Pneumonia 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 them to benchmark measures. Then, we publish them so you can draw your own conclusions regarding your healthcare choices.

Best practice in pneumonia care says that a blood culture should be collected before any antibiotics are given to a pneumonia patient to determine more accurately which microorganism is causing the illness.

Patients receiving blood cultures prior to antibiotics	LMH 2011 100%	LMH 2012 100%	LMH 2013 98%	National ⁽¹⁾ 98%	
Pneumonia patients given the most appropriate antibiotic	LMH 2011 97%	LMH 2012 91%	LMH 2013 98%	National ⁽²⁾ 95%	

Hospitalized patients with a condition that puts them at risk for developing complications from pneumonia and/or influenza (flu) should be screened for vaccines while in the hospital and receive a pneumonia and/or influenza vaccine, if appropriate.

High-risk patients screened for the pneumonia vaccine	LMH 2011 NA	LMH 2012 94%	LMH 2013 99%	National ⁽¹⁾ 92%
Patients screened for the influenza vaccine	NA	94%	98%	90%

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.

Head of bed elevated to 30 degrees	LMHP 2011 NA	LMHP 2012 100%	LMHP 2013 100%	LMH Goal greater than 90%
Oral care	NA	NA	99%	greater than 90%
Daily test to reduce sedation	NA	98%	97%	greater than 90%
Stomach ulcer prevention	NA	99%	99%	greater than 90%
Blood clot prevention	NA	99%	99%	greater than 90%

Licking Memorial Health Professionals (LMHP) office patients who are at high risk for these illnesses are also 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 receiving the pneumonia vaccine	LMHP 2011 87%	LMHP 2012 87%	LMHP 2013 87%	National ⁽³⁾ 71%
Physician office patients over 65 years receiving the influenza vaccine	LMHP 2011-2012 82%	LMHP 2012-2013 82%	LMHP 2013-2014 82%	National ⁽³⁾ 70%

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

	LMHS 2011-2012	LMHS 2012-2013	LMHS 2013-2014	National ⁽⁴⁾	LMHS Goal
LMHS employees receiving the	84%	84%	85%	72%	greater than 80%
influenza vaccine					

Patient Story - Greg Smith

When Greg Smith of Newark awoke with chills in the early morning hours on May 2, his wife, Pat, covered him with a blanket. However, the chills persisted, and she soon realized that he had a fever. Worse yet, Greg began speaking incoherently. At that point, Pat called 9-1-1 for emergency help.

"I had not been feeling sick, and I do not remember anything that happened at home that night," Greg said. "It came on so quickly without warning."



Greg and Pat Smith

may have nocardiosis, an infection from nocardia bacteria that are commonly found in soil and water.

Dr. Kebede said, "Most people come into contact with nocardia nearly every day, but their healthy immune systems quickly fight off the bacteria. In Greg's case, his immunity was weakened by recent illnesses, and nocardiosis was able to develop. Fortunately, Greg responded well to antibiotics and was able to recover completely."

At Licking Memorial Hospital (LMH), Emergency Physician Terrill D. Burnworth, D.O., discovered that Greg had a buildup of fluid on his lungs. Dr. Burnworth ordered a chest X-ray that showed two areas of infiltrate on his lungs. Greg then was admitted to LMH for aggressive treatment of pneumonia. Three days later, he was released from the Hospital with instructions to visit his family physician for follow-up care.

Before the follow-up appointment date, Greg had another episode on May 29. "It was just like the first one," Pat described. "He woke up in the middle of the night shivering with chills and talking incoherently. Again, I called the squad." At LMH's Emergency Department, Randy E. Jones, M.D., determined that Greg had suffered a recurrence of pneumonia, and he was admitted overnight to receive intravenous antibiotics.

"Just like the first time, I did not feel sick beforehand, and nothing seemed to have brought on the pneumonia," Greg said. "I did not have the typical pneumonia symptoms of chest pain or shortness of breath."

Three weeks later, Greg suffered a third incident in the middle of the night. At LMH, Asegid H. Kebede, M.D., who had recently joined Licking Memorial Pulmonology and Sleep Medicine, examined Greg and reviewed his records. Dr. Kebede told the Smiths that he suspected that something different was happening this time since Greg already had received the appropriate care to treat his pneumonia. Dr. Kebede performed a bronchoscopy and took a tissue sample from Greg's lungs. The tissue sample showed that he

Pneumonia and nocardiosis were the latest health challenges that Greg has faced in the past few years. Pat said, "Greg was never sick a day of his life until 2011. Since that time, he has had a heart attack, a stroke, mini strokes, rheumatoid arthritis, broken vertebrae and pneumonia. The doctors have told us that most of these conditions can be attributed to a history of tobacco use."

It took several attempts, but Greg gave up cigarettes "cold turkey" in 2006 after smoking for 46 years. "I began smoking at the age of 14," he said. "My friends smoked, my parents smoked – pretty much everyone I knew smoked back then." Pat also gave up smoking in 2007 after she was diagnosed with bronchitis. "It was a wake-up call for me," she said. "Now, if we see anyone smoking, we warn them, 'You will pay for it later."

Throughout Greg's illnesses, both he and Pat found comfort and reassurance from the Hospital staff. "The doctors were excellent, and the nurses were so helpful," Pat said. "We never had to wait – they could see how sick Greg was and attended to him right away. We like LMH very much." Greg agreed, saying, "If you do not feel good, this is the place to be. The nurses have always been nice to us."

Licking Memorial Pulmonology and Sleep Medicine focuses on the diagnosis and treatment of sleep disorders and lung conditions, such as chronic obstructive pulmonary disease, asthma, chronic bronchitis, chronic cough, pneumonia, lung cancer, and lung cancer-related problems. Appointments are available with Dr. Kebede or Eric R. Pacht, M.D., by calling (740) 348-1805. Their offices are located on LMH's sixth floor.





Licking Memorial Hospital's (LMH) Tobacco Cessation Program, Quit for Your Health, is designed to help people stop using tobacco at no cost. For most individuals, this requires the support of a professional counselor. Our counselors utilize evidence-based techniques to help participants develop a plan that will offer an opportunity to become tobacco-free.

For more information, please call (740) 348-QUIT (7848).

Recovery from Pneumonia Is Prolonged

Patients who have experienced pneumonia often say that they felt extremely sick, and many also report that they had severe chest pain. Medical treatment usually brings quick relief of the worst symptoms, but a low-grade fever, malaise and overall discomfort can persist for weeks or months, leading some patients to wonder if their treatment is effective.



Asegid H. Kebede, M.D.

"Pneumonia is a serious infection of the lungs," stated Asegid H. Kebede, M.D., of Licking Memorial Pulmonology. "It was a dreaded disease just a few generations ago because many patients died from pneumonia. Today, patients usually recover well with proper treatment; however, full recovery takes some time, and patients often ask if that means their pneumonia is not improving or even getting worse."

Pneumonia occurs when one or both lungs become infected with a bacterium, virus or fungus. The individual air sacs in the lungs swell with inflammation and fill with mucus and other liquids, making it difficult or painful to breathe. The patient usually has a frequent cough that may produce yellow or green mucus. In addition, the patient may have a high fever or chills.

Depending on many factors, including the severity of the illness, the patient's age and pre-existing chronic conditions, the patient may require immediate hospitalization for aggressive treatment. In other cases, the patient may be able to manage the disease at home with consultations and visits with the physician.

Pneumonia that is determined to be caused by a bacterial infection is treated with antibiotics. Viral or fungal infections typically do not respond to antibiotics; however, antibiotics still may be prescribed to treat any secondary complications that arise from the pneumonia. Other medications are often prescribed to alleviate coughing, chest pain, body aches and fever. Dr. Kebede said, "It is critically important that patients take the entire course of medications that their physician prescribes – especially if they are taking antibiotics. All too often, patients feel better after several days, and they mistakenly believe that the remainder of their antibiotics are unnecessary. The truth is that their immune systems are still quite weak, and just a few microbes of surviving bacteria could bring on another case if pneumonia that could be even more difficult to treat because of antibiotic immunity."

Regardless of whether pneumonia patients were hospitalized, their recovery time at home may take a few weeks or even months. To facilitate their full recovery, pneumonia patients should:

- •Take all prescribed medications
- •Drink plenty of water, tea, or fruit juices
- •Practice frequent deep breathing
- •Get plenty of rest
- •Get plenty of activity

- •Avoid all tobacco smoking and secondhand smoke
- •Limit alcohol consumption

"Pneumonia patients are sometimes tempted to stay in bed for many days because they do not feel good, but it is important for them to balance rest with activity," Dr. Kebede emphasized. "We advise our patients to move around frequently. Even sitting upright in a chair or casual walking will help to clear the lungs."

Full recovery from pneumonia is often a slow process. Some patients continue to have a low fever, cough, chest pain or fatigue for weeks after initial treatment, leading them to wonder if their treatment may be ineffective. "With most other infections, the patient

does feel 'back-to-



A non-invasive chest X-ray is commonly used at LMH to diagnose pneumonia and monitor the patient's recovery.

normal' within a couple of weeks," Dr. Kebede explained, "but pneumonia is more serious and affects the body more extensively. It is not at all uncommon for the symptoms to persist for weeks. Some patients report that it took several months for them to feel completely normal again."

If symptoms persist for more than a few weeks, or patients have other concerns about their recovery, they are advised to consult with their physician. "Some patients become alarmed over the slow recovery and go to the emergency room, but they really should simply call their physician first. Unless they notice new or worsening symptoms, their conditions are not life-threatening, and their physician will be able to evaluate whether their progress is appropriate," Dr. Kebede said.

Pneumonia patients who are recovering at home should seek emergency help if they experience new or significantly worsened signs, such as:

- •High fever, over 101°F
- •Breathing that is fast, shallow and painful
- •Skin tone that turns a bluish color
- •Coughing up more than a few specks of blood
- •Rapid heart rate (more than 100 beats per minute)
- Excessive sweating
- Confusion

Pulmonology focuses on diseases of the lung, including pneumonia, chronic obstructive pulmonary disease, asthma, and chronic cough. Licking Memorial Pulmonology is staffed by two board-certified pulmonologists, Dr. Kebede and Eric R. Pacht, M.D. Both physicians are accepting new patients at their practice, which is located on the sixth floor of Licking Memorial Hospital. Appointment can be made by calling (740) 348-1805.



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

Visit us at www.LMHealth.org

The Quality Report Card is a publication of the LMHS Public Relations Department.

Please contact the Public Relations

Department at (740) 348-1572

to receive future mailings.

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 2014. Licking Memorial Health Systems. All rights reserved.





Volume 15, Issue 11 November 2014

Health Tips - Who Should Receive a Pneumonia Vaccine?

Pneumonia is a lung infection that can be caused by a variety of bacteria, viruses or (rarely) fungi. More than 90 strains of pneumococcal pneumonia, a pneumonia-causing bacterium, have been identified. Fortunately, an effective vaccine is available to help protect against pneumococcal pneumonia. The vaccine is recommended for:

- All adults, 65 years of age and older
- Anyone, 2 through 64 years of age, who has a long-term health problem, such as heart disease, lung disease, or diabetes
- Anyone, 2 through 64 years of age, who has a disease or condition that lowers the body's resistance to infection
- Anyone, 2 through 64 years of age, who is taking a drug or treatment that lowers the body's resistance to infection, such as long-term steroids, certain cancer drugs or radiation therapy
- Any adult, age 19 through 64, who smokes tobacco or has asthma

A single dose of pneumonia vaccine is usually recommended for patients who are 65 years or older. A second dose is recommended for patients over the age of 65 if they received their first dose before the age of 65, and at least 5 years have passed since that first dose.

A second dose of pneumonia vaccine is recommended for children and adults, age 2 through 64 years, if at least five years have passed since their first dose, and they have a chronic medical condition that may affect their immune system.