

**2010-2014 Mississippi Lead Poisoning Prevention and Healthy Homes
Program Surveillance Snapshot**

Mississippi Lead Poisoning Prevention and Healthy Homes Program Overview

The goals of the Mississippi State Department of Health's Lead Poisoning Prevention and Healthy Homes Program (MSLPPHHP) are to promote statewide efforts to eliminate lead poisoning in children less than 72 months of age, and to develop strategies to decrease housing-related environmental hazards (i.e., mold, mildew, carbon monoxide, smoke, and pests) that may contribute to undesirable health conditions. The program provides practical prevention measures through care coordination, education, and risk reduction activities for children and their families. The program also collaborates with an array of organizations to promote, develop, and implement activities and policies.

In an effort to reduce families' exposure to lead poisoning and other environmental hazards, the MSLPPHHP provides the following services: educational telephone counseling for venous blood lead levels of 5-14 micrograms per deciliter ($\mu\text{g}/\text{dL}$) and home visits and environmental inspections for venous blood lead levels of $15\mu\text{g}/\text{dL}$ or greater. During the counseling, a series of questions are asked to help determine what lead sources are present in the child's environment. Based on the families' responses recommendations and low cost options are provided to help reduce the child's lead level. During home visits and environmental inspections, visual assessments were conducted to determine environmental risk factors that may affect the health of children and families. In 2010-2014, 153 families of children with venous blood lead levels qualified for a home visit and environmental assessment. Of the families and children who were qualified for a home visit, 40 were unable to be contacted due to inaccurate contact information, and 21 refused the services.

In May 2012, the Centers for Disease Control and Prevention recommended that all Lead Poisoning Prevention and Healthy Homes Programs use the reference level of $5\mu\text{g}/\text{dL}$ to identify children with lead poisoning. The MSLPPHHP currently provides educational counseling for families of children who have been identified to have a venous blood lead level between $5\mu\text{g}/\text{dL}$ - $9\mu\text{g}/\text{dL}$. Data from the Systematic Tracking of Elevated Blood Lead Levels and Remediation (STELLAR) database shows that from June 1, 2012 – December 31, 2014, 624 children were identified with venous blood lead levels in this range. All 624 children were eligible for services; however, only 110 accepted the services provided by the MSLPPHHP. Some families did not answer or did not return messages; in addition, some telephone numbers were incorrect or not in service.

The MSLPPHHP has successfully decreased the number of children with lead poisoning by 31% and increased the number of children tested by 18% over the past 4 years through health promotion activities such as the Community Transformation Project, provider education, and partnerships. The number of children with lead poisoning has decreased from 2,317 to 308 between the years of 2004-2014. With the increased children enrolled in Medicaid, the MSLPPHHP and the Mississippi Division of Medicaid continue to identify ways to increase the screening rate for Medicaid-enrolled children.

**Mississippi Lead Poisoning Prevention and Healthy Homes Program
Surveillance Snapshot
2010 – 2014**

The purpose of this report is to provide information on the status of childhood lead poisoning and health hazards in Mississippi. The report also serves as a resource for stakeholders and others who are interested in eliminating childhood lead poisoning and reducing environmental hazards in homes.

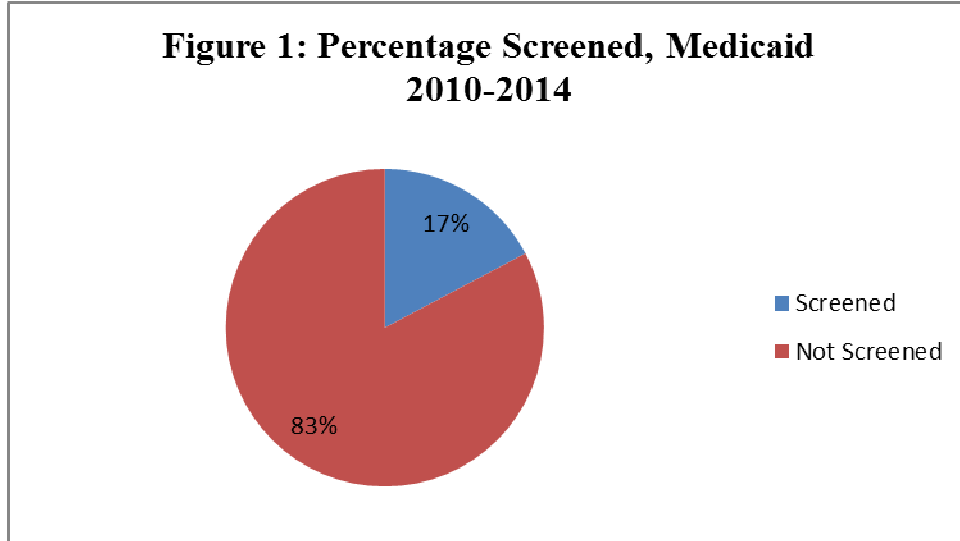
In 2014, 46,074 children under 6 years of age were tested for lead poisoning in Mississippi. There was a 13.2% decrease in the number of children tested from year 2010 to 2011; however, from 2011-2014, there was an 18% increase in the number of children tested over the 4 year period. In addition, from 2011-2014 there was a 31% decrease in the number of children identified with lead poisoning. (As shown in Table 1)

Table 1: Children Less Than Six Years Old With Elevated Blood Lead Levels

Year	Total Children Tested	Children Less Than Six Years Old	Percentage of Children Tested	5-9 µg/dL	10-14 µg/dL	15-19 µg/dL	20-44 µg/dL	45-69 µg/dL	>=70 µg/dL	Grand Total	Percentage of Children with Blood Lead Level >=5 µg/dl Among Children Tested
2010	47,792	252,345	19%	481	103	31	30	2	1	648	1.36%
2011	41,540	250,997	16.5%	274	69	32	26	0	0	403	0.97%
2012	42,610	247,761	17.2%	248	76	32	25	2	0	383	0.90%
2013	43,401	240,036	18.1%	223	67	17	20	1	0	328	0.76%
2014	46,074	234,738	19.6%	217	59	13	17	2	0	308	0.67%

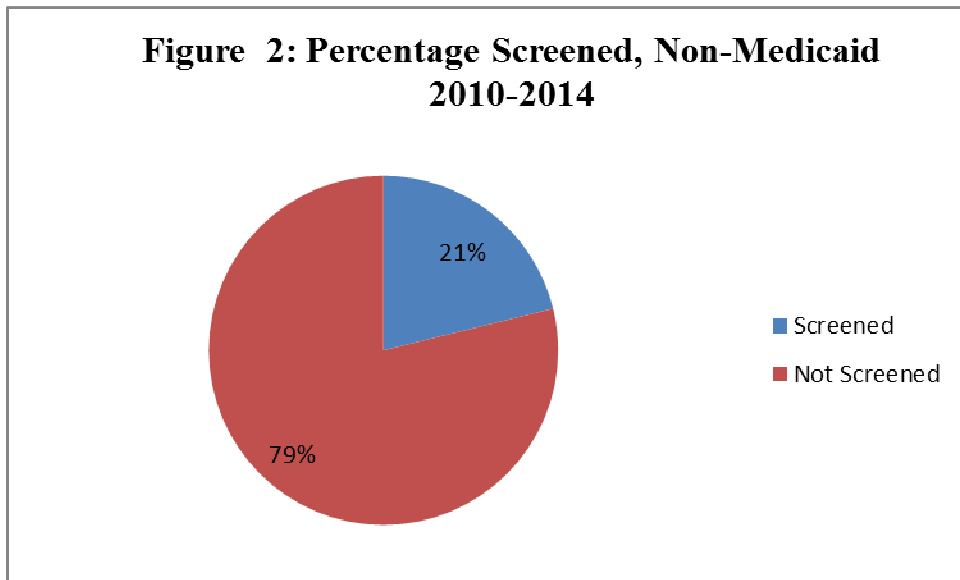
Source: U.S. Census Bureau, MSLPPHHP STELLAR Database

Figure 1 shows that only 17% of Medicaid-eligible children in Mississippi were screened from 2010-2014 (168,293 of 976,653) With 79% of the children in the state receiving Medicaid, a large portion of them are at risk for lead poisoning and should have been screened.



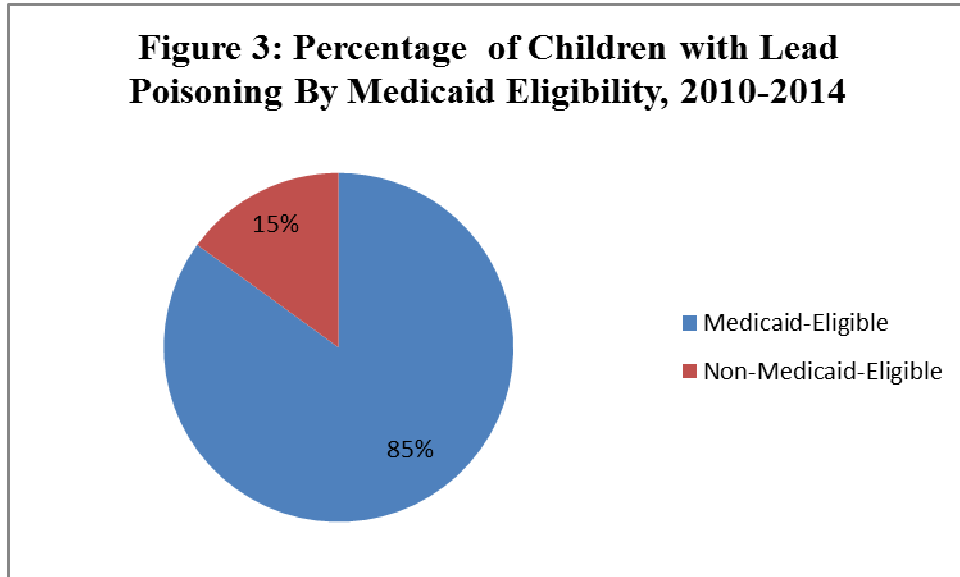
Source: Mississippi Division of Medicaid, MSLPPHP STELLAR Database

Figure 2 shows that only 21% of non-Medicaid eligible children in Mississippi were screened from 2010-2014 (53,124 of 250,224). These children could be living in older homes with lead-based paint or lead contaminated dust and dirt and should also be screened for lead poisoning, even though screening is targeted to children who received Medicaid.



Source: Mississippi Division of Medicaid, MSLPPHP STELLAR Database

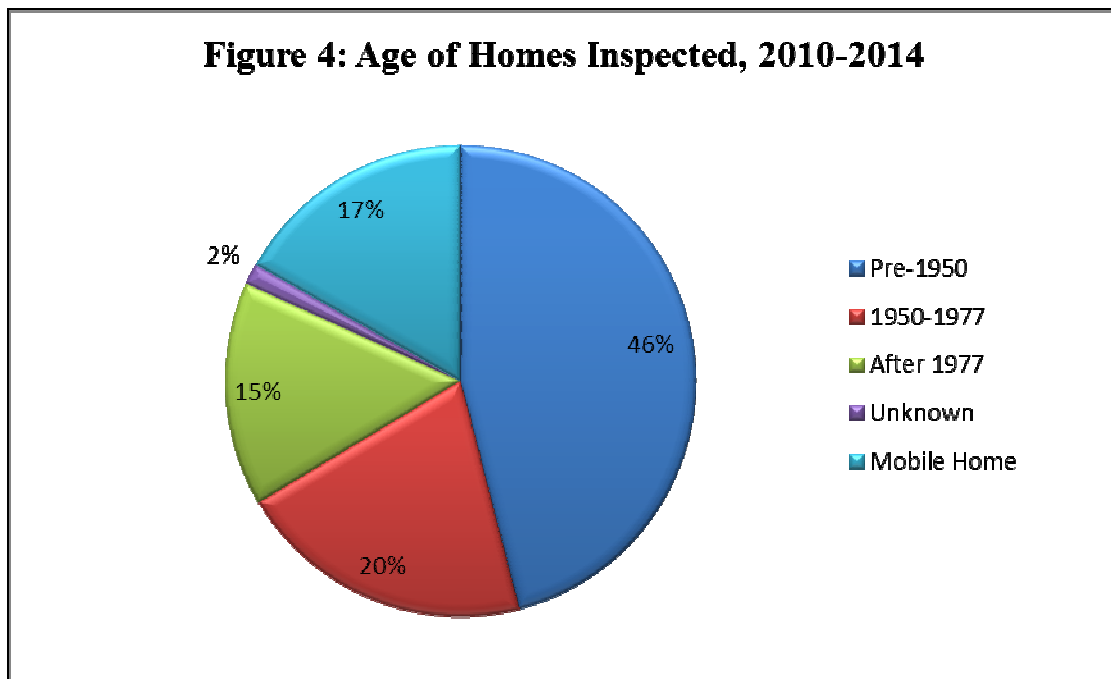
Figure 3 shows that 85% of the children identified with lead poisoning between 2010 and 2014 were Medicaid-eligible (1,757 of 2,070 children). This fact indicates that lead toxicity is still a problem for children with Medicaid coverage. Only 15% (313) of the children with lead poisoning were not enrolled in Medicaid. Medicaid-eligible children are almost six times as likely to have higher levels of lead in their blood as children without Medicaid.



Source: Mississippi Division of Medicaid, MSLPPHP STELLAR Database

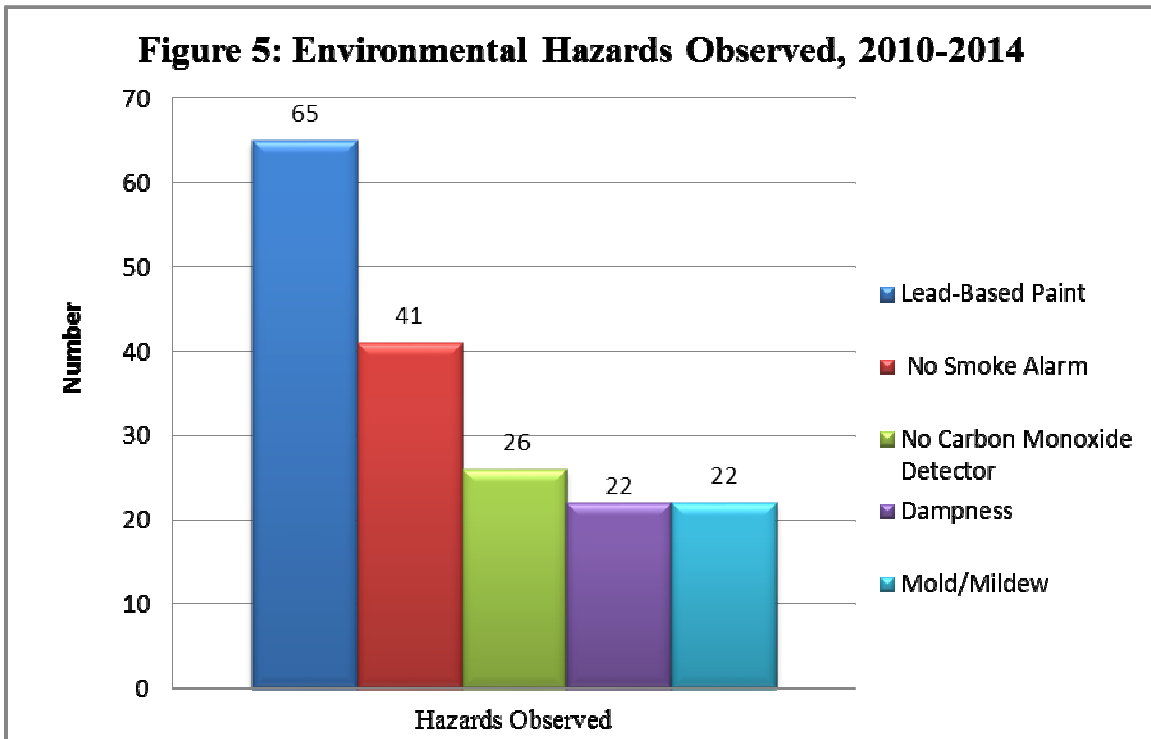
Figure 4 shows that 46% of the residential inspections conducted from 2010-2014 were pre-1950 residences (63 of 137 dwellings). A total of 20% of the residences were constructed between 1950 and 1977; 15% were constructed after 1977; 17% were mobile homes and the time of construction was unknown in 2% of the dwellings.

Over one half of the residences inspected had lead hazards in paint and hazardous levels of lead dust associated with paint. Slightly over one quarter of the residences had hazardous levels of lead in soil. Slightly over one third of the residences had ceramic tubs or sinks that contained lead. Lead in plastic mini-blinds and dust from these blinds was detected in almost one fifth of the residences. Other lead hazards detected include lead-contaminated dust transferred from the clothes and shoes of adults exposed to lead from jobs or hobbies, ashes in burn piles, electrical cords, keys, water, toys, ceramic tiles, and various plastic, vinyl and metal objects. Other than plastic mini-blinds, most other objects were tested for lead only if children had been seen mouthing them.



Source: MSLPPHHP STELLAR Database

Figure 5 shows that from 2010-2014, the top five environmental hazards observed during the environmental inspections were: 1) chipping or peeling lead-based paint, 2) no smoke alarms, 3) no CO alarm, 4) dampness, and 5) mold/mildew. Environmental hazards can influence many health and safety hazards in the home. Dampness, mold, and mildew are triggers for asthma and greatly increase exacerbation of asthma. By taking a holistic approach, the MSLPPHHP is able to install carbon monoxide alarms, smoke detectors, fire extinguishers, provide going green options for cleaning, and demonstrate how to properly clean up lead.



Source: MSLPPHHP
*Many homes have more than one hazard.