

# Questions and Answers about Lead and Lead Testing in New Mexico

## 1. What is the lead testing program in New Mexico (NM) for children?

- NM is a universal testing state: if a doctor or a family member is concerned about lead poisoning, testing is available per a doctor's order. All blood lead results are reported to the NM Department of Health, regardless of the level.
- Children under 6 years old who are qualified for Medicaid and enrolled are **required** to complete Early Periodic Screening, Diagnosis, and Treatment tests (EPSDT); a blood lead test is one of the requirements. A child must be tested at 12 months of age and 24 months of age and this is repeated if a blood lead test is above 5 ug/dL or if a sibling's level is above 5 ug/dL. The EPSDT lead testing requirement for testing at 12 and 24 months will detect 97% of cases with elevated blood lead levels due to lead in the home. This is predominantly due to a child's behavior at that age, which includes crawling on the floor and putting things into their mouths.
- Children enrolled in Medicaid who are under 6 years of age but who have never had a blood lead test need to be tested. This is repeated if a blood lead test is above 5 ug/dL for them or for a sibling.
- The NM Childhood Lead Poisoning Prevention Program (NM CLPPP) prioritizes areas in New Mexico that are at higher risk for lead, based on certain factors such as poverty levels, age of housing, among others. San Juan County is one of the prioritized areas and extensive outreach has been conducted to encourage lead testing.
- Testing can detect even very small levels of lead in blood. Hospital or clinical laboratories have standards that must be adhered to and those methods can be accurate down to 1 microgram per deciliter ( $\mu\text{g}/\text{dL}$ ), whereas case management begins at 5 ug/dL.

## 2. How does the New Mexico Department of Health Manage Lead Cases?

- NM Childhood Lead Poisoning Prevention Program (NMCLPPP) case management guidelines outline how we respond to different blood lead level (BLLs) (see attached and online: <https://nmhealth.org/publication/view/general/350/> ).
- At BLLs above 5 ug/dL, NM DOH will assist medical professionals in finding the lead hazards, and at the higher lead levels (>15 ug/dL) we can conduct a site visit to determine lead hazards with patient permission.
- Finding the source of the lead exposure is the goal. Once this has occurred the lead source can be removed and BLLs will go down as the patient is managed with a good diet.
- For most cases in NM, a lead hazard source is found and the BLLs can be managed.

### 3. What happens in the body when someone is exposed to lead? Can it accumulate?

- From the day of birth, humans slowly accumulate lead until a total body burden of 50-350 mg of lead is reached by age 60. More than 90% of lead absorbed in the body is deposited or stored in bone, mainly dense bone, from where it can be slowly released back into blood over time. Minor amounts of absorbed lead are excreted from the body in hair, nails, and urine. In bone, the half-life is about 20 years or more. Lead released from its bone storage/deposits may contribute as much as 50 percent of the lead in blood.<sup>1</sup> This released lead can be detected in blood samples. The fraction of lead in bone increases with age. Males have usually higher lead concentrations in nearly all tissues than females.<sup>2</sup> If an individual has persistent elevated blood lead levels (EBLL) with no discernable lead exposure, the source of this lead could be stored lead in the body. Therefore, it is important to start lead testing in children as early as possible or under the age of 2, ideally.
- Absorption of lead into blood in the intestines competes with absorption of iron and calcium. Calcium has a higher affinity for absorption than lead in the intestines. Therefore, a good diet high in iron and calcium may help assist with reduction of lead absorption.
- While absorbed lead can be stored in and slowly released from the bones, the bones are constantly absorbing and releasing calcium. A good diet high in calcium will also increase the body's ability to release and then excrete more stored lead from the body.
- Vitamin C and bioflavonoids can bind to lead to increase excretion of lead from the body.



**For questions about potential health problems please call  
NMDOH at 505-827-0006**

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<sup>1</sup> Casarett and Doull's toxicology: the basic science of poisons. Klaasen, Curtis, D., Amdur, Mary O, and Doull, John, editors, 5<sup>th</sup> edition. 1996.

<sup>2</sup> Baselt R. Disposition of Toxic Drugs and Chemicals in Man. Sixth Edition. 2002