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RESPIRATORY CARE

Vaccinations Protect Against Respiratory Illness

Vaccines are not only important to the health of an individual, but also to the health of the community. Each year, respiratory viruses are responsible for millions of illnesses and thousands of hospitalizations and deaths in the United States. Getting vaccinated is one of the safest ways that individuals can protect themselves and prevent the risk of spreading the virus to others. The Centers for Disease Control and Prevention (CDC) recently updated their respiratory virus guidance and recommends that children and adults receive vaccinations for respiratory illnesses such as influenza, COVID-19, and respiratory syncytial virus (RSV).

To prevent serious illness, the immune system first needs to recognize how to fight the disease. Vaccines utilize the body's natural defense system to assist in safely developing immunity to certain diseases and are the best way to protect individuals from infection and prevent severe illness and death.

Influenza, or flu, is a contagious respiratory illness caused by viruses that infect the nose, throat, and lungs. Flu season can begin as early as October and last until January or February. Symptoms include fever, cough, sore throat, body aches, headache, and fatigue. Infants, adults 65 years and older, and immunocompromised individuals are at higher risk to develop severe illness from the flu that may lead to hospitalization

and death. The CDC recommends that individuals 6 months of age and older receive a flu vaccine every year, preferably in September or October.

The impact of the COVID-19 virus has changed drastically since 2020. The symptoms of COVID-19 now closely resemble those of other respiratory viruses, including flu and RSV; however, the disease can still lead to hospitalization and death, especially for those who are in a high-risk category. The CDC recommends that individuals 6 months and older receive an updated COVID-19 vaccine. The updated COVID-19 vaccine targets XBB.1.5, which is a subvariant of the Omicron strain, was approved by the Food and Drug Administration (FDA) and the CDC in the fall of 2023.

RSV is a common respiratory virus that begins in the fall and peaks in winter. The illness involves mild, cold-like symptoms, including nasal congestion, sore throat, headache, cough, fever, loss of appetite, and fatigue. RSV is not a new virus; however, infections have risen during the past few years. Medical professionals suggest that immunity to the virus has been lost due to people isolating to reduce exposure to the COVID-19 virus.

Most people who are infected with RSV usually recover within a couple of weeks. However, high-risk groups, including infants, adults over 60, and those with weakened immune systems, are more

likely to experience severe RSV and hospitalization. The CDC recommends the RSV vaccine for adults, ages 60 and older, and pregnant women only. An RSV preventive antibody is recommended for infants whose mothers did not receive the vaccine during pregnancy and some young children.

Pneumonia is a common lung infection that can be a complication of influenza or COVID-19, but is also caused by other bacteria, viruses, or fungi. The most common type is pneumococcal pneumonia, which is caused by the streptococcus pneumoniae germ that normally lives in the upper respiratory tract. Symptoms range from mild to severe. Most healthy people recover within one to three weeks. Individuals can prevent contracting pneumonia by receiving seasonal flu, RSV, and COVID-19 vaccines. There is also a pneumococcal pneumonia vaccine that is recommended for children younger than 5 years old, individuals with compromised immune systems, and adults age 65 and older.

Pertussis, also known as Whooping Cough, can cause serious illness in people of all ages, but it is most dangerous for young babies. According to the CDC, cases of whooping cough are rising, and the increase may be due to individuals not receiving the diphtheria, tetanus, and acellular pertussis (Tdap) vaccine, which protects against whooping cough. The

Respiratory Care - Vaccinations (continued on back)



Although Hazel Blamey was born premature and spent a few days in the Special Care Nursery at Licking Memorial Hospital, her parents, Kianna and Cody, were pleased to note that she was happy and healthy. Hazel was on-track, meeting the milestones of an infant born at 37 weeks. In February, Hazel's older sister developed a cold, and soon Hazel too was exhibiting signs of illness, including sniffling and a stuffy nose.

"I became concerned about Hazel's cold when it seemed she was struggling to breathe," Kianna shared. "I made an appointment to visit a Licking Memorial Health Systems pediatrician as soon as possible."

During the visit, Hazel was tested for respiratory syncytial virus (RSV), a common virus that causes infections of the lungs and respiratory tract. Virtually all children will have been exposed to the virus by two years of age, and many may be reinfected during their lifetime. The virus typically causes common cold symptoms such as runny nose, sneezing, nasal congestion, sore throat, and coughing. Those infected typically recover in a week or two; however, RSV can be serious. Infants and older adults are more likely to develop severe RSV and need hospitalization.

Symptoms of RSV are similar to other commonly known viruses such as rhinovirus, influenza, parainfluenza, or coronavirus. RSV causes annual outbreaks of respiratory illnesses in all age groups. In most regions of the United States,

Patient Story – Hazel Blamey

RSV season begins in the fall and peaks in the winter. The timing and severity of RSV season in a given community can vary from year to year. The COVID-19 pandemic has impacted normal transmission patterns of RSV, leading recently to more unusual, "out of season" exposures and infections.

Hazel tested positive for RSV. The pediatrician explained that treatment generally involves self-care measures, such as plenty of rest and staying hydrated, to keep Hazel comfortable during the infection. Kianna was instructed to carefully monitor Hazel's condition and take her to the Hospital if the fever, cough, or difficulty breathing worsened. The sleep monitor that the family uses includes an oxygen sensor. Hazel's level was low, and Kianna became concerned about Hazel's breathing. They took her to the Licking Memorial Hospital Emergency Department where she was admitted for care.

"The physicians and nurses explained again that there is not much that can be done to treat a virus. They monitored Hazel very closely, and a respiratory therapist would provide breathing treatments every four hours," Kianna said. "We were able to be with her throughout her three day stay in the Hospital and were pleased with the quality care she received."

The staff at LMH showed Kianna and Cody how to use a special home breathing machine and administer medication to ease the symptoms so that they could return home with Hazel. She has fully recovered and is now back ontrack, meeting the milestones for an infant her age.

"It is important for parents to trust their instincts," Kianna advised. "I knew something was not right. Hazel had not been ill before, and I knew something serious was causing her discomfort. We

stayed vigilant and made sure to transport her to the Hospital immediately when we determined her oxygen levels were low. We are grateful that she received the care she needed and is now fully recovered and doing well."

RSV is highly contagious. Each year, an estimated 58,000 to 80,000 children younger than five years old are hospitalized due to RSV infection. Preventing the spread of RSV is vital. The most important practice that can significantly reduce the spread of RSV is handwashing. Good hand hygiene includes frequently washing hands with soap and water for 20 seconds. RSV can live on unwashed hands for 30 minutes or more. Frequent cleaning of countertops, tables, toys, and door knobs can also eliminate live viruses which can exist on these surfaces for up to 24 hours. Follow the suggestions below as well:

- Cover coughs and sneezes
- Avoid close contact with others who are ill
- Avoid touching the face, eyes, nose, and mouth with unwashed hands
- Limiting day care attendance has been recommended but this is often hard for some families
- Avoid secondhand smoke smoking increases the risk of contracting RSV and many other lung ailments

This year, the Centers for Disease Control and Prevention (CDC) has recommended several new preventive options to help protect individuals at highest risk for getting severe RSV illness. Vaccines are available for adults 60 or older. For children, two main options exist to help prevent young infants from getting severe RSV. One is an antibody product given to the infant. The other is an RSV vaccine for pregnant women to help protect the baby from birth through 6 months of age. Both are approved by the U.S. Food and Drug Administration (FDA).

Respiratory 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.

Tobacco use has been linked to many serious and life-threatening conditions, such as cancer, heart disease, cardiopulmonary disease, and diabetes. An estimated 21 percent of Licking County adults smoke. LMHS offers free Quit For Your Health tobacco cessation education, counseling, and nicotine-replacement products. A similar program, Quit for You, Quit for Your Baby, adds incentives to help pregnant women stop using tobacco products. In 2023, 1,656 patients visited one of LMHS tobacco cessation programs.

	LMH 2021	LMH 2022	LMH 2023	LMH Goal ⁽²⁾
Six-month success rate for patients who completed Quit for Your Health ⁽¹⁾	80%	95%	90%	70%

Chronic obstructive pulmonary disease (COPD) is a serious, progressive lung condition that includes two life-threatening diagnoses, chronic bronchitis and emphysema. According to the American Lung Association, COPD is the third leading cause of death in the U.S. There is no cure for COPD, and patients will progress to more serious respiratory compromise over time; however, with careful management, patients can enjoy longer and healthier lives. An admission to the hospital for a COPD patient typically means that their chronic respiratory issues have exacerbated to an immediate, acute condition requiring hospitalization. To monitor the quality of a COPD patient's care, the Centers for Medicare/Medicaid Services tracks the death rate nationally for patients who die from COPD within 30 days of hospital admission.

	LMH 2021	LMH 2022	LMH 2023	National ⁽³⁾
Mortality rate of COPD patients within 30 days of hospital admission	7.3%	7.5%	8.3%	9.2%

Protecting patients from hospital-acquired infections is a primary patient safety goal. LMH has many ongoing programs and safety mechanisms in place to help prevent patient infections. In accordance with the Centers for Disease Control and Prevention (CDC) recommendations, LMH monitors patients who are at high risk for infections, including those using invasive devices, such as ventilators (breathing machines). The following data reflect the rate of respiratory infections associated with ventilator use, per every 1,000 patient days.

	LMH 2021	LMH 2022	LMH 2023	LMH Goal
Pneumonia infection rate of Intensive Care Unit patients on ventilators				
per 1,000 ventilator days	0.0	0.0	0.0	0.0

Some pneumonia patients who are hospitalized require treatment with a ventilator to assist their breathing. Although the ventilator can be life-saving, it carries the risk of serious complications, such as infections, stomach ulcers, blood clots, and extended dependency on the ventilator. To help prevent complications, LMH staff members follow a best-practices protocol for patients on ventilators. Known as the "ventilator bundle," these five steps are carefully documented to ensure each patient receives the best possible care.

	LMH 2021	LMH 2022	LMH 2023	LMH Goal
Head of bed elevated to 30 degrees	100%	100%	100%	greater than 90%
Oral care	99.8%	100%	100%	greater than 90%
Daily test to reduce sedation	99.1%	100%	100%	greater than 90%
Stomach ulcer prevention	99.6%	100%	100%	greater than 90%
Blood clot prevention	99.1%	100%	100%	greater than 90%

LMHS is committed to providing and encouraging free, easily accessible vaccines to all employees. In order to provide the safest care to our community, LMHS recognizes the importance of keeping the staff healthy.

	LMHS 2021	LMHS 2022	LMHS 2023	LMH Goal	National ⁽³⁾
LMHS employees receiving the					
influenza vaccine	90%	84%	83%	greater than 90%	81%



Respiratory Care - How do we compare? (continued on back)



Licking Memorial Health Professionals (LMHP) office patients who are at high risk for these illnesses also are screened and vaccinated as appropriate. LMHP physicians strongly encourage patients over the age of 65 years to receive a one-time dose of pneumonia vaccine and an annual influenza vaccine during each "flu season," which runs from October to March.

Physician office patients over 65 years	LMHP 2021	LMHP 2022	LMHP 2023	National ⁽⁴⁾	
receiving the pneumonia vaccine	76%	72%	75%	73%	
Physician office patients over 65 years	LMHP 2020-2021	LMHP 2021-2022	LMHP 2022-2023	National ⁽⁴⁾	
receiving the influenza vaccine	71%	65%	57%	64%	

Data Footnotes:

- (1) 2022 Community Health Needs Assessment.
- (2) Tobacco-free status is self-reported by patients in a six-month follow-up after completing the Quit for Your Health program.
- (3) HospitalCompare.hhs.gov national benchmarks
- (4) Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Retrieved from https://www.cdc.gov/brfss/brfssprevalence/ [2019 BRFSS Prevalence & Trends Data].

Respiratory Care - Vaccinations (continued from front)

CDC recommends this immunization for people of all ages.

Vaccines have greatly reduced diseases that were once harmful for infants, children, and adults. It is important to stay up to date on recommended vaccines to prevent the spread of diseases that can cause severe illness or even death. Protection from some vaccines may fade over time, and additional vaccine doses, or boosters, may be

required to stay protected. Individuals can discuss vaccinations with their healthcare provider to determine missed doses or the need for a booster.

Understanding Allergy Triggers

Allergies occur when the body's immune system reacts to a foreign substance, called an allergen. Allergens trigger an allergic reaction, which can cause a variety of symptoms, such as itchy, watery eyes, sneezing, runny nose, rashes, and hives. Individuals who have a family history of allergies or asthma are more likely to develop an allergy. Understanding what causes a person's allergies can help them to avoid triggers and manage their allergies to live a comfortable life.

Common types of allergies and triggers may include:

 Food – specific proteins in certain foods, such as eggs and nuts Seasonal – pollen from trees, grass, and weeds

 Indoor – caused by dust mites, mold spores, or pet dander

- Medications penicillin and related antibiotics, sulfa drugs, or ingredients in over-the-counter medicine
- Insect stings venom from bees, wasps, hornets, or fire ants
- Latex natural rubber protein found in gloves, balloons, and condoms

Preventing allergic reactions depends on the type of allergy a person has. Allergies can be identified through testing by a healthcare provider. Treatment also varies but may include antihistamines, steroids, and allergy shots. Avoiding known triggers can also help prevent allergic reactions.





Licking Memorial Health Systems

1320 West Main Street Newark, Ohio 43<u>055</u> Please take a few minutes to read this month's report on **Respiratory Care.** You will 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.

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