

Contract Period October 1, 2018 - September 30, 2021

LPHA Contractor: Johnson County Community Health Services

Selected Priority Health Issue(s): Prevent and reduce unintentional injury to children related to environmental lead exposures.

Targeted national, state, and local outcomes:

- Rate of injury related hospitalizations per population (related to unidentified and untreated lead exposure)
- Child death rate per 100,000 (related to lead exposure)
- Percent of the pediatric population in Johnson County getting tested for lead between the ages of 1 year old and 5 years old.

Statement of the Problem:

Statistical Data: The rate of pediatric lead testing in Johnson County Missouri is 8.81%. The overall rate for the State of Missouri is 19.03%. The percent of the population under the age of 5 years old with a lead level over 10ug/dl is 0.14 which is higher than the state of Missouri average of 0.12. This data has been retrieved from the State of Missouri MOPHIMS webpage.

Root Causes & Community elements that contribute to the problem: Johnson County has a military base that does not test for pediatric lead testing. There is a local Battery factory located in Warrensburg. Older homes are still populated by residents. There is no evidence to support that these older homes still have remaining lead paint, but they were built before 1977 and the EPA indicates that if a home was built between 1960 and 1977, then there is a 24% chance that lead paint was used.

Goal(s): To increase the amount of lead testing in our county and community. The current statistics demonstrate that Johnson County, Missouri, only tests 8.81% of the population and we would like to increase this average to 12% with continued progress to the state average of at least 19%.

Evidence-Based Strategies: There are many social determinants present in Johnson County Missouri that shape our population. Education: there are 29 Early Childhood education and development centers. In Johnson County, we have a

91% high school graduation rate with the Warrensburg school district rated number 26 and Knob Noster school district rated number 41 out of 446 schools in Missouri. Of the population of Johnson County, 60% are enrolled in higher education and we have a 93% literacy rate of our citizens. Within Johnson County, Missouri, 32% of the population has some college/associates and 31.6% have a High School/GED. Of those who went to college, 45.3% have a Bachelor's degree, 22.1% have a Master's degree, 5% have a Doctorate and 4% have a professional school degree. The population of Johnson County, Missouri is able to access technology through the school system as well as through the Warrensburg public library, Knob Noster public library and Holden public library.

The general demographics of the residents of Johnson County, Missouri are as follows. Language: 98% speaks English, 1% speaks Spanish, 0.47% speaks German and 0.4% speaks Pacific Islander. Social norms and attitudes: 25.8% Evangelical Protestant, 5.7% Mainline Protestant, 3.5% Catholic, 61.3% no religion and 3.7% other. Johnson County, MO is a rural based county. There is no segregation based on income, race or cognitive development. All schools in Johnson County, Missouri are inclusive.

Identifying Characteristics. Age: The median age in this county is 29.7. Of the residents located here, 22% are aged 0-17, 62% are aged 18-59 and 16% are aged 60 and older. Gender: 48.4% of the residents in this county are female and 51.6% are male. Culture: In Johnson County, Missouri 86% of the residents identify as Caucasian, 4% black, 4% Hispanic, 1% Asian, 3% are more than one race, 1% American Indian/Alaskan Native and <1% Hawaii Native or Pacific Islander. Of our population, 0.25% is Amish. Whiteman Air Force Base is located within the county lines as well as the University of Central Missouri.

Employment and Income. Job Rate: 3.29% growth from 2015-2016 with an unemployment rate at 4.7%. Of the current population, 17% are considered within the poverty range. The median household income is \$49, 792.

Safety and Crime Exposure. Johnson County, Missouri was ranked 16 out of 107 for safety. Johnson County, Missouri is safer than 11% of United States cities with the following crime rates per 100,000 populations: 3.56 violent robberies, 34.91 properties, 0 murders, 1.19 rapes, 0.44 robberies, 1.93 assaults, 6.27 burglaries, 27.31 thefts and 1.33 for motor vehicle theft.

Healthcare Access: Within Johnson County, Missouri 49.3% of males are insured and 50.5% of females are insured. The ratio of population to primary care is 1 to 39. Access to care: there is no public transportation available in Johnson County, Missouri. There are transportation organizations available with limited immediate availability as this service is a scheduled service.

Environmental Factors: Johnson County, Missouri is 1.25 hours from Kansas City and 1.5 hours from Columbia, Missouri. Located in Warrensburg, Missouri is a local battery factory which contains a significant amount of lead dust. There are other industrial sites located in this area of town as well. Most of the town is rural and used as farmland for crops and cattle.

Existing strengths in access to care: There is a centralized hospital in Warrensburg as well as easy to access physician offices and urgent care facilities in the major towns within the county. General location for healthcare access within the county itself. Oats bus service for individuals in the community to utilize to get to a scheduled healthcare location.

Existing weaknesses in access to care: There is limited access to mental healthcare. No available medical specialists within the county and patients must travel to Kansas City or Columbia to get services from a specialist.

Existing gaps in access to care: No local Federally Qualified Health Center and no public transportation available.

Descriptive elements that give a sense of story behind the data: The data demonstrates that this county, located in the western portion of Missouri, is a rural county with available healthcare locations but due to its rural location these facilities may be difficult for some of the population to access with lack of public transportation. The population has a large battery factory which increases the incidence of lead in the community and around children. 22% of the population is less than 18 years old and are susceptible to the negative side effects of lead poisoning.

Outcomes and activities selected by JCCHS to address these factors contributing to health inequity and gaps in access to care represent the evidence-based recommendations given by the CDC in the guidance document, "Preventing Lead Exposure in Young Children: A Housing Based Approach to Primary Prevention of Lead Poisoning." (2002):

- Identify high-risk areas, populations, and activities associated with housing-based lead exposure.
- Use local data and expertise to expand resources and motivate action for primary prevention.
- Develop strategies and ensure services for creating lead-safe housing.
- Develop and codify specifications for lead-safe housing treatments.
- Strengthen regulatory infrastructure necessary to create lead-safe housing.

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- Engage in collaborative plans and programs with housing and other appropriate agencies.
- Evaluate and redesign existing CLPPP elements to achieve primary prevention goals while ensuring adequate secondary interventions.
- Evaluate primary prevention progress and identify research opportunities.

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Spectrum of Prevention	System Outcomes by Sept. 30, 2021	Activities
Influence Policy and Legislation	Increase number of childcare and pre-school facilities to review policies for lead testing for children attending the facilities. Baseline that is yet to be determined	FFY 2019: Assist childcare providers in determining the need for developing lead testing policies of children.
		FFY 2020: Assist childcare facilities to identify the need to develop universal policies for childcare.
		FFY 2021: Reevaluate policy progress among all childcare facilities.
Change Organizational Practices	Increase the number childcare facilities who consider new safety policies for lead testing and prevention. Baseline is yet to be determined.	FFY 2019: Educate organizations on the need for policy change with available resources.
		FFY 2020: Adopt universal policy for lead testing.
		FFY 2021: Implementation of organizational changes of policies.
Foster Coalitions and Networks	Increase the number of partners with community organizations to promote and refer lead testing in childcare facilities and outpatient clinics. Baseline: 0.	FFY 2019: Contact community organizations to promote lead testing. ie. PAT, PTA, School nurses, head start, etc.
		FFY 2020: Meet quarterly with partners for to improve communication outreach.
		FFY 2021: Work with community partners for the increase in pediatric lead testing.

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Educate Providers	Increase the number of educated local pediatric providers about the need for lead testing. Baseline: 1	FFY 2019: Contact local provider of the need for lead testing and education.
		FFY 2020: Educate and offer services not provided at their facilities.
		FFY 2021: Work for continued and expanded lead testing in clinics and childcare facilities.

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Promote Community Education	Increase the number of consultations the LPHA will be doing as the local consultant for physicians' offices, childcare provider and the community. Baseline: 0.	FFY 2019: Outreach visits to all pediatric providers to promote lead testing and provide testing at local events through partnerships.
		FFY 2020: Continued outreach visits and utilizes social media as a platform for community outreach.
		FFY 2021: Outreach visits and community events for education on lead testing.
Strengthen Individual Knowledge and Skills	Increase the number of lead information packets and resources distributed in addition to testing of children. Baseline: 0.	FFY 2019: Information about lead testing will be provided to all partners and client at risk for lead exposure.
		FFY 2020: Reinforce the lead testing program while educating clients. Provide in-services with childcare providers and parents. During in-services we will administer a pre and post-test to evaluate the quality of education.
		FFY 2021: Work for continued lead testing, education and outreach testing of children.

Approved and accepted June 12, 2018



Nola Martz, EDS, MSN RN
NW District Nurse Consultant

Revision Date:

(to be completed only for an amendment)