



***Touching Babies Every Day  
Lead in Diaper Bags***



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# Introduction

Lead is a stunningly toxic metal. A long list of problems has been linked to lead exposure: lowered intelligence, behavior problems, cancer, high blood pressure, kidney problems, anemia, cavities, and delayed puberty. Infants and children are particularly susceptible to lead's toxic effects.

While lead is a mineral that occurs naturally in our soils, people's activities have caused our exposure to lead to dramatically increase. Levels in our environment are about 1000 times what they were a few hundred years ago.

According to the American Academy of Pediatrics lead is "a serious threat to children's health." The Academy reiterates what researchers and government agencies have concluded, "there is no 'safe' level of lead exposure." It is counterintuitive to find this toxic metal in products that babies use every day.

In this report we identify popular diaper bags contaminated with lead.

# What We Did

We purchased 60 diaper bags from major California retailers and specialty stores in February and March, 2008. We tested their changing pads for lead. We also tested other parts of the bags where the potential for exposure to lead was high. We used an X-ray fluorescence analyzer and then sent the bags to a commercial lab to verify our results.

# Lead and Diaper Bags

Products with lead concentrations above the federal standard for lead in paint (600 parts per million)

	<p>“Baby Got Bag” (changing pad)</p>	<p>K-Mart</p>
	<p>“George” (changing pad)</p>	<p>Wal-Mart</p>
	<p>“Dolly” (Disney) changing pad</p>	<p>K-Mart</p>
	<p>“Baby Necessities” changing pad</p>	<p>K-Mart</p>
	<p>“Carters Out ‘N About” decorative face on accessory pouch</p>	<p>Babies R Us</p>
	<p>“Red” carrying strap</p>	<p>Mimi Maternity</p>

# Not Good for Babies

Lead has a profound ability to damage children's intellectual and behavioral development. Children who have been exposed to higher levels of lead score lower on IQ tests than children with less exposure. Children with higher exposures are also more impulsive and have shorter attention spans.

Recent research has documented that lead exposure during infancy causes significant problems for children as they grow and develop:

- A study led by a researcher at Cornell University showed that increases in the blood lead levels of infants and toddlers (6 months to 24 years old) were linked to lower IQ scores in early childhood, even after other important factors were considered.
- Scientists at Duke University found that increased blood lead levels in toddlers (1 to 2 years old) were linked with lower test scores when the children reached the fourth grade.
- The National Center for Healthy Housing documented that decreasing blood lead levels in preschool children were linked to decreases in crime rates when the children became young adults.

Children are more sensitive than adults to the health problems caused by lead exposure. Also, their activities make it easier for them to be exposed to lead.

# Not Good for Parents Either

Lead also causes a wide spectrum of health problems in adults.

One significant disease caused by lead exposure is cancer. The International Agency for Research on Cancer, the U.S. Environmental Protection Agency, and the National Toxicology Program, have all identified lead as a cancer causing chemical.

Lead also reduces our ability to have healthy children. Two recent studies, one from the Taiwan Institute of Occupational Safety and Health and the other from Brown Medical School, showed that women with higher lead exposures were more likely to have infertility problems. A third study, led by a researcher from the Harvard School of Public Health, found that mothers with higher lead exposure during the first part of their pregnancies were more likely to have babies with slower mental development.

Because of these kinds of problems, the state of California has identified lead as a chemical that causes developmental toxicity.

Other important diseases are also linked to lead exposure. Researchers from Tulane University and Johns Hopkins University recently showed that low level lead exposures are linked to a greater risk of heart attacks and strokes. Other recent studies showed that lead exposure increases blood pressure problems, accelerates kidney failure in patients with chronic kidney disease, and is linked to an increased risk of Lou Gehrig's disease.

# What You Can Do

The lead we identified in diaper bags was in the vinyl parts of these products. Purchase products made of other materials to avoid unnecessary lead. This is especially important for changing pads, because both babies and parents touch changing pads regularly. If you already own a changing pad made of vinyl you can cover it with a blanket, diaper, or pillowcase to protect your child.

Tell the stores where you shop that you want vinyl-free options.

During the past decade, the Center for Environmental Health has successfully negotiated agreements with manufacturers of other products that contain toxic chemicals. These agreements reduced the amount of toxic chemicals in children's medicines, wood play equipment, lunchboxes, jewelry, and candy. We used California's Safe Drinking Water and Toxic Enforcement Act of 1986, commonly known as Proposition 65, to initiate these actions. We are taking the same action with the diaper bags with lead hazards.

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