposure controlled or eliminated. If your home was built before 1978, according to EPA guidelines, it can be presumed to have lead based paint. Lead safe work practices should be followed whenever painting, doing repairs or remodeling to protect your family from lead in dust. Older homes may also have lead pipes. If you are concerned about lead in your water, letting it run for a few minutes before using it for drinking or cooking will flush away the lead that accumulates in the water as it stands in the leaded pipes. Frequent damp cleaning to remove lead dust and encouraging children to wash hands often can help to reduce exposure to lead.”

For more information:

On Erie County Department of Health Lead Poisoning Prevention visit

<http://www2.erie.gov/health/>

On Centers for Disease Control and Prevention Lead Poisoning Prevention visit

<http://www.cdc.gov/nceh/lead/>

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Tong S, Baghurst PA, Sawyer MG, Burns J, McMichael AJ. Declining blood lead levels and changes in cognitive function during childhood: the Port Pirie Cohort Study. *JAMA* 1998; 280:1915-9

⁴ KlaassenC, ed. Casarett and Doull’s toxicology: the basic science of poison. 7th ed. New York City, NY: McGraw Hill; 2008