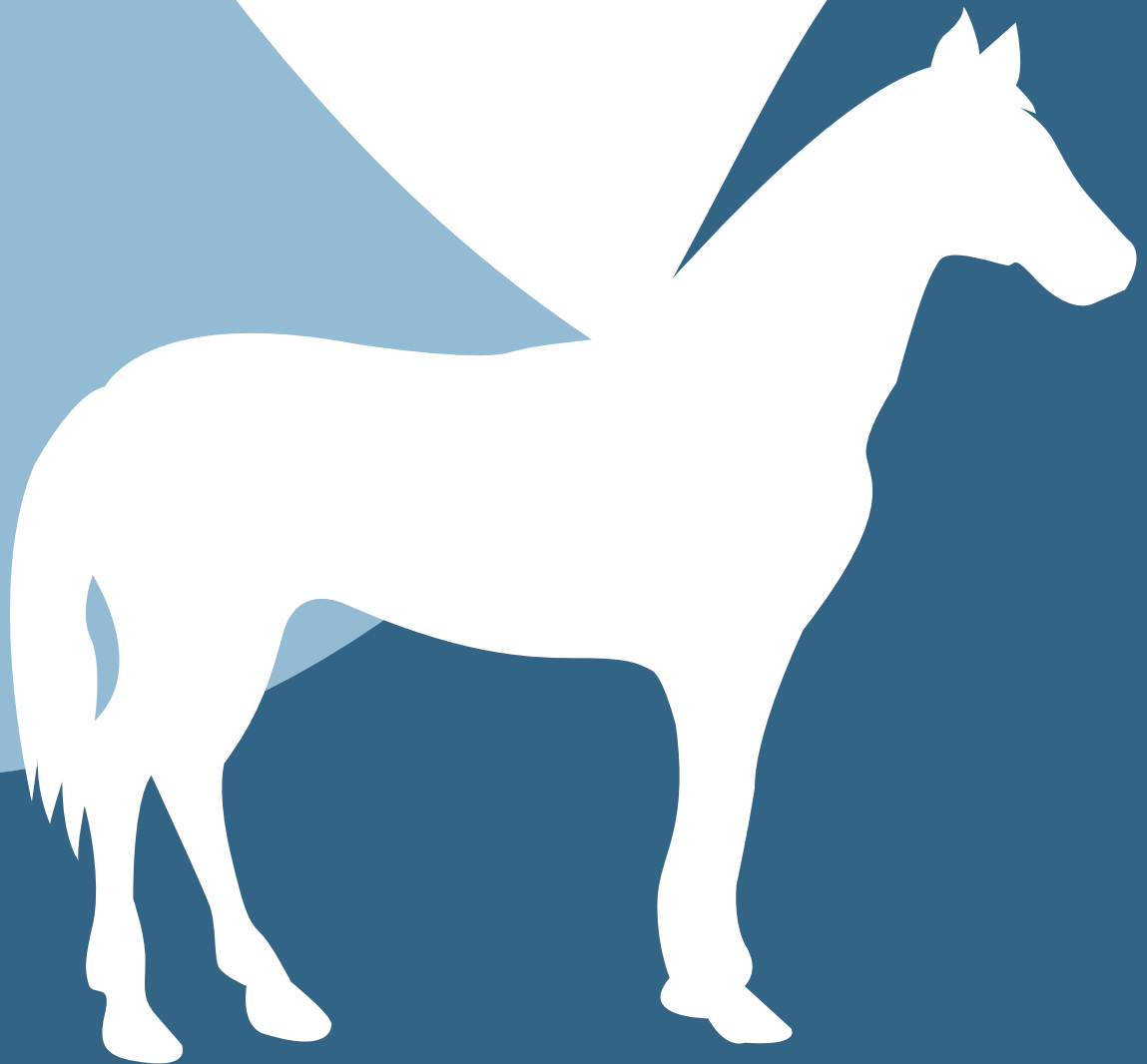




ALLERGY TESTING RESULTS BOOKLET FROM:  
**spectrum vet**  
a nextmune company

# **One of a Kind Jones**

## **201820172**



# ALLERGY REPORT



**Lab Number** 20180172  
**OrderDate** 5/27/2018  
**Patient** One of a Kind Jones  
**Sex** M **Age** 7 Yrs  
**Owner** Jones  
**Breed** Paint

Dr. Doctor  
 ABC Veterinary Clinic  
 123 N Main St  
 Anywhere, USA 12345  
 (303) 555-1212

☐ N - Negative (0-99)  
☒ P - Positive (100+)

**TOTAL REACTING ALLERGENS 20**  
 (Excluding Foods, Staph & Indoor)

**Region: CA California**

Grasses				Fungi				Foods			
Bluegrass/June Grass	88		N	Smut Mix*	92		N	Molasses	80		N
Orchard	84		N	Curvularia	84		N	Milo	72		N
Fescue	124		P	Cladosporium	88		N	Oats	54		N
Bermuda	85		N	Helminthosporium	122		P	Pasture (mix)*	85		N
Redtop	113		P	Stemphylium	139		P	Soybean	74		N
Brome	89		N	Candida Albicans	82		N	Wheat	110		P
Ryegrass	127		P	Monilia	82		N	Rice Bran	87		N
Johnson Grass	137		P	Cephalosporium	0		N	Beet Pulp	97		N
Weeds				Mucor Mix				Indoor			
Ragweed	138		P	Trichoderma	118		P	Pine Shavings	89		N
Pigweed/Careless Weed	64		N	Rhizopus	92		N	Redwood Shavings	91		N
Lamb's Quarters	179		P	Chaetomium	98		N	Cedar Shavings	133		P
Cocklebur	77		N	Phoma	108		P	Sisal	88		N
Marsh Elder	125		P	Rhodotorula	92		N	Wool	85		N
English Plantain	71		N	Botrytis	93		N	Cotton	88		N
Dock/Sheep Sorrel	148		P	Epicoicum	88		N	Insects			
Sage	75		N	Fusarium	0		N	Cockroach	79		N
Saltbush/Scale mix	74		N	Pullularia	88		N	Culicoides	111		P
Russian Thistle	70		N	Aspergillus	82		N	Mosquito	78		N
Kochia/Firebush	71		N	Nigrospora	84		N	Stable Fly	128		P
Trees				Alternaria	86		N	Deer Fly	149		P
Cottonwood/Aspen	70		N	Penicillium	126		P	Horse Fly	84		N
Alder	157		P	Saccharomyces	78		N	Fire Ant	81		N
Ash	69		N	Cephalothecium	84		N	Grains			
Juniper/Cedar	69		N	Epidermals				Corn Pollen	71		N
Box Elder/Maple	141		P	Mouse Epidermal	91		N	Oat Pollen	78		N
Oak	70		N	Leather	91		N	Wheat Pollen	90		N
Eucalyptus Tree	76		N	House Dust				Barley Pollen	109		P
Mulberry	73		N	Barn Dust	92		N	Foods			
Walnut	72		N	Foods				Alfalfa	75		N
Arizona Cypress	71		N	Barley	86		N	Corn	114		P
Sycamore	122		P	Corn	114		P	Cottonseed	78		N
Olive	74		N	Cottonseed	78		N				

(\*) Pasture (mix)=Bermuda, Rye, Timothy Smut Mix=Bermuda Grass Smut, Johnson Grass Smut

**Please note:** Allergens reflecting ARUs (allergen reacting units) of 100 or higher may be considered significant provided they correspond with clinical signs; however, the magnitude of signal (units reported) does NOT necessarily correlate with the severity of disease. Limiting exposure to these allergens, where possible, is highly recommended.

# WHY ALLERGY TREATMENT?

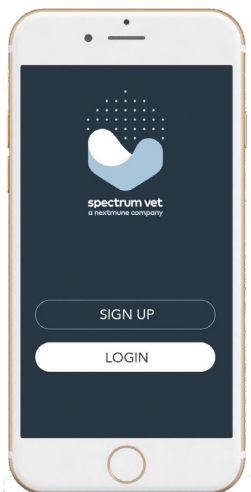
Allergy testing without proceeding to allergy therapy does little to improve your horse's quality of life. Allergy therapy is the **ONLY** way to increase their tolerance and address the root cause of their symptoms without harsh side effects. This is accomplished by introducing their immune system to small, controlled doses of the allergens to which they've reacted.

Treatment is available in allergy drops (lasting 100 days) or allergy injections (lasting 283 days). Regardless of which method you choose, treatment sets are formulated specifically for your horse based on their allergy test results.

With compliance from both the horse owner and the veterinarian,

Spectrum Veterinary has seen improvement rates as high as 90%\* – this means less reactions!

**Discuss the details of your horse's treatment with your veterinarian today!**



**Never miss a dose with our treatment app!**

Manage your horse's treatment schedule and receive reminders when their treatment is due

**spectrum vet**  
a neoschwanze company

Dr. Doctor  
ABC Veterinary Clinic  
123 N Main St  
Anywhere, USA 12345  
(303) 555-1212

Lab Number 20180172  
Order Date 5/27/2018  
Patient One of a Kind Jones  
Sex M  
Owner Age 7 Yrs  
Breed Jones Paint

☐ N - Negative  
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**TOTAL REACTING ALLERGENS 20**  
(Excluding Fescue, Staph & Indoor)

<input type="checkbox"/> Fescue	<input type="checkbox"/> Redtop	<input type="checkbox"/> Ryegrass	<input type="checkbox"/> Johnson Grass	<input type="checkbox"/> Ragweed
<input type="checkbox"/> Lamb's Quarters	<input type="checkbox"/> Marsh Elder	<input type="checkbox"/> Dock/Sheep Sorrel	<input type="checkbox"/> Alder	<input type="checkbox"/> Box Elder/Maple
<input type="checkbox"/> Sycamore	<input type="checkbox"/> Helianthus/Spurnum	<input type="checkbox"/> Stemphylium	<input type="checkbox"/> Trichoderma	<input type="checkbox"/> Phoma
<input type="checkbox"/> Penicillium	<input type="checkbox"/> Gulicoides	<input type="checkbox"/> Stable Fly	<input type="checkbox"/> Deer Fly	<input type="checkbox"/> Barley Pollen

**WE NOW HAVE**

Is all clinic and  
Please H

☐ SUB  
TREAT ALL REACTIONS  
TREAT ALL REACTIONS  
TREAT ALL REACTIONS  
TREAT ALL REACTIONS

☐ Single (up to 20 antigens; 1 set)  
☐ Double (over 20 antigens; 2 sets)

☐ Special Requests for treatment (check box of the allergens you **do not want** to include)

Signature of Ordering Veterinarian  
Fax Completed form to (480)898-0611  
Date  
Questions? Call us at 1-800-553-1391



\*According to a veterinary survey

## Dietary Results

*Your horse tested positive for the following allergens:*

Corn	Wheat
------	-------

# FIRST,

Before adjusting your horse's diet, review these results and develop an updated dietary plan ***alongside your veterinarian***

# AND

take into account your horse's...

**AGE**



**STAGE OF  
DEVELOPMENT**



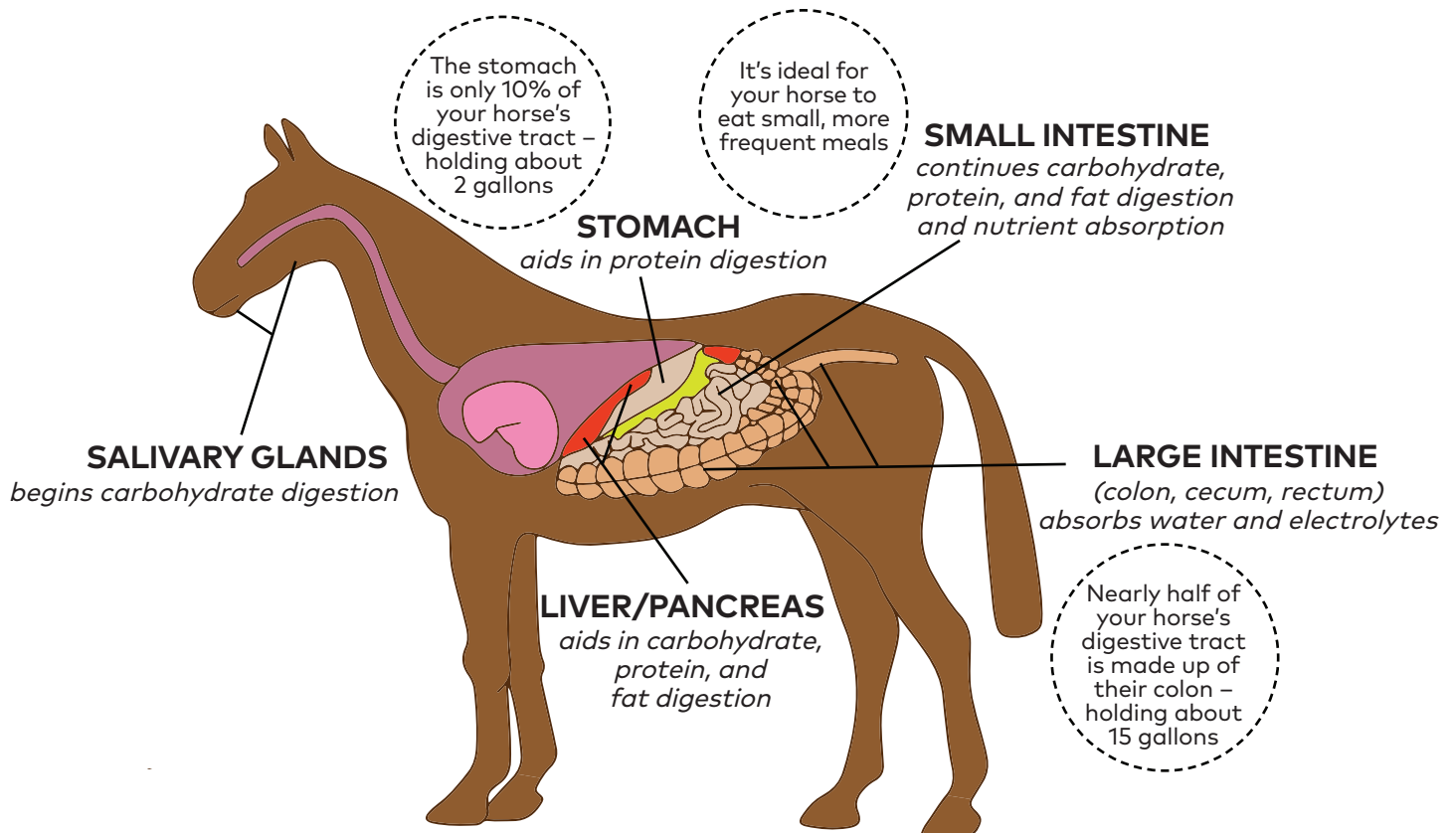
**WORKLOAD**



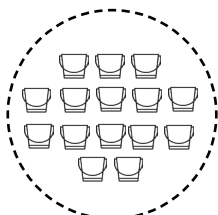
**METABOLISM**



# YOUR HORSE'S DIGESTION AND NUTRITION

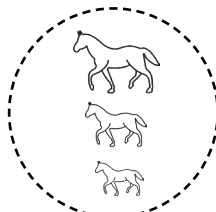


## 6 CLASSES OF NUTRIENTS



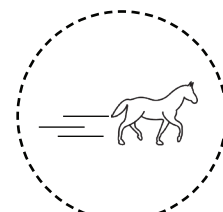
### WATER

70-75% of their body is made of water – generally drink 5-15 gallons daily



### PROTEIN

makes up their muscle, connective tissue, enzymes, hormones, and other substances



### CARBOHYDRATES

energy source for your horse



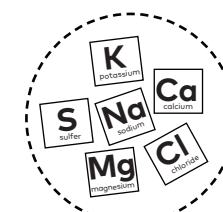
### FATS

essential to cell membrane health – alternative to simple carbohydrates as an energy source



### VITAMINS

used for metabolic functions and protects against disease



### MINERALS

inorganic elements necessary for their bodily functions

# TAKING CONTROL

## OF YOUR HORSE'S ALLERGIES

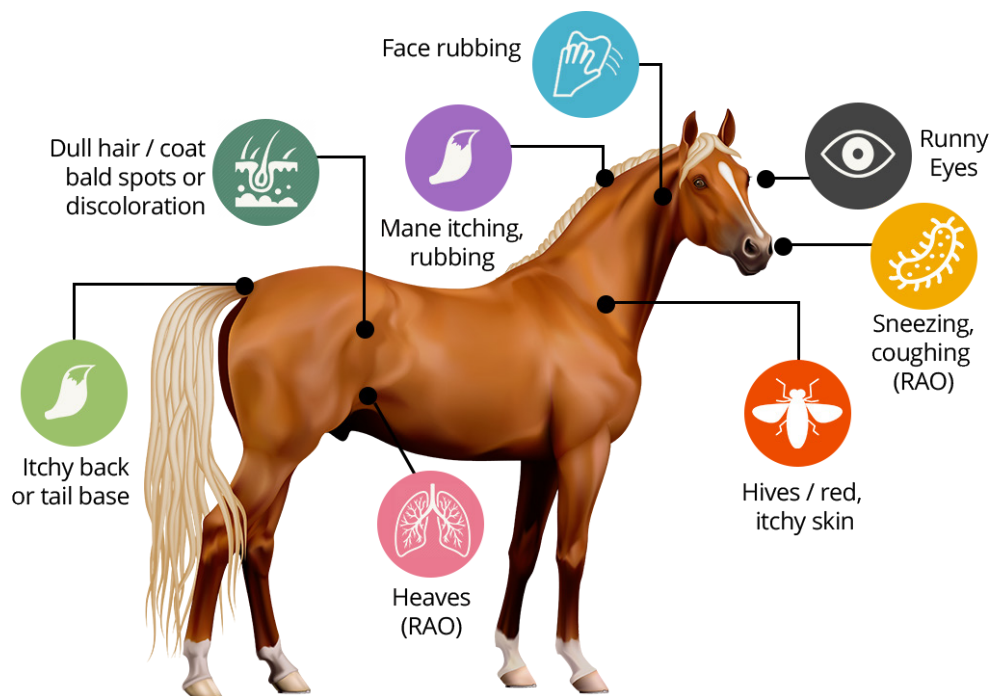
Allergy symptoms can initially be managed with a combination of antihistamines, diet changes, fatty acids, shampoos, and even relief medications. Positive effects can be seen with these therapies; however, the benefits are usually limited and temporary. To date, ***hyposensitization is the safest, most effective treatment for long-term allergy management.***

Spectrum Veterinary is committed to empowering horse owners with real allergy solutions. By consistently utilizing this 3-step approach, we've found lasting relief possible for your horse.\*

- 1** Consistently treating all possible reactions
- 2** Modifying the diet based on your horse's results
- 3** Maintaining treatment long-term; even after symptoms subside

\*According to a veterinary survey

### COMMON ALLERGY SYMPTOMS



# HYPOSENSITIZATION

## FOR ALLERGY MANAGEMENT






### ALLERGY INJECTIONS

- Every other day initially & eventually once per month
- Treat up to 20 allergens per set
- Initial set lasts 283 days (most economical option)
- Observe horse for 45 minutes after each dose

### ALLERGY DROPS

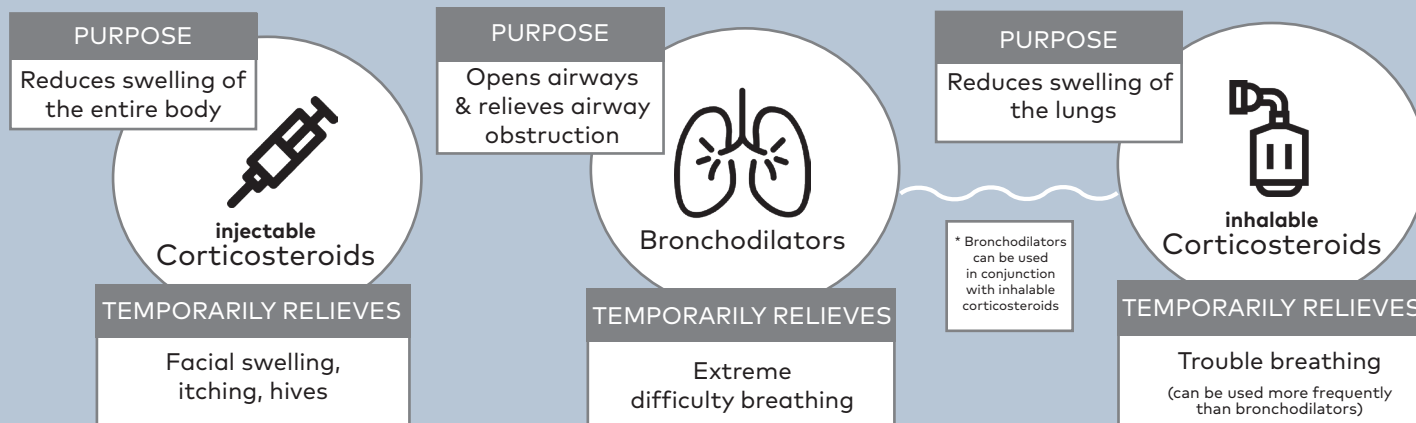
- Once a day oral administration (3 pumps - no food/drink 10 minutes before/after)
- Treat up to 20 allergens per set
- Initial set lasts 100 days
- Observe horse for 45 minutes after each dose

### TREATMENT COMPARISON

	<i>Efficacy</i> 	<i>Side Effects</i> 	<i>Cost</i> 	<i>Benefits</i> 	<i>Downsides</i> 
<b>Clenbuterol</b>	Up to 75% of cases experienced clinical improvement <sup>1</sup>	May cause mild sweating, muscle tension, urination, & tachycardia	About \$10 /day <sup>2</sup>	Oral treatment, easy to administer, longer lasting than aerosoled medications	Not effective for all horses, check withdrawal times before competition, potentially extensive treatment schedule
<b>Spectrum Veterinary Testing &amp; Treatment</b>	Very effective in about 85-90% of cases <sup>3</sup>	Low instance in increased allergy symptoms (depending on season)	About \$1/day (injection), about \$2/day (oral)	Efficacy, addresses root cause of allergy symptoms, safe for long term use	Can take 4-6 months before benefits of therapy are seen

1. [ncbi.nlm.nih.gov/pubmed/8575403](http://ncbi.nlm.nih.gov/pubmed/8575403) 2. Based on 1,000 lb horse at 5mls, 2 times daily for the recommended 30 days. (sources: product label & vet depot website) 3. Internal veterinary survey

### OTHER SHORT-TERM OPTIONS



# COMMON MOLD & BARN ALLERGENS

*\*Most abundant molds worldwide*

## **CLADOSPORIUM**

Grows on plants, leather, rubber, cloth, paper, & wood

## **ASPERGILLUS**

Found in soil, damp hay, grain, & fruit

## **PENICILLIUM**

Grows in soil, decaying vegetation, breads, fruit, & cheese

*\*Not to be confused with an allergy to the medication Penicillin*

## **ALTERNARIA**

Grows on textiles, soil, seeds, plants, & horizontal surfaces in water damaged buildings

## **CHAETOMIUM**

Found on deteriorating wood products, soil, air, plant debris, dung, straw, paper, feathers, & seeds. Grows rapidly & begins white in color, turns grey, then olive; musty odor

## **CEPHALOTHECIUM**

Found on rotting wood & plants; common soil fungi where standing water/excessive moisture exists

## **EPICOCCUM**

Colonizes on decaying plants, soil, paper, & textiles; thrives in warm environments, especially grasslands

## **BOTRYTIS**

Found virtually everywhere plants grow – especially on damp, decaying vegetation; woolly grey in appearance. Releases spores when it rains or during watering; Usually peaks between June & October

## **SMUTS**

Found on corn, grasses, weeds, flowering plants, & other fungi; wind disseminated

## **MONILIA**

A soil-borne organism that produces soft rot on tree fruits or a red bread mold

## **CURVULARIA**

May cause leaf spots & seedling blight; seen on castor beans, cotton, rice, barley, wheat, & corn

## **CANDIDA ALBICANS**

Found in soil, organic debris, & in humans as an organism in the nasal cavity & feces

## **PHOMA**

Grows in damp/humid areas on paper products, soil, & dead plants

## **PULLULARIA**

(Aureobasidium pullulans) Isolated from grasses, seeds, honey comb, nests, leather, cotton fabrics, & concrete surfaces

## **RHIZOPUS**

Found in pine needles, leaves, bird nests/droppings, decomposing foods bread, fruit, & vegetables

## **NIGROSPORA**

Most commonly found as a plant parasite in grains & grasses

## **STEMPHYLIUM**

Isolated from dead plants, & cellulose material

## **HELMINTHOSPORIUM**

Parasite found on cereals, grasses, sugar cane, soil, & textiles

## **RHODOTORULA**

Found in moist environments such as cooling coils & drain pans; reddish yeast

## **SACCHAROMYCES**

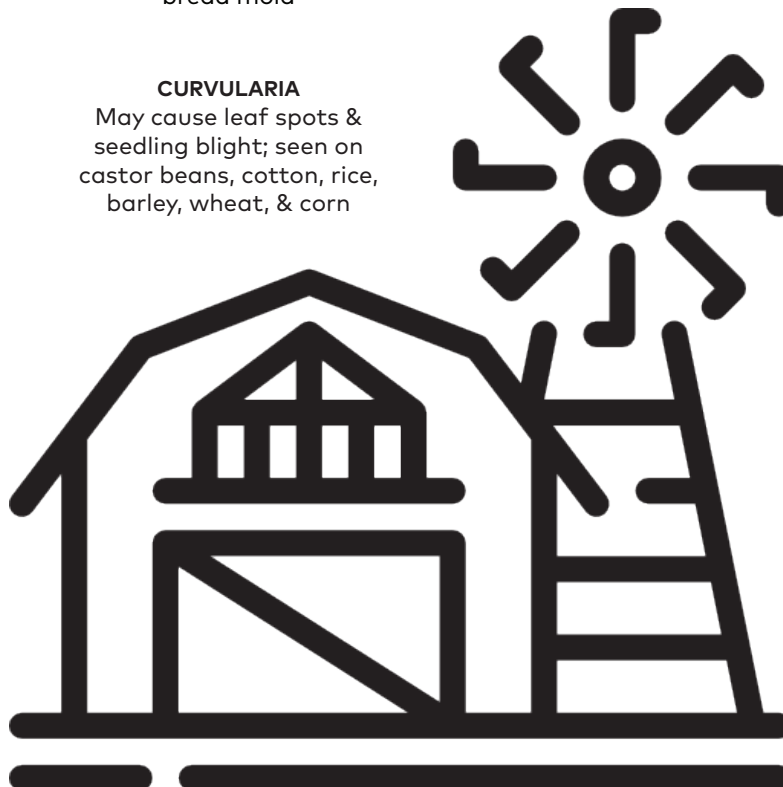
Known as brewer's or baker's yeast. Colonies are flat, smooth, moist, cream to tannish in color & may be glistening or dull

## **TRICHODERMA**

Occurs in a wide range of forests, grasslands, & cultivated soils. Found on fallen timber & in moist dwellings

## **MUCOR**

Found in leaf litter, organic debris, & animal waste





# RECURRENT AIRWAY OBSTRUCTION (RAO) IN HORSES

Recurrent airway obstruction (RAO), also known as heaves, broken wind, and chronic airway reactivity, is a common respiratory disease. Unlike inflammatory airway disease, horses with RAO don't breathe normally at rest and usually suffer from a persistent cough. Airway obstruction episodes occur when a susceptible horse is exposed to common allergens.

RAO symptoms include chronic cough, nasal discharge, and trouble breathing. The classic "heave line" that can appear along the bottom edge of the ribs (figure 2) occurs when the abdominal muscles become large from excess work. Severely affected horses may also exhibit weight loss, anorexia, and exercise intolerance.

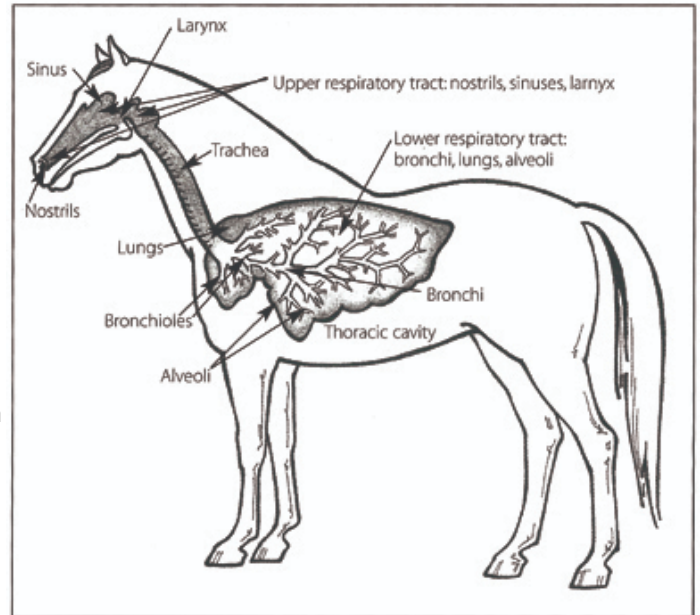


Figure 1 (equine respiratory system)



Figure 2 (heave line)

There are two forms of RAO: The barn-associated type, often occurring in stalled horses fed hay and summer pasture-associated, seen more commonly in horses living on pasture in the Southeast.

Most evidence suggests RAO is the result of the lung's hypersensitivity to inhaled antigens. The most common allergic triggers are mold, organic dust, and endotoxin in hay and straw.

Although relief medications will alleviate clinical RAO symptoms, the respiratory disease will return if the horse remains in the same environment once the medications are discontinued. Since bronchodilators have minimal to no anti-inflammatory activity, they should not generally be the sole treatment for RAO.

RAO is a chronic disease, requiring life-long management. Hyposensitization, alongside environmental and dietary management may help reduce the clinical symptoms of RAO.

Sources: Recurrent Airway Obstruction (RAO) in the Horse; Amanda House, DVM. AAEP. <https://aaep.org/horsehealth/recurrent-airway-obstruction-rao-horse>  
Recurrent Airway Obstruction in Horses; Bonnie R. Rush, DVM, MS, DACVIM, Kansas State University. <https://www.merckvetmanual.com/respiratory-system/respiratory-diseases-of-horses/recurrent-airway-obstruction-in-horses>

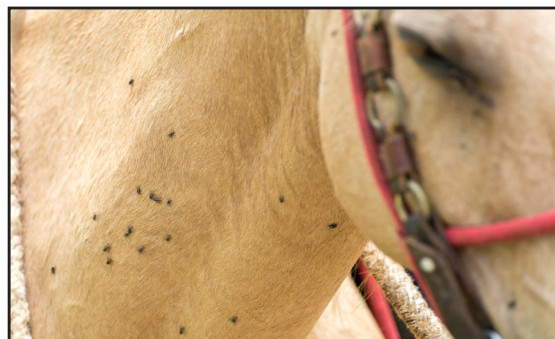
Figure 1: Airway Diseases In Horses; Susan Stafford-Pooley. [https://horse-canada.com/magazine\\_articles/airway-diseases-in-horses/](https://horse-canada.com/magazine_articles/airway-diseases-in-horses/)

# INSECT BITE HYPERSENSITIVITY

## IN HORSES

Insect bite hypersensitivity (bug bite allergy or IBH) is a common summer problem. Susceptible horses are actually allergic to the insect's saliva. Horses can have allergic reactions to any biting insect, but the most common are Culicoides (also known as gnats, midges, sand flies, and punkies), black flies, stable flies, horse flies, and mosquitoes.

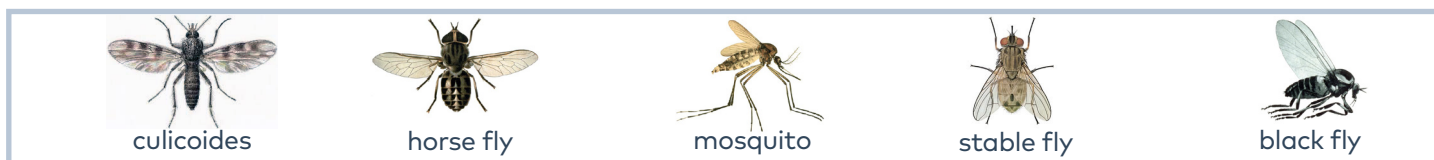
Symptoms may include hives, itchiness, hair loss, and dermatitis. Diagnosis of IBH can be determined by the time of year the symptoms occur, along with positive allergy test results.



Treatment must first involve avoidance and repelling insects. Routine barn maintenance, such as removing manure and standing water, disrupts insect breeding and decreases their numbers. For more natural options, consider fly masks, sheets, or wraps. Insect control using insecticides containing at least 0.2% pyrethrin or permethrin is recommended. Always check with your veterinarian first and read the product label carefully before buying and using any pesticides.

Omega-3 fatty acids can also reduce inflammatory reactions. They decrease skin inflammation and promote a healthy coat without the possible side effects of corticosteroids.

Hyposensitization can be used to decrease the symptoms associated with these allergies, by acclimating the horse's immune system via small, controlled doses of the allergens they've reacted to.



# FOOD SENSITIVITIES

## IN HORSES

Horses that test positive to multiple foods could be dealing with a condition called Leaky Gut Syndrome. Leaky Gut Syndrome is a breakdown of the protective intestinal tract lining, coupled with an imbalance in the horse's natural intestinal flora. This imbalance interferes with the horse's ability to completely digest their food. The breakdown of the intestinal lining allows the larger proteins from improperly digested food to be absorbed in the bloodstream. These larger proteins are interpreted as foreign invaders and trigger an immune response, resulting in a food sensitivity or true food allergy.

If your horse's allergy test results indicate they are sensitive to certain foods, reduce the sensitivity by removing these foods from your horse's diet.

Sources: Insect bite hypersensitivity; Bryan Waldrige, DVM. June 2013. <https://ker.com/equinews/insect-bite-hypersensitivity/>  
Food allergies & sensitivities in horses; Madalyn Ward, DVM. <http://www.holistichorsekeeping.com/articles/food-allergies-and-sensitivities-in-horses.html>

# ALLERGY MANAGEMENT CHECKLIST

## TIPS AND MEDICATIONS

While it is unrealistic to complete **all** the management tips listed below – the more you do, the better chance you have of providing your horse relief.

### RAO

*Barn-associated RAO is most common in winter and spring, pasture-associated RAO in summer and early fall. RAO typically affects horses 9-12 years of age and isn't more common in one gender. The highest prevalence occurs in stabled horses fed hay in the Northeast and Midwest. There also appears to be a heritable component.*

Date	Maintenance Tips	Date	Medications
	Wet or steam hay prior to feeding (mild cases)		Systemic corticosteroids
	Maintain horses on pasture (barn-associated)		Aerosolized bronchodilators (immediately helpful during respiratory distress)
	Clean, well ventilated stalls (pasture-associated)		Dexamethazone (severe cases)
	Avoid storing hay above stalls in barn loft		Prednisolone (moderate cases)
	Minimize sweeping floors when affected horses are stalled		Albuterol (benefits within 5 minutes of administering)
	Avoid straw bedding (consider chopped paper or cardboard)		Clenbuterol (for longer acting effects)
	Transition to pelleted feed (severe cases – consult your veterinarian before abruptly changing feed)		
	Avoid round bale hay		

# ALLERGY MANAGEMENT CHECKLIST

## TIPS AND MEDICATIONS

While it is unrealistic to complete **all** the management tips listed below – the more you do, the better chance you have of providing your horse relief.

### GI ISSUES

*Environmental and dietary factors, antibiotics, NSAIDs, and steroids, have been thought to change gut bacterial populations and can cause sensitization to common food antigens. Leaky Gut Syndrome forms when severe inflammation occurs in the horse's GI tract. For more information, see page 9. There are several steps below you can take to promote digestive wellness for your horse.*

Date	Maintenance Tips	Date	Dietary Conditioning Supplements
	Remove offending foods from their diet, allowing intestines to heal		Probiotics (supplements with active ingredients like microbes & digestive enzymes)
	Feed small meals throughout the day, instead of a couple large ones		Prebiotics (supplements with active ingredients like microbes & digestive enzymes)
	Provide free access to hay		L-Threonine (lubricates and protects the gut's lining)
	Offer regular turnout		Polar Lipids, Beta Glucan (aids in nutrient absorption and provides a variety of benefits in the gut)
			L-Glutamine (helps maintain tight junctions in the gut lining, preventing pathogen leakage and systemic interaction)

Sources: Digestive Health Risks; Succeed-Equine.com.  
<http://www.succeed-equine.com/education/gi-health-care/health-risks/leaky-gut-syndrome/>;  
 HolisticHorse.com. <https://holistichorse.com/health-care/leaky-gut-syndrome/>;  
 Leaky Gut Syndrome; Holistic Horsekeeping with Dr. Madalyn Ward. <http://www.holistichorsekeeping.com/articles/leaky-gut-syndrome.html>

# ALLERGY MANAGEMENT CHECKLIST

## TIPS AND MEDICATIONS

While it is unrealistic to complete **all** the management tips listed below – the more you do, the better chance you have of providing your horse relief.

### SKIN ISSUES

*Skin diseases in horses are prevalent throughout the year, though some types may be seasonal. These issues can be caused by various infectious agents—bacteria, viruses, fungi, parasites, or environmental irritants. Promptly treating the disease is critical, not only to alleviate your horse's discomfort, (such as itchiness and soreness), but also to improve their overall health.*

Date	Maintenance Tips	Date	Medications
	Remove manure		Pramoxine HCl sprays/lotions
	Eliminate standing water		Fly sprays
	Minimize dust in barn		Fly deterrent supplement
	Improve ventilation		Antioxidants
	Bed on low dust chopped paper/ cardboard		MSM
	Bathe with oatmeal shampoo, fatty acid shampoo, or HC formulation		Omega-3 fatty acids
	Place fans in stalls	Sources: A closeup look at equine skin diseases; Ed Kane, PhD. DVM360. <a href="http://veterinarynews.dvm360.com/closeup-look-equine-skin-diseases">http://veterinarynews.dvm360.com/closeup-look-equine-skin-diseases</a>	
	Fly mask/sheet		

# TREATMENT REMINDERS

NEVER MISS A DOSE!

*Maintaining your horse's treatment schedule is  
the key to maximizing their relief*

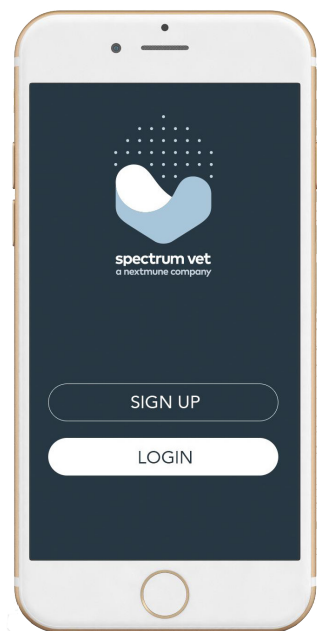
Spectrum Veterinary has developed an  
app with allergic horses and their  
owners in mind



Get notified when a  
dose is due or it's time  
to reorder a set



Export reminders  
to your phone's  
calendar



## Set-up is simple



**BUILD  
YOUR HORSE'S  
PROFILE**

.....



**CREATE YOUR  
ACCOUNT**  
manually or using  
credentials from  
Facebook or Gmail

.....



**CUSTOMIZE  
NOTIFICATIONS &  
CALENDAR SETTINGS**

.....



**MAINTAIN  
THEIR SCHEDULE**  
straight from your phone

# 4 STEPS TO LASTING RELIEF

## 1. STARTING POINT

Understand where your horse is now so you can assess their progress later.

1. Where's your pet on the itch scale?

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

1-3 Mild 4-6 Moderate 7-10 Severe

2. Why did you test initially?

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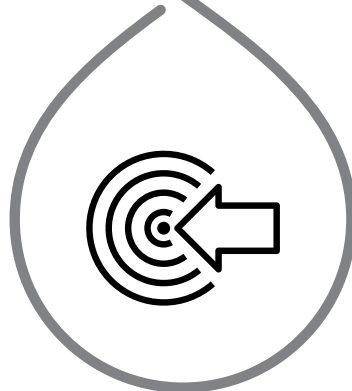
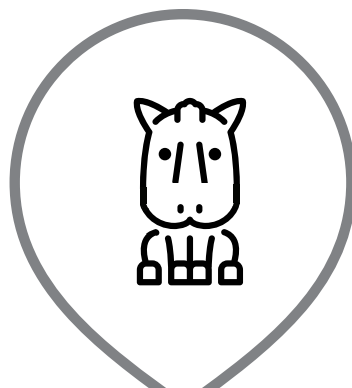
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3. What are your ideal goals/outcomes?

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---



## 2. ORDER TREATMENT

Which option is best for you – injections or drops?

---

**How long will they last?**

Injections last 283 days and the oral drops last 100 days. Injections start out every other day and work up to once per month, whereas drops are once daily. They both can treat up to 20 allergens in a single set.

## 3. EXPECTATIONS

**What is a "success"?**

We consider a success the effective elimination (or significant reduction) of steroid or relief medications.

**When should I see improvement?**

Allergy treatment is a long-term process, but it is the only way to address the real reason a horse suffers. It can take up to 4-6 months before you see the therapy's benefits. Every horse responds differently.

## 4. WHY MAINTENANCE?

Allergy treatment is a solution that is usually required indefinitely, since allergies are a lifelong problem. After symptoms subside it is important to maintain the tolerance you've established. If you stop treatment, tolerance will fade, symptoms can re-emerge, and you'll have to start over.





# COULD YOUR HORSE BE OUR NEXT SUCCESS STORY?



Submit your horse's allergy journey at  
[bit.ly/real-allergy-relief](https://bit.ly/real-allergy-relief)  
&  
on social media with the hashtag  
**#RealAllergyRelief**

Our 8-year-old Purebred Arabian horse, Jitters, brokeout in large hives all over his body. He's had breakouts in the past that went away after a low dose injection of Dexamethasone. However, this time turned out to be different. We did treat him, as before, however, after a few days the hives were back again.

Over the next few weeks we tried several types of bedding, food changes, and 2 different types of antihistamines but, nothing was helping.

Veterinarians at VCA Ocean Beach Animal Hospital suggested Spectrum Veterinary allergy testing and hyposensitization treatment. We received the results back in just a few days and started the injections shortly thereafter and in 18 days the hives stopped!

He hasn't had another breakout and  
it has been 7 months. ...

***The results are too good to stop!***

-Claudia M., Kelso WA

## Follow us!



@SpectrumVeterinary



@VetAllergy