

The Allergist

A newsletter from the Oklahoma Allergy & Asthma Clinic

Summer 2023



Mowing down your Grass Allergies

Spring rains help grasses grow along with the heat of the summer which means it's mowing season. It is easy to discern when watching the allergy and asthma report. Symptoms can present in a variety of ways. Nasal symptoms can include a runny nose, stuffiness and sneezing. Eyes can become itchy; watery and red. Grass pollen can also kick off asthma. Not as common, people can have skin rashes (hives or welts) after exposure to grass.



Wearing a mask when mowing grass will help keep the pollens at bay.

Grass pollen scatters in the wind so it is more easily inhaled. Two large classes of grasses are northern and southern. Northern grasses include Timothy, Kentucky Blue, Rye and Fescue. Common southern grasses include Bermuda and Bahia.

Diagnosis of grass allergy usually involves allergy testing. Generally, two types of allergy testing is used, skin prick testing and specific IgE testing (blood test). Allergy skin prick testing involves a slight scratch by grass extracts in liquid form on the arms or back, waiting 15 to 20 minutes for an

itchy bump to occur which indicates an allergy to grass.

These tests should be ordered and performed by an allergist. A blood test involves drawing blood and sending it to a laboratory to determine a grass allergy.

The goal of treatment is to improve your quality of life.

The goal of treatment is to improve quality of life, so those with grass allergies, doesn't interfere in school, work, social and family activities. Sleep should be restful and undisturbed.

First things first. Watch OAAC's website and social media to monitor pollen counts Monday through Friday. When grass pollen counts are high, staying indoors is best if possible. Closing windows can decrease pollen exposure. Taking a shower af-

ter coming home from being outside can also be helpful to wash off the pollen.

Nasal saline sprays are available over the counter to rinse pollen out of nostrils. Nasal saline therapies can moisten dry nasal passages and can help with nasal symptoms due to grass allergies. Nasal steroid sprays are anti-inflammatory medications sprayed into the nostrils.

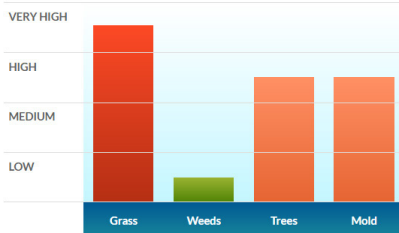
Steroids used to treat allergies are different from other types of steroids such as testosterone and estrogen. Although some nasal steroids are available over the counter, it is advisable to see an allergist first. When used properly and in conjunction with an allergist, steroids are safe. However, some steroids have potential side effects including nose irritation, headaches and nasal bleeds. Using nasal saline a few minutes prior to the nasal steroid sprays can possibly prevent nasal irritation and can further help nasal symptoms. Bring all nasal sprays for your allergist to review.

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OAAAC Oklahoma Allergy & Asthma Clinic
Pollen and Mold Report
Published: 05/20/22

VERY HIGH ALERT for Grass Pollen

VERY HIGH RANGE: Allergy Alert for grass pollen. This is an extreme exposure situation. Severe symptoms may be expected in pollen-sensitive individuals. The more seriously allergic people should be advised to stay indoors as much as possible. This is especially true if a person has pollen sensitivity or allergic bronchial asthma.



Scombroid Poisoning – Mimicker of Fish Allergy

Scombroid poisoning is a form of food poisoning which happened with someone eats a species of fish containing high amounts of a chemical called histidine. This chemical is an amino acid occurring naturally in fish. If fish is not kept refrigerated, bacteria break down the histidine and turns it into histamine.

Histamine is responsible for the toxicity that causes scombroid poisoning. When people eat large quantities of fish with histamine, they can experience symptoms resembling an allergic reaction, like hives. According to the National Capital Poison Center, this is not a true allergy to a particular fish.

The FDA says this condition is usually not long term or severe. Mild cases can disappear on their own without treatment. Antihistamine medications may help some.

If experiencing severe symptoms such as chest pain or breathing trouble, go to an emergency room or call 9-1-1.

The most common fish species involved are tuna, mackerel, bluefish,

mahi mahi or dolphinfish, herring, sardine, amberjack, anchovies and marlin. These types of fish contain high amounts of histidine.

When fish isn't stored in a refrigerator, it results in an overgrowth of bacteria. Bacterial strains responsible for this condition produce enzymes that turn histidine into histamine. These strains include those present in the skin and intestines of the fish such as *E. coli*, *morganella morganii*, *pseudomonas aeruginosa* and *klebsiella* species.

When eating fish with high amounts of histamine, symptoms feel like an allergic reaction. Scombroid poisoning is also called histamine toxicity.

Those with low levels of the enzyme diamine oxidase are more likely to experience scombroid poisoning. This enzyme breaks down histamine from food. A person with low levels of the enzyme might not break down the histamine as well as a person with higher levels.

The poisoning is not due to an allergy, so it is safe to eat fish again as long as it has been refrigerated.

Symptoms using start with a few minutes to two hours after eating the fish. The initial symptoms resemble an allergic reaction:

- Sweating
- Facial flushing
- Peppery taste around the throat and mouth
- Headache
- Dizziness
- Nausea

Initial symptoms may progress to:

- Facial rash
- Swelling
- Hives
- Short-term abdominal pain and diarrhea

Symptoms can linger 4-6 hours and rarely last more than 1-2 days.

Diagnosis can be made based on the circumstances from a physician such as a person's symptoms coincide with an outbreak that affected several people who ate fish bought from the same place.

Treatment can depend on the severity of the scombroid poisoning. Mild cases can disappear quickly without medication. Antihistamines such as diphenhydramine (Benadryl) may help some with this condition.

Severe cases may require a trip to the emergency room. Treatment may include intravenous fluids, oxygen and other medications.

A severe case could include chest pain; trouble breathing, and swelling of the tongue and mouth.

For severe cases that are not life threatening, it is best to see an allergist. The allergist can determine if the person is having an allergic



Fish such as tuna (as pictured here), mackerel, bluefish, mahi mahi or dolphinfish, herring, sardine, amberjack, anchovies and marlin can contain high amounts of histidine.

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Asthma and Pregnancy

Asthma and allergic diseases are the most common medical conditions faced during pregnancy. Asthma prevalence in pregnancy is 8-9 percent and increasing. Pregnant women with asthma have an increased risk for perinatal complications including preterm birth, low birth weight and pre-eclampsia. Severe asthma in pregnancy is a cause of mortality.



PREGNANCY ASTHMA CONTROL TEST

1. In the past 4 weeks, how much of the time did your asthma keep you from getting as much done at work or at home?					Score
All of the time	Most of the time	Some of the time	A little of the time	None of the time	
1	2	3	4	5	
2. During the past 4 weeks, how often did you have shortness of breath due to your asthma?					
More than once a day	Once a day	3 to 4 times a week	Once or twice a week	Not at all	
1	2	3	4	5	
3. During the past 4 weeks, how often did your asthma symptoms (wheezing, coughing, shortness of breath, chest tightness or pain) wake you up at night or earlier than usual in the morning?					
4 or more nights a week	2 or 3 nights a week	Once a week	Once or twice a week	Not at all	
1	2	3	4	5	
4. During the past 4 weeks, how often have you used your rescue inhaler or nebulizer medication (such as albuterol)?					
3 or more times per day	1 to 2 times per day	2 to 3 times per week	Once or twice a week	Not at all	
1	2	3	4	5	
5. How would you rate your asthma control during the past 4 weeks?					
Not controlled at all	Poorly controlled	Somewhat controlled	Well controlled	Completely controlled	
1	2	3	4	5	
Total Score					

If the sum of your individual scores is 19 or less, your asthma may not be controlled as well as it could be. Talk with your doctor.

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“The Allergist” welcomes your letters, comments or suggestions for future issues.

Send to:

The Allergist

750 NE 13th Street
Oklahoma City, OK 73104-5051
Phone: 405-235-0040
www.oklahomaallergy.com

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Asthma management in pregnancy is very important to lead to improved results for both mother and baby’s health.

A toolkit was created by the Vaccines and Medications in pregnancy Surveillance Study Taskforce and the Women’s Health in A/I Committee in collaboration with the Asthma and Allergy Foundation of America.

The Breath 4 Baby Toolkit is a resource for educating patients and providers regarding asthma prevalence, diagnosis and management in pregnancy to improve outcomes for pregnant women with asthma and their babies. The toolkit includes the Pregnancy and Lactation Asthma Plan, the validated pregnancy ACT and other educational resources.

Click on the link below for more information

<https://www.aaaai.org/practice-management/practice-tools/asthma-and-pregnancy-toolkit>



First Epinephrine Nasal Spray Coming Soon?

A Food and Drug Administration committee of outside advisors voted in favor of an epinephrine nasal spray which would be the first needle-free option for treating severe allergic reactions. The product called Neffy from ARS Pharmaceuticals is designed to deliver a 2-milligram epinephrine dose which can possibly prevent a life-threatening allergic reaction.

Drug approval was for anyone weighing about 66 pounds. ARS Pharmaceuticals is currently working on future studies for smaller children. The advisers had issues with data gaps by the drugmaker’s approach which was to bypass large clinical trials by instead comparing it with other approved injection products used to treat allergic reactions.

The FDA has asked the committee if it should demand more studies be required but acknowledged steep challenges for studies of life-threatening allergic reaction.

ARS Pharmaceuticals expects the FDA to issue its final verdict on approval of Neffy in mid-2023 (nothing has been announced as of completion/distribution of this newsletter.) If approved, the company hoped to launch the prescription spray by the end of 2023.

Vocal Cord Dysfunction

Vocal cord dysfunction (VCD) is defined as vocal cords intermittently malfunction and close when you inhale which reduces the space available for air to move in and out. VCD is not limited to age but most often it's people who are 20 to 40 and happens more to women than in men. It is also called paradoxical vocal cord motion. Because VCD sounds and feels like asthma – it can also be called vocal cord asthma.

People can have both – VCD and asthma.

Symptoms

A mild, acute episode may not cause any symptoms. Most symptoms are caused by inhaled air moving through a smaller area than usual. Symptoms can come on suddenly and can mimic an asthma attack.

Symptoms include:

- Shortness of breath
- Feels like suffocating – also called air hunger
- Wheezing (especially during inhalation)
- A high-pitched sound during inhalation called stridor
- Chronic coughing
- Chronic throat clearing
- Throat tightness or choking
- Hoarseness or weak voice
- Chest tightness or chest pain

Symptoms can be scary especially when they come on suddenly. Some people with VCD feel anxious and afraid. This can make it even harder to breathe.

For those with asthma, similar symptoms can be a life-threatening and needing immediate treatment. An important difference is that wheez-

UNDERSTANDING VOCAL CORD DYSFUNCTION

What is Vocal Cord Dysfunction?

Vocal cord dysfunction (VCD) is an abnormal narrowing of the larynx. VCD occurs in some people during high intensity exercise or exposure to certain irritants. This narrowing leaves only a small opening for air to flow through the windpipe, which can feel like you can't get enough air into your lungs. VCD can cause symptoms that mimic asthma.

Causes

What are Vocal Cords?

Vocal cords are folds of tissue in the larynx (voice box)

National Jewish Health

ing is heard exhaling with asthma but it is heard when inhaling with VCD.

Diagnosing VCD

Discuss with your allergist or medical provider, if having breathing issues. Some questions can help your physician if you have VCD or asthma.

Describe exact symptoms – VCD causes wheezes while breathing in and asthma causes wheezes when breathing out

What time of the day episodes happen – VCD doesn't happen while asleep, asthma attacks can.

Better or worse; inhalers can trigger a VCD attack or even make it worse. Inhalers usually make asthma symptoms better.

Looking at vocal cords can help a doctor confirm a diagnosis of VCD.

It can be difficult to tell the difference between VCD and asthma. A study showed that more than 40 percent of people with VCD are misdiagnosed as having asthma.

Tests

Testing is best when having an episode to diagnose VCD. Otherwise, the test is usually normal.

Spirometry

A spirometer is a device to measure how much air is breathed in and exhaled out. It measures how fast air moves. A VCD episode will show a lower amount of air coming in than usual because the vocal cords are blocked.

Laryngoscopy

A laryngoscope is a flexible tube with a camera attached. It is inserted into the nose and into the larynx so the doctor can see the vocal cords. When breathing the vocal cords open. For those with VCD, the cords will be closed.

Pulmonary Function Tests

For diagnosing VCD, pulmonary function tests will give a complete picture of how the respiratory tract is working. The most important parts are the oxygen level and the pattern and amount of airflow when you inhale. Those with VCD should have an oxygen level that stays normal during an attack. In lung diseases like asthma, it's often lower than normal.

What causes VCD?

Triggers for VCD

- Laryngopharyngeal reflux disease (LPRD) - stomach acid flows backward up the larynx

What is it and what does it have to do with asthma

- Gastroesophageal reflux disease (GERD) - stomach acid flows backward into the stomach
- Postnasal drip
- Exercise or exertion
- Breathing irritants such as toxic fumes, tobacco fumes, tobacco smoke and strong odors
- Strong emotions
- Stress or anxiety – especially in social situations
- Severe depression

Treatments

Short term for acute episodes - Even though it can be scary, severe acute episodes won't lead to respiratory failure like asthma does.

Continuous positive airway pressure (CPCP) – it blows intermittent bursts of air through a mask worn over the face. Pressure from the air helps keep vocal cords open making it easier to breathe.

Heliox is a mixture of 80 percent and 20 percent oxygen can reduce anxiety during an acute episode. This is less dense than oxygen alone and it will pass through vocal cords and windpipe more smoothly. When breathing becomes easier and quiet, anxiety will lessen.

Anti-anxiety medication can help such as alprazolam (Xanax) and diazepam (Valium). This can help end a VCD episode. These types of medications can be addictive so they shouldn't be used for more than

a few days or as a long-term VCD treatment.

Long-term treatments can include proton pump inhibitors such as omeprazole (Prilosec) and esomeprazole (Nexium) block stomach acid protection which helps stop GERD and LPRD. Over-the-counter anti-histamines can help stop postnasal drip. Avoid known irritants including smoking and secondhand smoke. Another option is to seek treatment for depression, stress and anxiety.

Another important component for long term management is speech therapy. A speech therapist will help reduce VCD episodes and manage symptoms by teaching relaxed breathing techniques, throat muscle

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Grass Pollen Allergy...

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Nasal antihistamines are nasal sprays containing antihistamines which are different than steroids. Antihistamines usually work quickly to bring symptom relief. Some experience a bitter taste with nasal antihistamines. With potential side effects as a medication, always discuss with your allergist before using.

Oral antihistamines are pills that can help with allergy symptoms like nasal draining and sneezing but not nasal congestion. It is better to use newer non-sedating antihistamines because it can be better tolerated. Potential side effects can include increased sleepiness or sedation during the day, increased dryness and difficulty urinating. There has been a potential association between older adult patients and dementia with oral antihistamines.

Systemic Steroids (steroid pills or



Immunotherapy can desensitize your immune system to grass allergens.

injections) are used if allergy symptoms are very severe. Steroid pills and steroid shots are much stronger than topical steroids and can cause more side effects. Those can include weight gain, high blood pressure and bone problems. If using this option for treatment, it should be cautiously used under the guidance of your allergist.

Allergy shots or immunotherapy is giving small doses of an allergen to desensitize the immune system to grass pollen effects. Immunotherapy

is currently FDA for asthma, hay fever and eye allergies due to grass pollen. Allergy shots are different than steroid shots or steroid injections. Allergy shots should be performed in a medical office under the supervision of an allergist since there is a potential of allergic reactions to them.

Sublingual immunotherapy is the same concept as allergy shots. However, instead of shots, it involves a dissolving tablet containing grass pollen under the tongue on a daily basis. It is currently approved for specific grass allergens in the United States.

Grass allergy is a very manageable condition for any age. Many treatments are available. Over the counter products should be discussed with your allergist for advice. With careful evaluation and follow up with your OAC allergist, you can have a high quality of life and enjoy all of your activities.

Air Quality Alert – what does it mean?






As fires have ravaged the United States and even Canada, what is the air quality alert mean and why is it important to know? For those who have compromised immune systems, and breathing and lung issues, an air quality alert can be hazardous to their health.

The Environmental Protection Agency (EPA) monitors the air and issues an air quality index. This daily index shows how clean or polluted the air is and this helps keep a record on five kinds of air pollutants. The index goes from zero to 500. The larger the number, the worse the air quality.

Air quality code categories include green or yellow – air is fairly clear; moving up to orange the quality is unhealthy for those sensitive groups like kids, older adults and those with health conditions. The red and purple readings, take precautions for

being outside. Maroon is measured at 301 and above, this means pollution levels are hazardous. Consider running air purifiers inside, wear an N-95 mask when outside and reduce outside activities.

If you would like to learn more about daily air quality report, you can visit AirNow.gov. The report is updated every hour. You can also install an app on your phone www.airnow.gov › [airnow-mobile-app](#)

	Green means air quality is good.
	Yellow means air quality is moderate.
	Orange means air quality is unhealthy for sensitive groups -- people with heart disease or lung disease such as asthma, children & teens, people who are active outdoors, and older adults.
	Red means air quality is unhealthy.
	Purple means air quality is very unhealthy.

VCD...

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relaxation, voice training and techniques to reduce throat irritating behaviors like coughing and throat clearing. A breathing technique call quick release is breathing through pursed lips and using the stomach

muscles to help move air. This will cause vocal cords to quickly relax.

Keys to managing VCD is to relax muscles in the voice box and to manage stress. Botox injections have also been used to treat severe cases. This causes partial paralysis of the muscles to allow the voice box to relax and will allow air through.

Scombroid Poisoning...

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reaction to fish or if it is scombroid poisoning. Since scombroid poisoning is not a true allergic reaction, it generally doesn't need epinephrine injections or corticosteroids. It is not an infection so antibiotics are not needed.

Prevention is to make sure fish is refrigerated to 40 degrees or lower. Cooking or freezing the fish will not get rid of the histamine that causes these symptoms. In a restaurant setting, there is no way to tell if it is spoiled or not. A salty, sharp or peppery taste may be red flags to indicate spoilage from histamine.

If you have more questions, please visit with your OAAC provider.



Remember to Follow OAAC on Facebook, Twitter, Instagram & Linked In

In addition to posting pollen and mold counts each day, OAAC also uses social media to post announcements or educational allergy news updates.

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