

Quality Report Card

Licking Memorial Health Systems



Volume 21, Issue 10

October 2020

PEDIATRIC CARE

Keeping Homes Healthy for Children

It is important for children to have a healthy home in which to live. People spend most of their time inside their homes, which are a source of shelter and safety. Serious health problems for adults and children can occur from unseen hazards that are in the home, such as lead-based paint, mold, carbon monoxide and radon. Children are at a higher risk for these hazards because their bodies still are growing. Understanding, identifying and eliminating dangers that may be in the home can help to keep children and families safe.

Protecting children from exposure to lead is important to lifelong good health. The Ohio Healthy Homes and Lead Poisoning Prevention Program (OHLPPP), through the Ohio Department of Health (ODH), recognizes that children under the age of 3 years are at greatest risk for lead poisoning. Exposure to lead can cause serious harm to a child's health, including damage to the brain and nervous system, slowed growth and development, learning and behavior problems, as well as hearing and speech problems. The most common source of lead poisoning is deteriorating lead-based paint. Although the use of such paints has been banned in the United States since 1978, it still may be present in older homes and apartments.

OHLPPP addresses the needs of lead-poisoned children from birth through 6 years of age. The program provides public health lead investigations, case management, local program funding, education, and lead data. They can be contacted by calling (877) LEADSAFE (532-3723).

Mold is another hazard in the home that

can cause adverse health effects for children. It is a fungi that assists in the breakdown of organic material and reproduces through tiny spores that can float easily through the air. For some, mold can cause a stuffy nose, sore throat, coughing or wheezing, burning eyes, or skin rash. Kids who have asthma and those allergic to mold may have severe reactions. Children with compromised immune systems or chronic lung disease may get infections in the lungs from mold.

Mold flourishes in areas that contain moisture, such as leaks in roofs, windows or pipes, or where flooding has occurred. Organic materials such as wood, paper and cloth provide the ideal nutrients for mold to grow. It is important to mitigate a mold problem as soon as it is discovered. Soap and water or a bleach solution can be used to remove mold from hard surfaces. Moisture control is the best way to prevent indoor mold growth. Reducing humidity levels in the home by using air conditioning and dehumidifiers may prevent future mold growth. Utilizing exhaust fans when cleaning and cooking also may limit excess moisture in the home.

Licking County has the highest levels of indoor radon in the state of Ohio. According to the EPA, radon is estimated to be the second leading cause of lung cancer in the United States and is responsible for over 20,000 lung cancer deaths each year. Radon is a naturally forming gas that is produced when uranium, radium and thorium break down in rocks, soil and groundwater. It is colorless and odorless, and exposure comes from breathing radon in air that enters through cracks and gaps in

buildings and homes. Exposure to radon over a long period of time can lead to lung cancer. A radon test is the only way to determine radon levels in the home, and levels can be reduced with a mitigation system.

The Licking County Health Department (LCHD) recommends that all residents test their homes for radon. Free test kits are available and may be ordered online at the ODH website, ohio.radon.com. LCHD also provides radon education and awareness through a grant from the EPA, administered by ODH. Individuals may call (740) 349-1562 for more information.

Carbon monoxide (CO) is another harmful gas that is odorless and colorless. CO is found in combustion fumes produced by cars, gas appliances, generators, gas or kerosene space heaters, fireplaces and wood stoves. If CO builds up in an enclosed space such as a room, home or garage, people and animals can be poisoned by the gas. The most common symptoms of CO poisoning include headache, dizziness, weakness, nausea, vomiting, chest pain, and confusion. High levels of CO inhalation can cause loss of consciousness and death.

A number of preventative measures can be taken to avoid CO poisoning, such as installing a battery-operated CO detector in the home and performing annual maintenance checks on heating systems, water heaters and other appliances powered with gas, oil or coal. Stoves and fireplaces should be properly vented to the outside of the home. Generators, grills and other equipment powered by gasoline or

Keeping Homes Healthy (continued on back)

Patient Story – Sean Jordan, Jr.



Sean Jordan, Jr. was born at Licking Memorial Hospital (LMH). Soon after his birth, Sean's mother, Ashley, began taking him to Licking Memorial Pediatrics – Tamarack for regular well-child visits with Kelly R. Morrison, APRN-CNP. "She is really good as a caretaker and very helpful. She listens to our needs and answers all my questions," said Ashley, who also has two daughters, Mya and Brianna, and understands the importance of routine check-ups for her children. The schedule of screenings and assessments, set by the American Academy of Pediatrics (AAP), assists in the prevention of illness through immunization, tracks growth and development, and creates strong, trustworthy relationships among the pediatrician or nurse practitioner, parent and child.

As part of the well-child visits, the AAP recommends a risk assessment for lead poisoning starting at six months of age and continuing until the six years of age. Lead poisoning usually is detected by measuring the level of lead in a child's blood. Licking Memorial Pediatrics performs lead screening tests at age 1 and 2. To test the blood, a sample is taken using a finger-prick. If the test shows an elevated amount of lead, confirmation of the results must be gathered through a blood draw sample. An elevated lead level indicates that lead is present in the child's environment.

During one of Sean's well-child visits, Ashley was told the initial test indicated a high level of lead in Sean's blood. She then took him to Licking Memorial Hospital Laboratory Services for confirmation. "He does not care much for strangers, and was not happy about

the procedure, but I think I was more upset than he was. The staff members did the blood draw pretty quickly and helped me stay calm as well," Ashley said. The blood lead level is measured in micrograms of lead per deciliter of blood. No safe blood lead level in children has been identified; however, the Centers for Disease Control and Prevention (CDC) uses a blood lead reference value of five micrograms per deciliter to identify children with blood lead levels that are much higher than most children's levels. Sean's blood level was at 11.

After confirmation, Ashley was given information about lead exposure. There are a number of sources where lead can be found throughout a child's environment. Homes built before lead-based paints were banned in 1978, often present a risk. Lead dust is created as the paint peels and cracks, and children can be poisoned when they swallow or breathe in the dust. Lead also may be found in the dirt surrounding a house, certain water pipes or products, such as toys and jewelry.

In hopes of saving money to buy a house of their own, Ashley and the family moved into a rental home in downtown Newark. The house was built in the 1920s. Ashley contacted the Licking County Health Department about having the house tested for lead; however, an inspection was not possible immediately due to the COVID-19 pandemic. She then purchased lead test strips to try to find the source of the lead and limit Sean's exposure. She discovered lead was present in paint inside and outside of the house on the siding. Exposure to lead can seriously harm a child's health and cause adverse effects including damage to the brain and nervous system, slowed growth and development, learning and behavior problems, and hearing and speech problems.

While Ashley works as a manager at a local restaurant, Sean's father, Sean, Sr., stays at home to care for the three

children. As a healthy toddler, Sean enjoys getting messy, generally is happy and often refuses help to perform tasks. He was having some issues with sleeping and eating habits, but otherwise exhibited no signs of a serious health problem. "As I learned more about lead poisoning, I found out signs and symptoms may not appear at all, but the effects can have an impact on his learning later in life," Ashley said. She also was greatly concerned about her youngest daughter's health and development. Mya was tested and found to have elevated levels of lead in her blood.

Usually, removing the contaminated paint is enough to lower the level of lead in a child's blood. Ashley and Sean, Sr. are working with the rental owner to safely remove the lead-based paint. In the meantime, they have been working to lessen the children's exposure to the lead. They have been wiping toys with a disinfectant, and doing all they can to minimize the amount of dust in the house. Feeding children healthy foods with calcium, iron, and vitamin C also can help keep lead out of the body. Calcium is found in milk, yogurt, cheese, and green leafy vegetables such as spinach. Iron can be found in lean red meats, beans, peanut butter, and cereals. "The children have been eating more greens. It is helping. We have to have them re-tested soon," said Ashley.

Chelation therapy is available for more severe cases of lead poisoning where children have a blood level of 45 micrograms of lead per deciliter of blood. The child is given a medication by mouth that binds with lead and then easily eliminated through urination.

Annual well-child visits are a standard part of patient care at Licking Memorial Pediatrics. Please contact your child's pediatrician or family physician for more information, or to schedule an appointment.

Pediatric Care – How do we compare?

At Licking Memorial Health Systems (LMHS), we take pride in the care we provide. To monitor the quality of that care, we track specific quality measures and compare to benchmark measures. Then, we publish the information so you can draw your own conclusions regarding your healthcare choices.

- Immunizations are one of the safest and most effective methods to protect children from potentially serious childhood diseases. Licking Memorial Health Professionals (LMHP) monitor the percentage of children, aged 19 months to 35 months, who receive the individual and complete set of recommended immunizations. The series is frequently referred to as the 4:3:1:3:3:1 series. It consists of the following vaccines:

 - 4 doses of diphtheria, tetanus (lockjaw), and pertussis (whooping cough)
 - 3 doses of polio
 - 1 dose of measles, mumps and rubella
 - 3 doses of Haemophilus influenzae B (influenza type B)
 - 3 doses of hepatitis B
 - 1 dose of varicella (chicken pox)

	LMHP 2017	LMHP 2018	LMHP 2019	National
Childhood immunization rate (4:3:1:3:3:1 series)	86%	83%	82%	73% ⁽¹⁾
Children, aged 6 months to 18 years, receiving the influenza vaccination	31%	33%	33%	58% ⁽²⁾

- LMHP providers follow Advisory Committee on Immunization Practices (ACIP) recommended vaccinations to prevent cervical cancer, varicella (chicken pox) and meningitis among adolescents. (In 2019, the parameters for the HPV vaccination series were changed from females, aged 13 to 17, to persons, aged 11 through 26. The vaccine can be administered to both females and males starting at age 9, and those who have not been adequately vaccinated may still receive the vaccination series until age 26.)

	LMHP 2017	LMHP 2018	LMHP 2019	National
Persons aged 11 through 26 completing HPV vaccination series	62%	58%	53%	53% ⁽³⁾
Adolescent children receiving varicella vaccination	97%	96%	95%	89% ⁽³⁾
Adolescent children receiving meningococcal vaccination	91%	89%	90%	85% ⁽²⁾

- Pharyngitis (sore throat) is a common illness in children. Most children's sore throats are caused by viral illnesses. While antibiotics are needed to treat bacterial pharyngitis, such are not useful in treating viral pharyngitis. Before antibiotics are prescribed, a simple diagnostic test needs to be performed to confirm the presence of a bacterial infection. Inappropriate use of antibiotics for viral pharyngitis is costly, ineffective and contributes to the development of drug-resistant bacterial strains. LMHP monitors and reports how many children with sore throats, aged 2 to 18 years of age, received a Group A streptococcus test before they were given a prescription for antibiotics.

	LMHP 2017	LMHP 2018	LMHP 2019	National
Children with pharyngitis receiving test before antibiotics	96%	94%	97%	84% ⁽²⁾

- Kids' Place is an accredited child advocacy center that provides a comprehensive, multi-disciplinary evaluation of children who are suspected victims of sexual and/or physical abuse and/or neglect. Services are provided in a comfortable and confidential environment. Case management and victim advocate services also are available.

	LMH 2017	LMH 2018	LMH 2019	LMH Goal
Total number of children served	214	242	187	N/A

Data Footnotes: (1) Vaccination Coverage Among Children Aged 19-35 Months – United States, 2017 (2) Centers for Disease Control and Prevention, "Influenza vaccination coverage for persons 6 months and older by state, National Immunization Survey – Flu, 2017-18 influenza season, 6 months-17 years" (3) Estimated Vaccination Coverage with Selected Vaccines and Doses Among Adolescents Aged 13-17, by State/Area; National Immunization Survey-Teen (NIS-Teen), United States, 2017.



Check out our Quality Report Cards online at www.LMHealth.org.

charcoal should be operated outdoors and not inside a garage or a basement. Vehicles should not be left running while in a closed space, even with the garage door open.

LCHD and ODH offer a number of resources for Licking County residents to ensure that their homes are healthy and safe. ODH provides a Healthy Homes Environmental Visual Assessment Tool for homeowners to inspect their dwelling for potential health hazards. Information can be found on their websites, www.lickingcohealth.org/env and www.odh.ohio.gov.

Health Tips – Brain-Building Activities

Cognitive development involves the building and learning of skills, such as attention, memory, critical thinking and problem-solving. The most crucial time for brain development in children is between birth and 3 years, when the brain grows faster than at any other time. Cognitive development continues to progress from childhood through adolescence and into adulthood. Parents can support their child's intellectual development by providing a variety of age-appropriate activities through play and exploration.

Building blocks expose preschool-age children to different shapes, sizes and colors, while helping to develop hand-eye coordination, sorting and comparison skills, construction and creativity. Older children may use blocks to learn about gravity, balance and geometry. Memory games build thinking skills, concentration, attention and persistence. Activities and books, such as *I Spy* and *Where's Waldo*, enhance visual discrimination, a skill used when reading that allows children to recognize shapes of different letters. Games, such as *Follow the Leader* and *Simon Says*, help children learn listening skills and teach them how to follow directions.

Reading to children, starting in infancy, is important for language acquisition and literacy skills. Studies show that hearing stories strengthens the part of the brain associated with visual imagery, story comprehension and word meaning. Reading to children also helps build vocabulary, establishes a love for reading and strengthens the parent/child bond.

Puzzles develop a child's spatial perception, coordination, problem-solving, cognitive skills and fine motor skills. Board puzzles and tangrams – a group of polygons that are put together to form shapes – are appropriate activities for young children. Puzzles, such as Sudoku, crosswords and Rubik's cubes, can stimulate brain development in older children.

If a child has problems understanding simple directions or performing basic tasks by age 3, he or she may have a delay in cognitive development. Parents should discuss any developmental concerns about their child with a pediatrician.



 **Licking Memorial Health Systems**
1320 West Main Street
Newark, Ohio 43055

Please take a few minutes to read this month's report on **Pediatric Care**. You'll soon discover why Licking Memorial Health Systems is measurably different ... for your health!

The Quality Report Card is a publication of the LMHS Public Relations Department. Please contact the Public Relations Department at (220) 564-1572 to receive future mailings.

Visit us at www.LMHealth.org.

The articles contained in this publication should not be considered specific medical advice as each individual circumstance is different. Should you need medical advice, consult your physician. Entire publication copyrighted 2019 Licking Memorial Health Systems. All rights reserved.