

What doctors want patients to know about pneumonia



DEC 20, 2024

Sara Berg, MS

News Editor

Pneumonia continues to pose a significant public health challenge, particularly for young children, older adults and those with compromised immune systems. This acute respiratory infection, which inflames the air sacs in one or both lungs, can range from mild to life-threatening, often demanding swift medical intervention. As temperatures drop in many areas across the country and respiratory-virus season takes hold, the call to action grows louder: vaccines, awareness and being proactive could be the difference between a mild and a life-altering illness.

The AMA's What Doctors Want Patients to Know™ series gives physicians a platform to share what they want patients to understand about today's health care headlines.

In this installment, Abdul M. Khan, MD, a pulmonologist at [Ochsner Health](#) in Kenner, Louisiana, took time to discuss what patients need to know about pneumonia.

Ochsner Health is a member of the [AMA Health System Program](#), which provides enterprise solutions to equip leadership, physicians and care teams with resources to help drive the future of medicine.

Pneumonia is a lung infection

"The parenchyma or functional tissue of the lungs gets infected and the most common cause of [pneumonia](#) is either viruses or bacteria," Dr. Khan said. "Most of the time, pneumonia is spread by droplets that get passed from one person to the other."

“Your upper-respiratory tract—such as your sinuses, nasal passages and airway—is where those viruses and bacteria initially grow,” he explained. “Then you have what we call (micro)aspiration where you inhale them, or you take them down into your airway, because the airway to your lungs sits right behind your esophagus, the feeding tube to your stomach.

“So, that’s how organisms get into your lungs—they start to grow. With lung infection, you get cells and pus that accumulate within the lung tissue and the airspace of the lungs,” Dr. Khan added, noting the phase of inflammation in your sinuses, throat and upper respiratory tract is called “sinusitis, laryngitis or pharyngitis. And if you have inflammation or infection in your lungs, it’s pneumonitis or pneumonia.”

With pneumonia, you’re very sick

“What’s important to know is a lot of people who have the common cold think they have pneumonia,” Dr. Khan said. “But pneumonia is actually an infection of the lungs, and you are very sick when you have pneumonia.”

“The mild symptoms of pneumonia are having a fever and having a cough,” he said. “Severe symptoms include having respiratory distress, having sepsis, or diffuse infection throughout the body,” which can lead to other symptoms such as “headaches, fast heart rate and myalgias muscle aches and pain throughout the body.”

Older patients can also “get confusion when they have pneumonia, meaning they’ll have altered mental status,” Dr. Khan said.

Contagiousness depends on cause

“The contagiousness of pneumonia is dependent on the virus or bacteria or, in some small cases, fungus that cause it. It’s how contagious the organism that causes pneumonia is,” Dr. Khan said. “For example, the virus associated with COVID-19 was very contagious.

“So, you had the spread of the virus, and one of the main health disease processes was that it caused pneumonia as well as lots of other medical issues,” he added. “COVID-19

was and is a very contagious disease.”

Additionally, “there's other bacteria and other viruses that aren't as contagious, but there are certain risk factors and it's more about if you have a risk factor that would increase your risk of having pneumonia,” Dr. Khan said.

There's also fungal pneumonia

“Fungal pneumonias predominantly occur in people who are either in areas that are endemic to those fungus or who have an immune compromised state,” Dr. Khan said, noting that “fungal pneumonias can be much more severe than a viral pneumonia or bacterial pneumonia.”

“Overwhelmingly, when you get fungal pneumonia where there's fungus growing in your lungs, you are extremely sick. Those people are admitted in the hospital and sometimes in an intensive care unit,” he said.

Some people are at increased risk

“People who are younger than 5 or older than 65 are at increased risk of pneumonia and as you get younger than 5, your risk increases,” Dr. Khan said. “So, the younger you are, you have an increased risk and the older you are from 65 up to 80, every year you have an increased risk of getting pneumonia and respiratory issues.”

“If you have chronic lung or heart conditions—people with COPD, asthma or other underlying lung conditions—you are also at increased risk,” he said.

“Chronic liver disease is another big risk factor of getting pneumonia,” Dr. Khan said. “Also, smoking and heavy alcohol use are known risk factors of getting pneumonia.”

Diagnosis includes a lung exam and X-ray

“There are two big categories for pneumonia. There’s community acquired pneumonia, which is the biggest category, meaning that you acquired it through things outside of the hospital,” Dr. Khan said. “Then there’s nosocomial pneumonia or a pneumonia acquired in a hospital setting.

“Community acquired pneumonia is contracted through other people who have the infection, or getting a viral or bacterial infection in the upper airways,” he said. “Your doctor will do a good lung exam or order a chest X-ray to diagnose pneumonia.”

It's different than bronchitis or a cold

“Bronchitis is within the airways itself—it’s inflammation of the airways. It’s not the inflammation of your lung tissues, which is pneumonia,” Dr. Khan said. “If you have the [common cold](#), you might have an overgrowth of those viruses in your upper airways, your nose, your oropharynx, the back of your mouth, the back of your throat.”

But “a big difference is the fact that it’s a progression of the disease. Pneumonia is much more severe and when you have a common cold, you might be at risk of developing pneumonia downstream if you don’t improve or if you have a decreased immune system,” he said.

Viral pneumonia means supportive care

“There are some medications that you can use to treat certain viruses that cause pneumonia, such as with COVID-19 or the flu, that might decrease how long you have symptoms,” Dr. Khan said.

“But for the most part, when you have pneumonia associated with viruses, good supportive care is the best treatment,” he added.

Bacterial pneumonia needs antibiotics

“For bacterial infections, the Infectious Diseases Society of America offers guidelines about the best antibiotics to use,” Dr. Khan said, noting “there is a group of antibiotics you offer to outpatients. If a doctor feels you meet criteria to be admitted to a hospital you will get antibiotics that cover a broader range of bacteria.”

“As you have increased risks, whether you have underlying lung disease or were recently in a health care facility, you can broaden the different antibiotics that cover for the bacteria you may be infected with,” he added. Also, “you hear about MRSA, or methicillin-resistant *Staphylococcus aureus*, if a patient has recently been discharged from a hospital or lives in a nursing home or recently had the flu. MRSA pneumonias tend to be more severe.

“If a patient has risk factors, then we’ll think about covering more broadly with stronger antibiotics,” Dr. Khan added.

Get vaccinated to protect yourself

“The most common cause of bacterial pneumonia is *Streptococcus pneumoniae*,” Dr. Khan said. “Getting your pneumococcal vaccine for the most common bacterial pneumonia and then getting your [vaccines for the flu](#) or COVID-19 will help decrease your risk of it progressing to bad pneumonia.”

Pneumococcal vaccination is recommended by the CDC for children younger than 5 and adults 50 years or older. Vaccination is also recommended for children and adults at increased risk for pneumococcal disease.

“They’re effective in decreasing the risk of getting pneumonia,” Dr. Khan emphasized.

Home remedies will likely not help

“Unfortunately, pneumonia is an infection of the lungs, so once infected, by this point you have already seeded your lungs with infection,” Dr. Khan said. “A lot of home remedies are things that mostly involve treating your sinuses, treating the back of your throat to help you feel better from that standpoint to decrease mucus production.”

“The home remedies are going to have little effect on the actual treatment of pneumonia,” he said, noting “they might make some of symptoms such as [cough](#) or runny nose feel a little better. But they aren’t going to treat the pneumonia itself.”

Recovery often takes weeks

“When you have community-acquired pneumonia, it takes weeks to improve. Antibiotics are recommended for five to seven days” for bacterial pneumonia, Dr. Khan said. “The reality is that the complete improvement takes several weeks, as does the finding on imaging such as an X-ray and CT scan. It can take from six to eight weeks to completely resolve, but symptoms are going to take several weeks to resolve.”

“Even though you usually only take antibiotics for less than a week, you may continue to have symptoms for several weeks,” he said. “And if you spend time in the hospital, it might even take longer than that.”

“When your fever stops and there’s improvement with antibiotics, then you can return to work or school,” Dr. Khan said. “Once you’re feeling better from a viral pneumonia or you don’t have a fever from bacterial pneumonia, you’re likely not contagious at that point and it’s more about how strong you feel and how weak you were from the pneumonia about when you can return to work or school.”

Antibiotic resistance strains are a concern

“In the hospital, [antibiotic-resistant strains](#) of pneumonia are a concern,” Dr. Khan said. “It’s important that everyone who walks around with sniffles or a sore throat doesn’t get antibiotics.”

“Resistance can increase if every time you go to an urgent care or an emergency department or a doctor’s office and say you have a cold or a sore throat, you are prescribed antibiotics,” he added. Hospitals have programs led by infectious disease specialists to be good stewards of antibiotic therapy. Antibiotics should be stopped appropriately and timely.”

“It’s a concern in the outpatient setting, too. It is really important to go to see your doctor to get a proper lung evaluation and exam,” Dr. Khan said. “You really do need to get evaluated prior to antibiotics so we [don’t create more antibiotic resistance](#).”

Don’t minimize severity of pneumonia

“Most people don’t recognize the severity of pneumonia,” Dr. Khan said. The reality is “Pneumonia is a lung infection and it’s the second most common cause of hospitalizations in the U.S., but many people still think a pneumonia is just a cold.”

“When you have a cold, you get better in a few days,” he said. “When you have a bacterial pneumonia, you have an infection of the lungs and most of the time you will only get better with treatment.”

“If you start having shortness of breath and respiratory symptoms outside of cough and fever, then you should not wait to see your doctor. The longer you wait, the more likely you are to have severe pneumonia,” Dr. Khan said. “If you need to be hospitalized for pneumonia, you have an increased risk of worse outcome for every hour that you are without appropriate antibiotic treatment.”