



Atlantic County Division of Public Health

Questions and Answers about Lead Poisoning

Q: Why is exposure to lead harmful to young children?

A: Scientists have found that lead can disrupt the normal growth and development of a child's brain and central nervous system. If this exposure happens at a critical time in brain development, the damage can be permanent. Young children are also more likely to be harmed by exposure to lead because the normal behavior of children -crawling on the floor, playing in dirt, putting objects in their mouths -puts them into immediate contact with any lead that might be present in their environment.

Q: How does lead get into children?

A: Young children can get lead by:

- 1 swallowing lead dust that is picked on their hands, or toys or other objects that they put into their mouths;
- 2 swallowing lead paint chips;
- 3 breathing lead dust in the air; eating food or drinking water that has lead in it.

Q: The biggest danger is paint chips, right?

A: No! While lead paint chips can contain a lot of lead, and be very dangerous, most children with lead poisoning never eat paint chips! The most dangerous lead is the lead you can't see. Most lead poisoning in children is due to their swallowing or breathing particles of very fine household dust or soil that have been contaminated with lead. This fine dust is very easily absorbed once it gets into the body.

Q: What age are children most at risk for lead poisoning?

A: The children that we are most concerned about are children less than six years old, particularly children between six months old (when they start to crawl around) and their third birthday. This is because:

- The time between birth and six years, and especially between birth and three years of age, is when the human brain grows the fastest, and when the critical connections in the brain and nervous system that control thought, learning, hearing, movement, behavior and emotions are formed. Anything that effects the brain at this time has lifelong effects.
- The normal behavior of children at this age - crawling, exploring, teething, putting objects in their mouth - puts them into contact with any lead is present in their environment.
- Children at this age absorb more of the lead that gets into their lungs or stomach than adults or older children.

Q: What are the effects of lead poisoning in children?

A: Very high levels of lead can cause seizures, severe brain damage resulting in developmental disabilities, coma, and even death. Lower levels can cause stomach pains and anemia. Long term exposure to lead, even at relatively low levels; have been found to be associated with decreased hearing, lower intelligence, hyperactivity, attention deficits, and problems in school.



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Q: Only poor children and children who live in cities get lead poisoning, right?

A: No! While these children are at higher risk than other children, there is so much lead, in so many places, in the environment in New Jersey that all children in this state are at risk of lead poisoning. There have been cases of lead poisoning in children reported every year in every county in the state.

Q: Where is the lead in the environment?

A: Lots of places!

- Lead-based oil paint on buildings. Lead paint was banned in New Jersey in 1971, but not nationwide until 1978, so any house built before 1978 may contain lead paint. Any house built before 1950 may be a particular risk, since paint made before then had very high (up to 50%) levels of lead pigments. More than one-third of the houses in New Jersey were built before 1950. Every county has at least 10,000 pre-1950 housing units. In some cities, the majority of the housing was built before 1950.
- In the soil, especially near factories that used lead, along heavily traveled roads (due to lead in gasoline), and on farms and orchards where lead arsenate pesticides were used. As New Jersey's population has grown, housing developments have been built on land that used to be factories, farms, or orchards where lead was used.
- In the water, if the building has lead pipes, or lead solder connecting the pipes.
- On the clothes of adults who work in industry that uses lead.
- In common hobbies, such as stained glass, pottery making, or home manufacture of fishing sinkers or bullets.
- On consumer products, such as pottery, toys, crayons, and vinyl mini-blinds imported from countries that do not ban the use of lead in these products. While these products are not supposed to be imported into the U.S., sometimes they are carried in by individuals who buy them in other countries, or are not detected in Customs and discovered only after they are in the hands of consumers.

Q: What children are at highest risk of lead poisoning?

A:

- Poor children
- African-American children
- Children who live in houses built before 1950
- Children who live in houses with lead paint, where that paint is chipping or peeling, or has been removed without taking the proper precautions.

Q: What are the symptoms of lead poisoning in children?

A: Children with high levels of lead in their body may not have symptoms! Lead poisoning causes symptoms only have very high levels, and even then those symptoms -stomach aches, anemia -are similar to those of much less serious illnesses. Only when a child is very sick will they get serious symptoms, such as seizures. Such children should be taken to a hospital immediately! However, because most children with lead poisoning will not show obvious symptoms, it is important that children be screened to detect lead poisoning.



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Q: Does New Jersey require that children be screened for lead poisoning?

A: New Jersey State law (Public Law 1995, chapter 328) requires every physician, nurse practitioner, and health care facility to screen all children under six years of age who come to them for care. Parents have the right to refuse to have the test done for any reason. There is no requirement that children be screened for lead poisoning before they can go to school or day care.

Q: When should children be screened for lead poisoning?

A: All children should be screened for lead poisoning at 12 and 24 months of age. Any child older than 12 months, but less than 6 years old, who has never previously been screened should, also be screened. In addition, any child who is six months of age or older, and is exposed to a particular lead hazard, should be screened. For example, if the child lives in a house with peeling paint, or a older house that was recently renovated without precautions to control lead dust, should be screened as soon as possible.

Q: Will my health insurance pay for the cost of lead screening?

A: State law (Public Law 1995, Chapter 316) requires every health insurance plan covering a group of 50 or more persons, including HMO's and Managed Care, to cover the cost of lead screening and childhood immunizations, without any deductible.

Q: What if I am uninsured and can't afford to pay for the cost of the screening test for my child?

A: Free screening is available through your local health department and the NJ Department of Health and Senior Services Laboratory. Every local health department in the state is required to provide well child services for its community, including lead screening and immunization. For the dates, times, and locations of your local Child Health Conference, call your local health department. If you are uncertain about which local health department covers your area, call the Child and Adolescent Health Program at (609) 292-5666.

Q: How much lead is safe in a child? What amount of lead is considered lead poisoning?

A: There is no single number above which a child has "lead poisoning" and below which is safe. So far as we know, no amount of lead in the human body is "safe" or "normal". Unlike other natural minerals, such as zinc and iron, that are necessary for our bodies to function properly, but are toxic in high doses, lead has no natural function in the human body. However, scientists have been able to detect problems in children only at lead levels above 5 micrograms per deciliter (ug/dL) in the blood. Blood lead levels between 10 and 19 are considered borderline, and the child retested every few months to insure that it does not go up. In New Jersey, any blood lead level of 20 or more is considered significant, and must be reported to the state health department. Levels above 45 are considered especially dangerous and need immediate attention of a doctor. A level of 70 or more is considered an emergency, requiring hospitalization.

Q: What happens when a child has a blood lead of 20 ug/dL or more?

A: The laboratory that performs the test must report it to the Department of Health and Senior Services. The Department then alerts the local health department where the child lives. The local health department sends out a Public Health Nurse to inform the family about lead poisoning and to help it get the medical attention the child needs. It also sends an inspector to find out where the lead hazards are. The inspector will write a



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report to the property owner, telling him/her where the lead hazards are and what to do about them. The property owner is legally required to remove those hazards. If necessary, the local health department will take the property owner to court to force him/her to remove the hazards.

Q: What can parents do to prevent their children from getting lead poisoning?

A: There are a lot of simple, low-cost things that parents can do to keep children from being exposed to lead, like:

- Have them wash their hands frequently, especially before eating or after playing outside or on the floor.
- Wash toys and other objects they handle and put in their mouths.
- Take off shoes and leave them at the door.
- Give them a nutritious diet high in iron and calcium and low in fat. Iron and calcium block lead from getting into red blood cells and being carried around the body.
- Clean floors and window sills by using a mop or sponge and detergent. Sweeping, dusting, and vacuuming only push lead dust around, and don't remove it. Recent research shows special detergents are not needed.
- If they work in a job that uses lead, shower and change clothes before leaving work. Wash work clothes separately from the other family laundry.
- Keep children away from hobbies that use lead. Keep children out of the workshop, or clean-up carefully after using lead.
- Don't remove paint unless they know it does not have lead in it. Any paint known or suspected to have lead should be removed only with special precautions, or by a state-certified Lead Abatement Contractor.

Q: How do I tell if there is lead paint on my house?

A: You can pretty much assume that any house built before 1960 has some lead paint on it, unless you know that all the old paint was removed some time in the past. If you want to be certain, you can hire a state-certified Lead Evaluation Contractor. New Jersey law requires that any person who does inspections for lead paint must meet certain training and experience requirements, pass a test, and obtain a permit from the New Jersey Department of Health and Senior Services. The inspector should be able to show you his/her permit, which looks like a photo ID. In addition, any company in the business of doing lead inspections must be certified by the New Jersey Department of Community Affairs (NJDCA). For more information, or a list of state-certified lead evaluation contractors, call the NJDCA at (609)530-8812.

There are also simple test kits that you can buy in a hardware store that you can use to test paint, water, or dishes for lead. Be aware however, that these tests, while reasonably accurate, do not always detect lead even when it is present. For example, if lead paint is covered with several layers of non-lead paint, the test



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kit may not show positive. You can also take paint chips or water samples and send them to a laboratory for testing. There are many environmental laboratories that perform this service. They are listed in the Yellow Pages under "Laboratories -Testing".

Q: What should I do if I want to remove old paint from my house?

A: Assume that the paint is leaded unless you know for certain that it is not. See the answer above for how to get paint tested for lead.

- Don't assume that every painter knows how to remove lead paint safely. State certified Lead Abatement Contractors must meet requirements set by the NJ Department of Community Affairs (NJDCA) and follow work practices set by the NJDCA. Their workers must meet training requirements, pass a test, and have a permit issued by the NJ Department of Health and Senior Services. For a list of state-certified Lead Abatement Contractors, call the NJDCA at (609) 530-8812.
- Don't remove the lead paint yourself unless you know how to do it safely. The basic principles of safe lead paint removal are:
 - DO wet the area first and manually scrape off the old paint.
 - DON'T dry scrape or sand off old paint.
 - DON'T use a power sander, power washer, or sand blasting.
 - DON'T burn paint off, or use a heat gun with a temperature of over 700 degrees. The fumes could give you lead poisoning!
 - DO cover the floor/ground and seal off the work area with plastic.
 - DON'T allow children, pets, or pregnant women in the work area.
 - DO clean up very carefully at the end of the work day or job.

The NJ Department of Health has a pamphlet, "Important Information for Homeowners and Renters about Lead Paint Hazards", that explains these precautions in more detail. For a copy, call the Child and Adolescent Health Program at (609) 292-5666.

Q: Where can I get more information about lead poisoning in children?

A: Call the Atlantic County Division of Public Health at 609-645-5935.

Information provided by the New Jersey Department of Health.