

## **TEXAS LUNG ASSOCIATES**

### *Allergy Clinic*

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## **ALLERGY CLINIC POLICY AND INFORMATION**

Allergy testing is the first step to allergy symptom relief. Upon completion of your allergy test, we will apply a soothing antihistamine gel to your back and arms. You should feel relief with this, but if not, you may re-apply some Benadryl cream or cortisone cream once you leave the office. The raised areas on your arms should gradually decrease in size in a couple of days, longer in some instances. If you experience an increase in size, apply cortisone or Benadryl cream and apply ice to the site. You may also take an antihistamine like Benadryl (25mg) or Claritin (10mg). If there is no improvement with these treatments, please call our office at (940) 382-LUNG (5864).

Over the next couple of days when you are bathing, you may notice increased redness at the testing site. This is normal and will resolve in a few days. Advil or ibuprofen will help with any swelling or redness, although this is usually not needed.

### **How Does Allergy Therapy Work?**

Allergy injections (immunotherapy) are most effective if given year round. You will receive a steadily increasing amount of the substances that cause your allergies. The usual time between injections is seven days. Over the next few months your dosage will increase until you reach your maintenance level. When an effective dose is reached, allergy symptoms will decrease after an injection and start to return when the next injection is due. Many patients notice symptom relief in the first two to three months of treatment. The results are worth the wait! Try not to miss a weekly allergy injection because the more regularly you receive your shots, the quicker you reach your maintenance level and have less symptoms. Communication from each patient with the allergy staff is a vital link in treatment success, so talk to us regularly about your progress. If you are involved in an activity that may have increased your total allergy load, (e.g., cleaning the attic, raking leaves, mowing the lawn) the day before or the day of your injection, please inform the allergy staff. Your dose may have to be reduced, as your exposure to allergens was increased.

After you have been at your weekly maintenance dose for two years, injections may be given every two weeks. At the end of the third year, your physician will determine if stopping shots is indicated. Some patients continue with injections every three to four weeks.

It is important to remember that allergy injections are not a cure, but they can improve your quality of life. Eventually, you will need less or no allergy medication. Our hope is that you will need your medications only during peak allergy season, instead of daily.

## Important Things to Know While on Allergy Injections

You will need to remain in our office for 20 minutes after your injection. This is very important! If a severe allergic reaction happens, it is likely to occur within the first 20 minutes. Reactions are rare, but can occur. **PLEASE DO NOT ASK TO LEAVE EARLY.**

You have been asked to fill a prescription for an EpiPen. You are required to bring it with you each day you receive an allergy injection. A delayed allergic reaction can occur up to two hours after your injection.

If you skip an injection, we may not be able to increase your dose. There will be circumstances in which we will not give you an allergy injection.

1. If you have a fever of 100 degrees Fahrenheit or higher.
2. If you are experiencing wheezing.
3. If you have asthma or other lung disease and your peak flow readings are lower than expected.
4. If you have an active rash or hives.
5. If you have received an immunization on the same day. Allow two days between an immunization (i.e., flu shot, pneumonia shot) and your allergy injection.

**Do Not** exercise one and a half hours before or after receiving an allergy injection.

There is a chance that you may have a mild reaction to your weekly allergy injection, your reaction can include, but is not limited to:

1. **Delayed local reaction:** Some people may develop swelling, itching or bruising at the injection site several hours to three days after the injection. If this occurs, you can apply cortisone or Benadryl cream to the site and applying ice. If you are developing reactions after most allergy injections, take a long-lasting antihistamine before the injection is given again (e.g. Claritin, Clarinex, Allegra, Zyrtec, Xyzal).
2. **Large local reaction:** A large reaction is described as immediate or delayed swelling or redness at the injection site larger than a 50 cent piece lasting over 24 hours. You may apply cortisone or Benadryl cream and ice to the site and take an antihistamine such as Benadryl (25 - 50mg). Due to its tendency to cause drowsiness, we ask that you avoid driving if you take Benadryl. If you have this type of reaction, please notify the allergy clinic (940) 382-LUNG (5864).
3. **General or Systemic reaction:** These are extremely rare and usually occur within 20 minutes of the injections. Some symptoms are hives, itching all over, flushing, coughing, wheezing, chest tightness, difficulty breathing, mouth or throat swelling and/or fainting or collapsing. In the event of a serious reaction, first use your EpiPen, then call 911, then call our office at (940) 382-LUNG (5864). **THE EPIPEN SHOULD ALWAYS BE GIVEN FIRST, THEN CALL 911 IMMEDIATELY!**

If you become pregnant while having allergy injections, please inform an allergy clinic staff member and your OB/GYN. Allergy injections can be continued during pregnancy at the dose you were at when you got pregnant.

**Beta Blocker drugs:** These are medications commonly prescribed for high blood pressure, palpitations, heart conditions, performance anxiety or migraine headaches. Update the allergy clinic staff if you begin taking any new medications, even if you do not think it is a Beta Blocker. **If you start taking a Beta Blocker, notify our physician and allergy staff. We cannot continue giving your allergy injections while you are also taking Beta Blockers. Do not stop taking your Beta Blocker without talking to the doctor who prescribed it for you.**

The following is a list of beta blockers you will need to avoid while on immunotherapy (receiving allergy injections):

### Beta Blockers

Acebutolol  
Atenolol  
Betapace  
Betaxolol  
Betimol  
Betoptic  
Bisoprolol  
Blocarden  
Brevibloc Injection  
Bystolic  
Carvedilol  
Cartrol  
Coreg  
Coreg CR  
Corgard  
Corzide  
Cosopt  
Esmolol  
HCT/Propranolol  
Inderal  
Inderide  
InnoPran XL  
Kerlone  
Labetalol

Levatol  
Lopressor  
Lopressor HCT  
Metoprolol  
Nadolol  
Nebivolol  
Normodyne  
Ocumeter  
Penbutolol  
Propanolol  
Pindolol  
Secrtal  
Sorine  
Sotalol  
Tenoretic  
Tenormin  
Timolol  
Timolide  
Toprol  
Toprol XL  
Trandate  
Visken  
Zebeta  
Ziac

### Glaucoma Eye Drops:

AK-Beta  
Betagan  
Betaptic  
Betaxolol  
Betaxon  
Betoptic S  
Betazon  
Carteolol  
Combigan  
Cosopt  
Istalol  
Levobetaxolol  
Levobunolol  
Levobetaxolol  
Metipranolol  
Ocupress  
Optipranolol  
Timoptic

**Follow-up appointments are important!** You will need to see the physician three months and then again nine months after you start taking allergy injections. After that, you will be seen yearly or as needed for your allergy follow-ups.



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## **ALLERGY SEASONS**

### **Weeds**

Weeds begin to pollinate in late July and continue until the first hard freeze. They peak during August to October. Short Ragweed pollinates in August and is known to cause “hay fever.” Weeds that we test and treat for are Ragweed, Kochia (fire brush), Lambs Quarter, Marsh Elder, Pigweed, English Plantain, Common Mugwort Sage, Russian Thistle, and Sour Dock (Sheep Sorrel).

### **Grasses**

Grasses begin to pollinate in March until September. They peak in May and June. If you have a reaction when mowing the grass, you may be reacting to the grass terpenes, the chemicals released that cause the smell, rather than the grass pollen. Grasses we test and treat for are Bermuda, Johnson, and Perennial Rye.

### **Trees**

Most trees begin to pollinate in February until June. Mountain Cedar pollinates from November to March. Other trees we test and treat for are Live Oak, American Elm, Box Elder, Cottonwood, Mesquite, Hickory Pecan, Mountain Cedar and White Ash.

### **Dust Mite**

Dust Mites are microscopic organisms that thrive on human skin cells that have shed off the body. They can be found in all pillows, mattresses and carpets any time of the year. The protein in their waste and saliva is the cause of irritation. We test and treat for these.

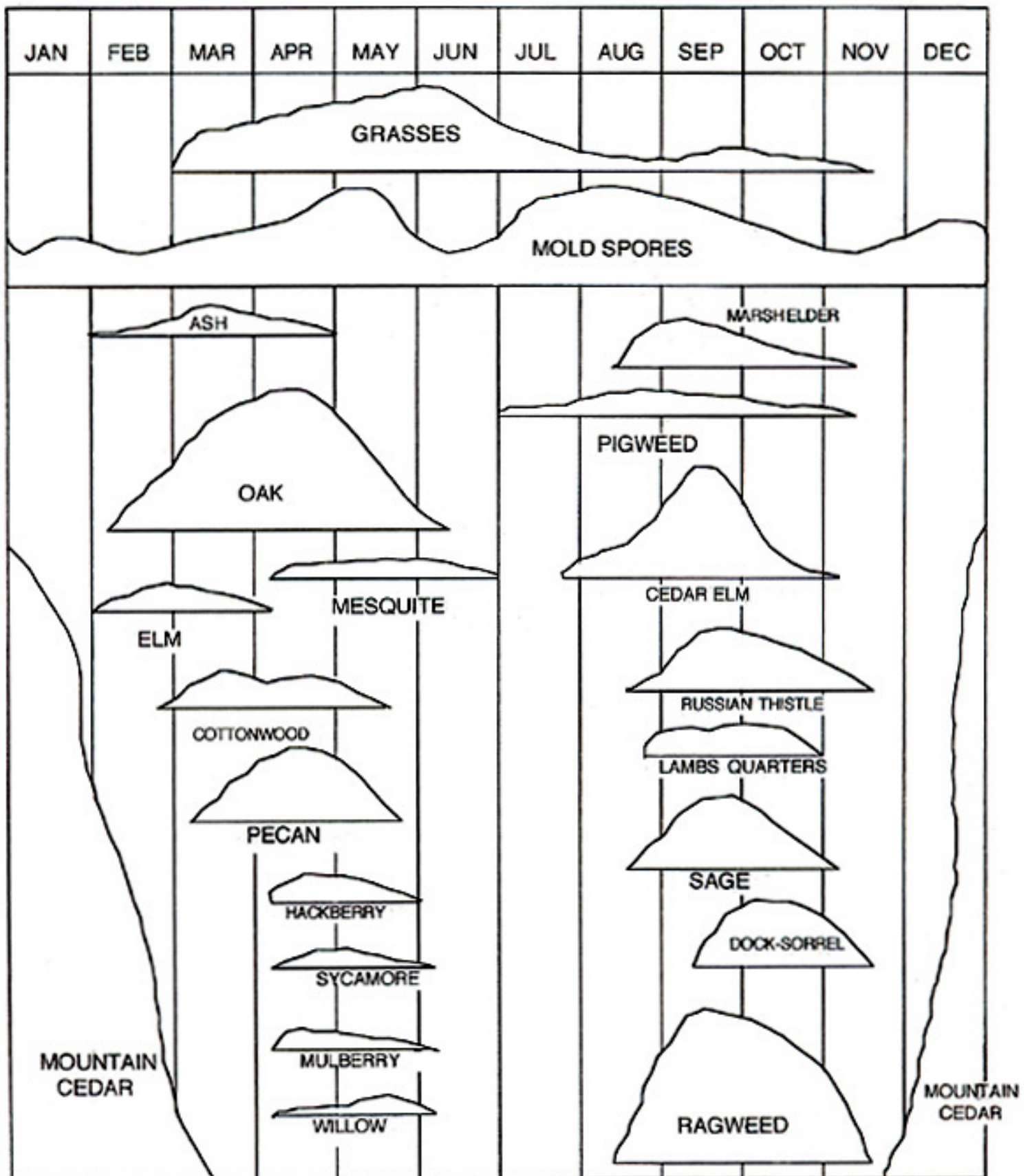
### **Molds**

Molds are around all year. They live and thrive indoors as well as outdoors where it is moist and dark. The molds we test and treat for are Alternaria, Aspergillus, Hormodendrum, Penicillium, Helminthosporium, Fusarium, Phoma, Fusarium, Grass and Grain Smuts, Rhizopus, Pullularia and Curvularia. Molds are present in the highest concentration in the evening.

### **Animals/Insects**

The protein in their waste and saliva is the cause of irritation as well as their dander. We test and treat for Cat, Dog, Cockroach and Feather (chicken, duck, goose).

# AIRBORNE ALLERGENS IN TEXAS







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## ABOUT POLLENS

**RAGWEED** pollen produces severe and widespread allergies and causes what is known as, “Hay Fever.” It grows in dry sunny areas, sandy soils, along river beds, on the side of the road, in vacant lots and anywhere that the soil is disturbed. The leaves are grayish to silvery green and the plants grow tall. Ragweed is a food source for birds, butterflies and moths. It is spread by wind and it is considered impossible to rid an area of this weed.

**PIGWEED** is a coarse, widely distributed plant that can grow up to three feet tall. It is found in gardens and waste areas. The stems often have red stripes and the leaves have distinct veins and may have green flower clusters with spikes. It reproduces through seeds that can germinate when conditions are favorable.

**KOCHIA** plants are often found along roads and railways where no other plants can survive. Resistant to most herbicides and pesticides, Kochia is difficult to eradicate. Its pollen is spread through the wind in a tumbleweed-like fashion.

**LAMBS QUARTERS** is a fast growing, tall, weedy plant. Although it is considered a weed, it was once harvested for food by the Eastern Agricultural Complex.

**ROUGH MARSH ELDER** is a weed that is often mistaken for ragweed. It grows in wet, moist areas near ponds, lakes and waste areas. The stems are tall, hairy and the leaves are also hairy, are oval shaped and have a pointed tip. The leaves may cause a skin rash in some people and the plant causes “hay fever,” like symptoms.

**ENGLISH PLANTAIN** is a perennial herb that is frequently used in teas, tarts and herbal remedies. It is a leafless, silky plant with the stems clustered in groupings that stand about 15 inches tall.

**RUSSIAN THISTLE** grows in sandy, dry places. The dry nature makes it detach and blow like a tumbleweed.

**COMMON MUGWORT SAGE** is an invasive weed found growing in areas high in nitrogen, mainly uncultivated areas. Its pollen does not travel far from the plant and is a known “hay fever” and asthma trigger. It has reported uses in herbal medicine.

**SHEEP SORREL** is a common, perennial weed. It is a tall plant that has maroon flowers. It lives in moist areas and may be found in floodplains and marshes. Sheep sorrel thrives in the same environment as blueberries and can be a nuisance to farmers who grow this fruit. The tart leaves have a lemony flavor and is used to flavor tarts. There are also several reported uses in herbal medicine.

**BERMUDA GRASS** is a fast growing, tough grass that grows well in sunny, hot climates. It is often used for turf in sports because it holds up well to wear and tear. Bermuda grass has a deep root system and can become invasive, choking out other grasses.

**JOHNSON GRASS** can be used for forage for animals and to stop erosion, but is generally considered a weed. Foliage can cause bloating if eaten by livestock and if it becomes wilted by frost or hot weather can cause harm.

**PERENNIAL RYE GRASS** is a cool weather grass. It is used for lawns, as pasture for grazing, for hay for feeding livestock, and for soil erosion programs. In some circumstances it can invade like a weed and choke out other grasses. Its pollen is a major source of, “hay fever,” and it can be infected by molds.

**MOUNTAIN CEDAR** trees are small, shrub like, evergreen trees that are highly drought tolerant. They are found in high concentrations in Central Texas. This tree can cause a severe allergic reaction in the winter months often referred to as, “Cedar Fever.” Ranchers often consider Mountain Cedar a nuisance because livestock choose other plants over its bitter tasting seeds, therefore causing overgrazing on other plants. The strong wood is used for constructing fence posts.

**LIVE OAK** is an evergreen species of oak tree. Live oaks produce fruit called acorns and each contains one seed. Live oaks produce catkins that are spread by wind in the spring. Oak wood is strong and resistant to fungal and insect damage. Common uses are for furniture and to contain aging alcohol. Oak flavoring is commonly instilled in wine. Acorns are used for flour and roasted for coffee.

**AMERICAN ELM** is a hardy deciduous tree that can live in temperatures as low as –40 degrees F. It has a vast wide canopy and small purple, brown flowers. Its pollen is spread by wind. It is found in many areas, but mostly in floodplain. Highly susceptible to Dutch Elm Disease, American Elms rarely live more than 10 years.

**BOX ELDER** is a small, fast growing tree that has a shorter lifespan than other trees. It often has many trunks that form a thicket. Box elder has soft green branches that do not develop the hard protective bark that some trees do. It is often found in flood plains, around houses, in hedges and areas where water is plentiful. The weak wood from Box Elder trees has few uses for landscaping and industry, but birds and squirrels eat the seeds.

**EASTERN COTTONWOOD TREES** are large and deciduous. They have thick-fissured bark and triangular shaped leaves that blow in the wind in a distinctive manner. The flowers are catkins and can blow a long distance before settling. Cottonwoods are flood and erosion tolerant and the wood is weak and fibrous. It has few uses because of its weakness, but may be used for carving or to make shipping crates.

**MESQUITE TREES** are hardy, drought tolerant deciduous trees that are often shrub sized. The twigs have a characteristic zigzag shape. Mesquite is difficult to eradicate due to its deep roots. Its bean pods can be ground and added to jelly, wine and bread. The wood can be used for furniture and for barbecuing.

**HICKORY TREES** have 19 different species. They are deciduous and some species are native to North America. The fruit is an oval nut and in some species the nuts are edible. They are pollinated by wind. The tough wood from hickory trees can be used for tool handles, carts, lacrosse stick handles, bottoms of skis, walking sticks and some flooring. It is also used for barbecue.

**PECAN** is a species of hickory native to North America. It is a large deciduous tree with catkin flowers that are spread by wind. Pecan nuts have a rich buttery flavor and are used in many foods especially deserts. The wood can be used for furniture, flooring and for fuel for smoking meats. It is the state tree of Texas.

**WHITE ASH** is a large deciduous tree, found in Southwest to East Texas. The bark is smooth and gray in younger trees and becomes fissured with age. They are green above, whitish glaucous below and turn yellow, red or purple in the fall. This tree has small purple flowers that are spread by the wind in the spring. The wood from White Ash trees is used to make baseball bats, lobster traps, some flooring and electric guitars. They can live to be 300 years old.





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## ABOUT MOLD ALLERGY

When we refer to mold allergy, many patients question, “Just what is mold, and where are specific molds found?” This informational sheet is intended to help our patients understand more about mold allergy.

Molds are actually very small fungi that grow indoors and outdoors. Molds thrive in dark, damp places. Molds typically grow on other plant or animal matter such as fruit, flour and leather. Air currents cause mold to circulate in the atmosphere as a dust, also called spores. The two most common outdoor molds are: *Alternaria* and *Cladosporium* (*Hormodendrum*). These mold spores are measurable in the spring months and peak in the fall. The most common indoor molds are: *Penicillium* and *Aspergillus*. These molds are perennial or year-round offenders. Indoor mold is commonly found in basements and crawl spaces as well as furniture, bedding, and stuffed toys.

*Here is a brief description of commonly occurring molds:*

**ALTERNARIA** is a common outdoor mold. It may also be found indoors on moist window frames. *Alternaria* may be found as a parasite on plants and plant materials. It typically grows in dead, decaying vegetables and may be responsible for the black spots on potatoes and tomatoes. Known habitats are soils, corn silage, rotten wood, composts, bird nests, and various forest plants.

**ASPERGILLUS** is a common indoor mold found in damp, musty houses, on damp cloth and leather goods. It is also found in damp hay and grain and in soil, leaf and plant litter, decaying vegetable root, bird droppings, tobacco, and stored sweet potatoes. *Aspergillus* occurs on spoiled foods such as bacon, chicken, sausage and dried fruits as a bluish color, and on onions as a black mold. It is a heat tolerant mold, growing in a wide range of temperatures.

**CLADOSPORIUM (Hormodendrum)** is the most common airborne mold. It exists indoors and outdoors and is frequently found in unclean refrigerators, foodstuffs and moist window frames. *Cladosporium* is found in homes with poor ventilation in low-lying damp areas. It is found on leather, rubber, cloth and wood products as a brown mold and in decaying vegetation, spoiled meat and tobacco.

**CURVULARIA** is a common plant mold that is found on cotton, rice, barley, wheat and corn plants.

**FUSARIUM** is found in slime in river beds and is widely distributed in grass and other plants. *Fusarium* is a common soil fungus that often causes disease in rice, sugar cane and sorghum and on maize grains. It also occurs on the roots of fruits and vegetables including bananas, tomato and watermelons.

**HELMINTHOSPORIUM** is most frequently found in grains, grasses, sugar cane, soil and textiles. It is a common parasite of cereal and grains. Helminthosporium occurs seasonally in hot weather on dry, windy days.

**PENICILLIUM** is a mold found in decaying vegetable products, grains, cereals, and hay. It is a major ripening agent in Camembert and Roquefort cheeses. Penicillium is the blue-green mold found on stale bread and fruits. It is found year round but peaks in the spring and winter months.

**PHOMA BETA** is a paper and plant mold commonly found in soil, dead plant tissue and potato. It attacks weak and damaged plants. Indoors, Phoma may be found in humid places and is associated with painted walls.

**PULLULARIA** is known for attacking various leaves. The spores are deposited on the leaf surfaces in the spring and begin decomposition in the fall as the leaf reaches senescence. Pullularia is found on the surface layers of soil and on wheat seeds, barley, oats, tomato and pecans. Indoors it is found in kitchen and bathroom areas and may cause damage to painted surfaces.

**RHIZOPUS** mold spores are dispersed in hot, dry weather. It is found in forest and cultivated soils and in children's sandboxes. Rhizopus is found on sweet potatoes, cold-stored strawberries and stewed fruits. It is also found in bird nests, feathers, and wild bird droppings. Occupational exposure may occur among food handlers associated with transfer of strawberries, peaches, cherries, corn and peanuts.

**GRAIN SMUTS** are fungi found on wheat, corn, oat, or grass grains. They are released during the flowering cycle as well as the harvesting time of the specific plant.



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### **ALLERGIES, NASAL/RESPIRATORY IRRITANTS AND SINUS INFECTIONS**

The average adult has three to five respiratory infections per year. These usually begin with sneezing and nasal drainage, with subsequent development of thick mucus, nasal congestion, sore throat, and coughing. These can last 7 to 10 days and are usually viral infections that cause sinus inflammation, which do NOT improve with antibiotic therapy. A bacterial sinus infection is usually defined as persistent symptoms that last about 10 to 14 days.

Exposure to cigarette smoke, environmental irritants, persons prone to infections, chronic allergies, and hereditary factors will make some people more likely to develop infections. If symptoms persist after proper medical treatment, surgery may be necessary to open the obstructed sinuses to allow for ventilation and drainage of the sinuses. Sinus surgery usually does not completely eliminate the occurrence of infections, but it may help reduce the severity and frequency of sinus symptoms. Medical treatment and/or allergy treatment is often needed even after successful surgery.

Many environmental irritants can cause symptoms that worsen or mimic symptoms of allergies. This may include burning or itching of the eyes, nose, throat, lungs, nasal congestion, cough, and/or wheezing. Examples of irritants are tobacco smoke, perfumes, hair spray, household chemicals, and outdoor ozone. Medications and allergy shots are not usually effective for the treatment of symptoms from irritants. Sinus rinses such as a Neti Pot often help with allergies from irritants.

When treating allergies, it is important to reduce exposure to triggers in the environment that may worsen allergy symptoms. Healthy eating and exercise habits may help reduce respiratory and allergy symptoms. Specific guidelines to reduce irritants and allergy triggers are outlined below:

- Patients should make every effort to stop smoking or avoid those who do smoke. When air pollution levels are high, stay indoors as much as possible. Air conditioning filters should be changed monthly. The use of HEPA (high efficiency particle arresting) filters is recommended at home and in the workplace. They are available at stores that sell appliances and air conditioners as well as on the Internet.

- Avoid sources of dust such as stuffed animals, feather pillows, and down comforters. Keep closet doors closed. Vacuum mattresses and box springs, and then cover them (and pillows) with dust mite proof covers. Avoid fuzzy-surfaced wool and cotton blankets, chenille bedspreads, and down comforters. Carpet should be vacuumed frequently and professionally cleaned at least annually. Washable window shades are preferable to drapes and Venetian blinds. Try to maintain a relative humidity in the home of about 45 percent.
- Dusting should be done frequently, with the use of a pollen mask if needed. Use a damp cloth to clean the room from top to bottom, with attention to walls, molding, shelves, pictures, closets, and furniture. Wet mopping is preferable to sweeping. Water-filter vacuum cleaners are recommended to capture dust, and vacuums with HEPA filters are the most efficient.
- To treat house dust mites in the carpet, consider using ACAROSAN, which is brushed into carpets and vacuumed after several hours. This is available without prescription at pharmacies, hospital supply outlets, and allergy supply stores.
- Pollen levels are increased by wind, heat, and dryness. Since levels are highest in the early morning, plan activities to diminish exposure. Pollen masks may be used to decrease exposure.
- Molds thrive in moist environments where air circulation is poor. Avoid leaving damp clothes in closets and avoid exposure to basements. Check windows, air conditioners, vaporizers, humidifiers, bathroom walls/floors, and tiles for mold. Clean with dilute bleach (one pint diluted in one gallon of water) and remove obviously moldy objects such as old shoes, books, plants, and wet carpet. Houseplants should be moved outside if possible. Avoid compost piles, leaf piles, and grass clippings. Use mite proof covers on mattresses, box springs, and pillows.
- Pets often worsen allergic symptoms. Try to keep them outside (or at least out of the bedroom). Cat dander can persist for several months even after cats are removed from the house.
- Chemicals may cause problems for some people that are sensitive to them. Avoidance is the key in this situation. Sources of indoor pollution include gas appliances, newsprint, insecticides, plastics, nail polish removers, cements/adhesives, and dyes from clothing/furniture.

Following these environmental guidelines should help in the prevention and treatment of chronic nasal, sinus and allergic disorders.



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## **NASAL IRRIGATION**

### **What Is Nasal Irrigation?**

While it sounds like an intimidating or uncomfortable process, nasal irrigation is really as simple as running a gentle saline solution through your nasal passages and sinuses. While it takes a little getting used to, most people find that in a short time they are comfortable with the twice-daily nasal irrigation regimen. Often compared to cleaning your body's "ducts" or "filters", nasal irrigation cleans the passages of your nose where particles get trapped, helping to wash them away. In addition, nasal rinsing will help stimulate cilia movement and healthy secretions, keeping the mucosa moist and trapping unwanted particles like bacteria, dirt, and allergens.

### **When Should Nasal Irrigation NOT Be Used?**

Sinus irrigation is not recommended if you are fighting an ear infection. Neither should you rinse your nasal passages if either nostril is completely plugged or hard to breathe through. If this is the case, you could create pressure and retention of the solution inside the nasal or sinus cavities, causing adverse symptoms in the ears. Consult your physician if you have questions or concerns about whether or not you should irrigate.

For more information visit website <http://www.natlallergy.com>.

# NASAL IRRIGATION INSTRUCTIONS

Premixed solution packets are available for purchase at your local drug store; however, some people prefer to mix their own solution when using a Neti pot. Below are instructions for mixing homemade solution.

## Things You'll Need

Pickling or canning salt

Baking soda

Distilled or boiled water

Neti pot (available at most local pharmacies)

1 Mix three teaspoons of salt with one heaping teaspoon of baking soda. Store this in an airtight container for mixing up individual treatments as needed. The type of salt used is important because salt with iodine or preservatives may irritate the nasal lining.

2 Add one teaspoon of the above solution to 8oz of lukewarm distilled (or boiled) water. Once you have added the solution, stir or mix it until it has dissolved. Do not shake the fluid as it may produce bubbles that irritate the nasal passages when used during irrigation.

3 Administer the solution by leaning over the sink (about 45 degrees) so you are looking directly into the basin. Gently insert the spout of the Neti pot into the nostril so that it forms a comfortable seal. (Do not press the spout against the nasal septum). Breathing through your mouth, raise the cup until the solution enters the nostril and runs out of the other nostril. Repeat this procedure with the opposite nostril. When finished, gently blow your nose and repeat the process until sinuses are clear.

4 Discard any unused solution as bacteria can breed in closed containers of lukewarm water. Mix up another dose when ready to repeat the process or whenever sinuses feel congested.