

# Lead Testing for Children Enrolled in Medicaid

<b>Purpose</b>	To synthesize evidence and develop preliminary findings and recommendations that address the audit objective
<b>Source</b>	Audit team created
<b>Conclusion</b>	The audit team has developed preliminary findings and recommendations

## Audit Objectives

- 1. To what extent are children enrolled in Medicaid receiving the required lead testing?*
  - 2. If eligible children are not receiving required tests, what are the causes for this?*
  - 3. What should the state do to ensure children at the highest risk receive tests?*

## Overview of Audit Methods

<p><b>Review of Laws and Rules</b></p> <ul style="list-style-type: none"><li>Federal laws and guidance related to Medicaid and lead testing from the Centers for Medicare and Medicaid Services (CMS) and Centers for Disease Control (CDC).</li><li>Nevada laws related to lead testing.</li><li>Contract requirements from Agency contracts with MCOs.</li><li>Grant requirements from CDC grant that COMMISSION receives.</li></ul> <p><b>Online Research</b></p> <ul style="list-style-type: none"><li>Conducted a literature review to identify potential causes for low lead testing numbers from across the country.</li><li>Conducted a literature review to identify potential leading practices for lead testing from across the country.</li></ul> <p><b>Interviews</b></p> <p>To identify potential causes of low testing rates in Nevada and to identify potential leading practices we interviewed the following groups:</p> <ul style="list-style-type: none"><li>Program management and staff from the AGENCY and COMMISSION.</li><li>Interviewed all five Managed Care Organizations that have contracts with AGENCY.</li><li>Interviewed medical associations that represent providers.</li></ul> <p><b>Analysis</b></p> <ul style="list-style-type: none"><li>Conducted a cross-match of AGENCY’s Medicaid client eligibility data to COMMISSION’s lead testing data. We conducted the cross-match by dividing our population into two cohorts:<ul style="list-style-type: none"><li>Group 1 – Includes children that turned 1 yr. old in 2010, 2011, and 2012. We tested this group to see how many were tested at 12 months, 24 months or at least once by the age of 6.</li></ul></li></ul>
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- Group 2 – Includes children that turned 1 yr. old in 2013, 2014, and 2015. We tested this group to see how many were tested at 12 months and 24 months of age. We also tested this group to determine, of the kids that did not get tested by 24 months, how many also lived in an area at high risk for lead exposure.
- Conducted a risk analysis to identify areas in the state that are at higher risk for lead exposure based on the following factors
  - Areas with elevated blood lead levels
  - Age of homes
  - High percentage of test results with elevated blood lead levels
  - Federal poverty rate

## Background

Information
<p>Lead exposure has well-documented long-term health and developmental impacts for children</p> <ul style="list-style-type: none"><li>• In the U.S., individuals may be exposed to lead through multiple sources in their home or environment.</li><li>• Exposure to lead can seriously harm a child’s health, including damage to the brain and nervous system, slowed growth and development, learning and behavior problems, and hearing and speech problems.</li><li>• Children are more impacted by lead because of their hand-to-mouth behaviors and rapidly developing brains and nervous systems.</li><li>• Though no safe blood level of lead has been identified, CDC uses a blood lead reference value of 3.5 µg/dL to identify children with blood lead levels that are higher than most children’s levels in the United States.</li><li>• The Centers for Disease Control and Prevention (CDC) recommends testing blood for lead exposure because there are often no immediate symptoms when a child is exposed to lead.</li></ul> <p>Federal rules require children enrolled in Medicaid receive two blood lead tests within the first two years of life.</p> <ul style="list-style-type: none"><li>• Medicaid covers lead testing through the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefit and has specific requirements for lead screening of children.</li><li>• Medicaid requires that all children enrolled in Medicaid receive a blood lead test at 12 and 24 months of age, or at least once by 72 months if not previously tested.</li><li>• In addition to initial testing, Medicaid EPSDT benefits require states to provide medically necessary diagnostic and treatment services for children identified with elevated blood lead levels.</li><li>• Although the Medicaid requirement is clear, the CDC has said it is no longer necessary and states should take a risk-based approach to determining which enrollees should be tested.</li></ul> <p>Medicaid strategies to mitigate lead exposure include collaboration between Medicaid and state’s health departments and lead poisoning and prevention programs to reach children who have not received required blood lead screening tests. In Nevada the two main agencies responsible for this work are the AGENCY and the COMMISSION.</p> <ul style="list-style-type: none"><li>• Nevada’s Agency (AGENCY) is responsible for ensuring Medicaid providers perform the required testing<ul style="list-style-type: none"><li>○ AGENCY contracts with five managed care organizations to deliver health care to Medicaid clients through their managed care programs.</li><li>○ The AGENCY currently contracts with five MCOs to deliver multiple managed care programs for Medicaid clients in the state.</li><li>○ AGENCY administers the contracts with the MCOs and is responsible for ensuring compliance with all contract requirements.</li></ul></li></ul>

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- The Nevada Commission (COMMISSION) also plays a key role in improving lead testing rates for children enrolled in Medicaid.
  - COMMISSION is responsible for administering the CDC’s Childhood Lead Poisoning Prevention Program which seeks to strengthen blood lead testing and reporting, surveillance, linking children to recommended follow-up services and targeted population-based interventions.
  - Since 1984, COMMISSION has been conducting lead surveillance. COMMISSION receives, records and analyzes blood lead results.
  - When a test confirms a child’s blood has elevated levels of lead, COMMISSION works with local health jurisdictions to provide case management and connect the family with needed services.
  - COMMISSION publishes information about the risks of lead exposure and helps promote lead testing statewide.
  - COMMISSION has developed maps that identify areas in the state with the highest risk of lead exposure.

Disparities in lead exposure persist for lower-income households and neighborhoods and children of color

- Data show that although the goal to reduce overall blood levels in children have been exceeded, Black children and those living in households with incomes below 130% of the federal poverty level (FPL) remain at increased risk for exposure
- Similarly, research show that areas with higher blood lead levels are associated with low home ownership, high poverty, and residents who are a majority people of color.
- Lead poisoning also disproportionately affects refugee and other immigrant children due to both environmental exposures, such as resettling in pre-1978 housing, and potential exposure through cultural practices, traditional medicines, and consumer products
- Indigenous people may also be at increased risk of being exposed to lead through certain traditional practices, such as lead contamination of plants and animals in traditional diets, and older housing.

## Results

Nevada is not fully meeting the Medicaid requirement to test all children enrolled in Medicaid at 12 and 24 months of age.

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1.	Federal law requires <u>all</u> children enrolled in Medicaid to receive a blood lead test at 12 and 24 months or at least once by age 72 months.	Nevada is out of compliance with Federal Medicaid requirements. Only 13% of children enrolled in Medicaid are receiving the required lead testing.	Providers are not testing all children enrolled in Medicaid for a variety of reasons. Providers: <ul style="list-style-type: none"><li>1. Are unaware of the requirement.</li><li>2. Can choose to not test the child if the family objects to the child getting another poke.</li></ul>	Children with elevated blood lead levels may not be identified and therefore may not receive adequate treatment. Without treatment, lead can seriously harm a child’s	1. AGENCY should work with COMMISSION, medical associations and MCO’s to ensure providers are receiving adequate training about the Medicaid testing requirement, the importance of testing, and lead exposure risk in Nevada.

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	<p>Multiple states (including Connecticut, Ohio, Florida, Illinois, Iowa, Missouri, Maryland, and Tennessee) have adopted Performance Improvement Plans (PIPs) and/or value-based bonus payments for Medicaid managed care plans aimed at improving rates of lead screening and follow-up.</p> <p>In 2012, CMS expanded its lead screening policy to allow states to request approval from CMS to implement a targeted lead screening program.</p> <p>CMS and CDC have developed a guidance process document for states that want to request to move to a targeted screening approach.</p>	<p>We used Medicaid client eligibility data and grouped the results by the following:</p> <ul style="list-style-type: none"> <li>For children that turned one year old in 2010, 2011, or 2012 we found: <ul style="list-style-type: none"> <li>20% percent had at least one test at age one</li> <li>12% percent had two tests at age two</li> <li>25% percent had at least one test by age six</li> </ul> </li> <li>For children that turned one year old in 2013, 2014, or 2015. <ul style="list-style-type: none"> <li>12% percent had at least one test by age one</li> <li>15% percent had two tests by age two</li> </ul> </li> </ul>	<ol style="list-style-type: none"> <li>Can prioritize other family concerns over lead testing during well child exams.</li> <li>Are unaware of the risk of lead exposure in Nevada or more specifically to the patients in their practice - leading to possible lack of training.</li> <li>Are not receiving adequate reimbursement for the tests.</li> <li>Are having a hard time getting kids to come into the office for Well-check appointments, where lead screening usually occurs.</li> <li>Are unaware of their patients' Medicaid enrollment status.</li> </ol> <p>Families may not fully understand the risks of lead exposure and/or about the Medicaid requirement in order to advocate for testing during well-child visits</p> <ol style="list-style-type: none"> <li>The state does not currently include blood lead screening as a requirement to attend school.</li> </ol> <p>AGENCY questions the efficiency/effectiveness of testing all children enrolled in Medicaid.</p>	<p>health and cause well documented adverse effects such as:</p> <ul style="list-style-type: none"> <li>Damage to the brain and nervous system</li> <li>Slowed growth and development.</li> <li>Learning and behavior problems</li> <li>Hearing and speech problems</li> </ul> <p>This can cause:</p> <ul style="list-style-type: none"> <li>Lower IQ</li> <li>Decreased ability to pay attention.</li> <li>Underperformance in school.</li> </ul>	<ol style="list-style-type: none"> <li>AGENCY and COMMISSION should coordinate to provide outreach/education to families and schools at the greatest risk for lead exposure about the effects of lead, the importance of testing and the lead exposure risk in Nevada.</li> <li>See recommendation 1 and 2.</li> <li>See recommendation 1 and 2.</li> <li>AGENCY should conduct a feasibility analysis to determine whether adopting a value-based bonus payment system for Medicaid managed care plans could help to improve rates of lead screening and follow-up care in Nevada.</li> </ol>

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			<ol style="list-style-type: none"> <li>1. Since 1999, the state has convened three expert panels including representatives from COMMISSION and AGENCY, none of which recommended universal screening.</li> <li>2. AGENCY has told us they are using a targeted plan to testing</li> </ol>		
2.	<p>As the state Medicaid Agency, AGENCY is responsible for ensuring all Medicaid testing requirements are met.</p> <p>Federal Grant requires COMMISSION to identify providers and clinics that are not testing Medicaid enrolled children.</p> <ul style="list-style-type: none"> <li>• Link Medicaid billing claims data to Childhood Lead Poisoning Prevention (CLPP) data</li> <li>• Create list with contact information.</li> </ul>	<p>The state’s system to monitor compliance with the Medicaid blood lead testing requirement is inadequate.</p> <ul style="list-style-type: none"> <li>• The state does not currently perform a match of Medicaid clients to test results. Instead, COMMISSION sends AGENCY a list of all children with elevated blood lead levels for AGENCY to determine if they are enrolled in Medicaid or not.</li> <li>• AGENCY lacks adequate performance measures to determine the extent to which the state is meeting the requirement. The only</li> </ul>	<p>AGENCY and COMMISSION are not conducting a coordinated analysis to identify Medicaid enrolled children who are receiving the required lead tests.</p> <ul style="list-style-type: none"> <li>• AGENCY and COMMISSION do not have an agreement in place to perform a match of children enrolled in Medicaid to test results.</li> </ul> <p>AGENCY, COMMISSION and the MCOs have been focused on monitoring children with elevated blood lead levels to ensure they get the treatment they need.</p>	<p>The state could lose grant funding based on underperforming on its grant requirements.</p> <p>Children with elevated blood lead levels may not be identified and therefore may not receive adequate treatment. Without treatment, lead can seriously harm a child’s health and cause well documented adverse effects such as:</p> <ul style="list-style-type: none"> <li>• Damage to the brain and nervous system</li> </ul>	<p>COMMISSION and AGENCY should work together to develop an analysis plan that includes the following:</p> <ul style="list-style-type: none"> <li>• Performance metrics to determine the children enrolled in Medicaid that have/have not had the required tests an summarize test results.</li> </ul> <p>AGENCY should require MCOs to identify providers that are not performing tests and create a plan to inform providers about their performance and offer education about the Medicaid testing requirement, the importance of testing, and lead exposure risk in Nevada.</p>

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	<ul style="list-style-type: none"> <li>Conduct outreach to educate providers of Medicaid requirements</li> </ul>	<p>performance measure we identified is the HEDIS measure that only tracks whether children enrolled in Medicaid have received at least one test by age 24 months and does not include fee for service clients.</p> <ul style="list-style-type: none"> <li>AGENCY does not conduct analysis to identify providers that are not performing tests.</li> <li>COMMISSION reports on the number of children that are tested by age six, but it is not specific to Medicaid.</li> </ul>	<p>AGENCY does not track whether fee for service providers are meeting the requirement.</p> <p>MCOs have focused efforts on case management to help coordinate care after elevated blood lead levels are detected instead of ensuring tests are done in the first place.</p>	<ul style="list-style-type: none"> <li>Slowed growth and development.</li> <li>Learning and behavior problems</li> <li>Hearing and speech problems</li> </ul> <p>This can cause:</p> <ul style="list-style-type: none"> <li>Lower IQ</li> <li>Decreased ability to pay attention.</li> <li>Underperformance in school.</li> </ul>	<p>AGENCY should conduct an analysis to identify fee for service providers that are not performing tests and work with medical association to offer education about the Medicaid testing requirement the importance of testing, and lead exposure risk in Nevada.</p>
3.	<p>As the state Medicaid Agency, AGENCY is responsible for ensuring all Medicaid testing requirements are met. Federal regulations mandate that states require Medicaid managed care plans to establish and implement an ongoing comprehensive quality assessment and performance improvement</p>	<p>AGENCY has not taken any corrective action to address low testing rates among children enrolled in Medicaid.</p> <ol style="list-style-type: none"> <li>The independent review by a Contractor tracks how well the MCOs are doing in completing required blood lead testing.</li> <li>While MCOs have rates ranging from a low of 25% to a high of 55%, AGENCY has not required any</li> </ol>	<ol style="list-style-type: none"> <li>AGENCY has not established a process to ensure MCOs are complying with all contract requirements related to lead testing (see criteria column for a description of these requirements).</li> <li>AGENCY has not established a process for identifying low performing fee for service providers and/or</li> </ol>	<p>Without putting adequate corrective action in place, the state could remain out of compliance with Federal Medicaid requirements.</p> <p>Children with elevated blood lead levels may not be identified and therefore may not receive adequate treatment.</p>	<ol style="list-style-type: none"> <li>AGENCY should develop a process for identifying low performing providers,</li> <li>AGENCY should develop a corrective action process for the low performing providers that includes <ul style="list-style-type: none"> <li>Performance measures to identify low performing providers, including both fee for service and MCO providers.</li> </ul> </li> </ol>

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	<p>program for Medicaid services that includes Performance Improvement Projects (PIPs)</p> <p>As stated in its contracts with MCOs:</p> <ul style="list-style-type: none"> <li>• AGENCY has the authority to require each MCO to create a Corrective Action Plan (CAP) whenever AGENCY concludes that the MCO is out of compliance with one or more terms of conditions of the Contract.</li> <li>• Each MCO is responsible for all EPSDT screening, diagnostic, and treatment services found to be medically necessary [blood lead testing is a required EPSDT screening]</li> </ul>	<p>corrective action from any of the five MCOs it contracts with.</p> <p>3. MCOs have not included blood lead testing in their required performance improvement projects (PIPs) even if they have been identified as underperforming.</p> <p>4. Some providers do not bill for tests performed leading to inaccurate HEDIS numbers.</p>	<p>implementing corrective action for these providers.</p> <p>3. AGENCY has not established clear thresholds for when a Corrective Action Plan would be needed.</p> <p>4. MCOs might have a false understanding that their providers are performing better than they are because:</p> <ul style="list-style-type: none"> <li>• Some providers may not be billing for actual tests being performed which would not show up on the HEDIS measure. MCOs would then not rely on the HEDIS measure to determine if corrective action is needed.</li> <li>• The HEDIS measures might not be given significant weight as a measure because blood lead testing has not been identified as core</li> </ul>		<ul style="list-style-type: none"> <li>• Clear thresholds for when a corrective action plan would be needed.</li> <li>• A monitoring process to ensure corrective action plans have been implemented and are achieving intended outcomes.</li> </ul>



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			<p>measure for Apple Health.</p> <ul style="list-style-type: none"> <li>The interpretation of the HEDIS measure might not be given enough weight because AGENCY and MCOs believe that the risk questionnaire should satisfy the requirement.</li> </ul>		
4.	Federal law requires that states ensure Medicaid-eligible children, and their families are aware of the services that are a part of the EPSDT benefit and have access to required screenings and necessary treatment services	<p>Nevada could do more to ensure children enrolled in Medicaid have access to required screenings and necessary treatment services.</p> <ul style="list-style-type: none"> <li>We have heard anecdotally from providers that when families need to travel to a separate lab, they are less likely to get tested. We talked to three medical associations and few providers during scoping/planning..</li> <li>Providers have also told us that giving providers more access to capillary testing machines, which are commonly used to get an</li> </ul>	We have not seen any evidence that anyone in the state has done an analysis to determine if access is an issue.	Parents are less likely to get their children necessary testing if access is an issue. This in turn can lead to children with elevated blood lead levels not being identified and therefore not receiving adequate treatment.	AGENCY and COMMISSION should coordinate to conduct an analysis to identify the need for better access to testing.



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		initial lead test, could increase testing. <ul style="list-style-type: none"> <li>Our analysis may show locations with far fewer tests being done</li> </ul>			

Children at the highest risk for

lead exposure in the state may not be receiving the required blood lead tests **[This analysis still needs to be completed]**

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5.	<ul style="list-style-type: none"> <li>Federal law and Federal law requires <u>all</u> children enrolled in Medicaid receive a blood lead test at 12 and 24 months or at least once by age 72 months.</li> <li>Guidance from CDC and American Academy of Pediatrics (AAP) recommend universal screenings at age one and two well-child visits for children enrolled in Medicaid who live in high lead exposure-prevalence areas.</li> <li>COMMISSION shall work with AGENCY to</li> </ul>	Of the children enrolled in Medicaid that did not receive a test, 33% percent lived in an area considered high risk for lead exposure: <ul style="list-style-type: none"> <li>Elevated blood lead levels</li> <li>Poverty level</li> <li>Older homes – Areas where at least 25% of houses are built before 1960</li> </ul>	<ul style="list-style-type: none"> <li>The state does not conduct analysis to determine whether children enrolled in Medicaid that live in an area considered high risk for lead exposure are receiving tests.               <ul style="list-style-type: none"> <li>COMMISSION and AGENCY have not established an agreement to be able to do this kind of analysis.</li> </ul> </li> <li>COMMISSION is not focusing its outreach to families at the highest risk for lead exposure.</li> <li>Providers sometimes do not know if their practice serves high risk clients and</li> </ul>	Children at the highest risk of having elevated blood lead levels may not be identified and therefore may not receive adequate treatment.	COMMISSION should create a plan to regularly (at least annually) identify/assess Nevada communities most at risk for lead exposure.  COMMISSION and AGENCY should create a an agreement to conduct a coordinated analysis, at least annually, to determine whether children at the highest risk (based on the risk analysis done in the previous recommendation) are receiving the required testing.

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	<p>improve lead screening rates among children at highest risk who are on Medicaid</p> <ul style="list-style-type: none"> <li>In 2012, CMS expanded its lead screening policy to allow states to request approval from CMS to implement a targeted lead screening program.</li> <li>CMS and CDC have developed a guidance process document for states that want to request to move to a targeted screening approach.</li> </ul>		<p>therefore may not prioritize blood lead testing.</p>		
6.	<p>Research has shown certain populations continue to be at increased risk for lead exposure.</p>	<p>There are certain populations that seem to be tested at a lower rate We reviewed testing rates in the following demographic groups:</p> <ul style="list-style-type: none"> <li>Race</li> <li>Spoken language</li> <li>Written language</li> <li>Federal poverty level</li> <li>MCO vs. FFS</li> </ul>	<p>Some high-risk children are being tested more than the state average, but some are not.</p> <ul style="list-style-type: none"> <li>For 2 out of 6 high-risk groups of children we evaluated, the number of children tested was 35%</li> <li>For 4 out of 6 high-risk groups of children we evaluated, the number of children tested was 19%</li> </ul>	<p>Children at the highest risk of having elevated blood lead levels may not be identified and therefore may not receive adequate treatment.</p>	<p>TBD based on analysis results.</p>

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		<ul style="list-style-type: none"><li>Urban vs. Rural communities</li></ul>			