

Please Pay Attention to These Life-Threatening Symptoms

When left untreated, they can lead to death - especially if not diagnosed and treated promptly. Pets may need oxygen and other supportive therapies aimed at reducing complications like sepsis. What to know about the 3 types of origins and the symptoms and treatments of each.

Analysis by Dr. Karen Shaw Becker

STORY AT-A-GLANCE

- Cats frequently develop upper respiratory conditions that can lead to pneumonia
- Common causes of feline pneumonia include bacterial and fungal infections, other types of infectious agents and aspiration of a foreign substance
- No matter the cause of your kitty's pneumonia, classic symptoms include difficulty breathing, coughing, nasal discharge and fever
- Feline pneumonia can be a life-threatening illness, so if you notice any respiratory symptoms in your cat, make an urgent appointment with your veterinarian
- Recovery will depend on the cause and severity of your kitty's pneumonia, as well as prompt diagnosis and treatment

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Cats don't get common colds like we do, but they frequently develop other types of upper respiratory conditions that left untreated can lead to pneumonia, especially in kittens, seniors and cats with compromised immune systems.

Pneumonia in cats can have a variety of causes, including infectious agents (bacteria, fungi, viruses such as calicivirus and protozoa such as *T. gondii* that causes **toxoplasmosis**) and aspiration. It's important to understand that pneumonia can put your kitty's life at risk if not diagnosed and treated promptly.

Bacterial Pneumonia

Bacterial pneumonia is inflammation characterized by cells and fluid that accumulate in the lungs, airways and alveoli. The cause is pathogenic bacteria. No single type of pathogen is responsible for bacterial pneumonia, but in cats, the most common culprits are *bordetella bronchiseptica*, *pasteurella* and *moraxella*. But other organisms, including anaerobic bacteria, can also cause infection.

Conditions that seem to predispose some pets to bacterial pneumonia include a preexisting viral infection, problems swallowing, regurgitation and metabolic disorders. Symptoms of bacterial pneumonia include:

- Cough

- Loss of appetite
- Nasal discharge
- Fever
- Weight loss
- Dehydration
- Breathing difficulties
- Lethargy
- Exercise intolerance

Diagnosing and Treating Bacterial Pneumonia

When your vet listens to your cat's lungs with a stethoscope, he may hear abnormal breathing sounds known as crackles (which are short, snapping sounds), as well as some whistling or maybe even wheezing.

If he suspects bacterial pneumonia, he may perform a transtracheal wash to obtain material from the lining of the trachea for analysis, including cytology and a culture and sensitivity test. X-rays of the chest and lungs may also be ordered along with a blood test to check for systemic infection.

Antimicrobial therapy will be needed in confirmed cases of bacterial pneumonia. The proper medication can be selected from the results of the bacterial cultures. If there are other symptoms like loss of appetite, those will also need to be addressed.

Pets in respiratory distress may need oxygen therapy. IV fluids are also sometimes ordered to either treat or prevent dehydration. While she recovers, your kitty will need plenty of rest. Exercise should be limited to physiotherapy and activities to help clear the lungs and airways.

Even though she'll need lots of rest, it's important she doesn't lie in one position too long to allow fluid buildup on one side of the lungs or the other. You should encourage her to change positions often while she's resting. During the recovery period, I recommend supportive therapies including antioxidants — specifically vitamin C and N-acetylcysteine — as well as lung-specific nutraceuticals and Standard Process Feline Immune System Support.

Many cats have a full recovery from bacterial pneumonia when treated appropriately and promptly. Most deaths from pneumonia result from secondary complications, including hypoxemia (severely low levels of oxygen in the blood) and sepsis, which occurs when a localized lung infection spreads throughout the body.

Fungal Pneumonia

Fungal pneumonia is the result of a deep fungal infection, sometimes called a mycotic infection. The inflammation caused by this type of infection can develop in the interstitial tissues, the lymphatic vessels or in the peribronchial tissues of the lungs. There are several types of fungi that can cause lung fungal infections, including blastomyces, histoplasma and aspergillus. Exposure to infection-causing fungi can happen through contact with soil that's rich in organic matter, bird droppings or feces.

The method of contraction depends on the type of fungus. For example, some fungi enter the body through inhalation via the mouth and others enter through the nasal cavity. Symptoms of fungal pneumonia include:

- Loss of appetite
- **Coughing**
- Weight loss
- Difficulty breathing
- Fever
- Eye problems
- Runny eyes or nose
- Sometimes lameness

Diagnosis and Treatment of Fungal Pneumonia

Your veterinarian may hear abnormal lung sounds during an examination, but oddly, often a fungal infection will first present as an eye or skin problem.

The only way to definitively diagnose fungal pneumonia is to analyze the fluid collected on a transtracheal wash. If there are skin lesions present, performing a fine needle aspirate, lumpectomy or biopsy of an enlarged lymph node can also yield the diagnosis of fungal infection. Other tests your vet may want to run include a urinalysis, X-rays of the chest and lungs, a fungal PCR assay and an abdominal ultrasound.

Unfortunately, many cats are unresponsive to fungal pneumonia medication. In addition, treatment is very expensive and can last for two to six months or longer. The precise treatment depends on the type of fungus that has caused the infection.

Aspiration Pneumonia

Aspiration pneumonia, also called inhalation pneumonia, is a condition of inflamed and infected lungs caused by inhaling (aspirating) substances, including vomit, food, foreign bodies and regurgitated gastric acid. The severity of the condition depends on what material has been inhaled, what bacteria are present and the distribution of the aspirated material into the cat's lungs.

Aspiration pneumonia can result from disorders that adversely affect your kitty's respiratory system or increase the risk of aspiration, including any disease of the pharynx or larynx (which is the back of the throat), esophagus, stomach or intestines.

These diseases can include **laryngeal paralysis**, gastroesophageal reflux (also called GERD), megaesophagus, tumors, paralysis of the complex swallowing mechanism, esophagitis (a fancy name for inflammation of the esophagus), pyloric outlet absorption, or trauma. Pyloric outlet absorption means the stomach can't empty appropriately.

It's not the act of vomiting that directly causes aspiration pneumonia. It's the bringing up of contents from the tummy that are then inhaled. Inhalation of anything regurgitated can cause problems.

Induction of general anesthesia is also a trigger for this type of pneumonia. Normally, the placement of a tracheal tube prevents aspiration pneumonia. But sometimes kitties can reflux before or after the tube is in place. And sadly, some veterinarians perform surgery without tracheal tubes, which dramatically increases the risks.

Other triggers can be inhalation of smoke, mineral oil, kerosene, gasoline or any other caustic chemical. Disorders that cause a state of altered consciousness such as seizure disorders can increase the likelihood. Chronic vomiting can also put a cat at a higher risk of developing aspiration pneumonia.

Believe it or not, a quite common cause of aspiration pneumonia is faulty administration of liquid medication either administered by drench (drench is when a stomach tube is passed down the back of the throat), or by a dose syringe. Any liquid that's given via syringe, whether medication or food, must not be given any faster than kitty can swallow, or the risk of aspiration pneumonia becomes very real. Symptoms of aspiration pneumonia include:

- Difficulty breathing
- Runny nose
- Vomiting
- Difficulty swallowing
- Rapid breathing
- Regurgitation
- Coughing
- Increased heart rate
- Loss of appetite
- Fever
- Exercise intolerance
- Lethargy

Treatment of Aspiration Pneumonia

Your veterinarian will do abdominal palpation, chest X-rays, a complete blood count, as well as a complete chemistry profile. Fluid may be removed from the lungs to check for the presence of bacteria through culture and sensitivity testing, as well as cytology.

Aspiration pneumonia is a life-threatening condition, and may require that your kitty spend several days or more in an intensive care setting. If possible, airway suctioning should be performed immediately following the inhalation of foreign matter. If the cat is in respiratory distress, oxygen will be given. If there's dehydration or shock present, those symptoms will be treated with an IV drip.

Until a diagnosis is made, your kitty should not be given anything orally, especially in acute cases of aspiration pneumonia. Rest will be required, oftentimes cage rest, in a very quiet, stress-free environment under careful supervision.

A cat with aspiration pneumonia should not lie on his side for more than about two hours at a time. If recovery is slow, as in the case of paralysis of the esophagus, continued medical care may be needed for up to several weeks. Once kitty is stable, mild exercise can stimulate coughing to help clear the airways. Any underlying cause for the aspiration should be identified and resolved, if possible.

Kitties who develop aspiration pneumonia have a poor prognosis even with treatment, so it's imperative to focus on preventing the problem from happening, and seeing a veterinarian immediately if you feel your cat may have aspirated something.

If You Notice Respiratory Symptoms in Your Cat

It's really important if you see any signs in your kitty involving the respiratory tract that you make an immediate appointment with your veterinarian. If your pet has pneumonia, delayed treatment means a much poorer prognosis.

Some kitties develop only mild symptoms and clear them in a few days on their own. However, cats with a significant lung infection are at high risk for systemic inflammatory response syndrome in which the inflammation in the lungs spreads throughout the body, affecting other organs such as the kidneys, gastrointestinal (GI) tract, heart and brain. The result is multiple organ failure and ultimately, death.

Sources and References

[VetStreet April 10, 2017](#)

[Cornell University College of Veterinary Medicine](#)
