



WHY AND WHEN TO TEST FOR EQUINE ALLERGIES

In the first of the three blogs on equine summer allergies, we looked at how to recognise the common symptoms of allergy and how it is diagnosed by ruling out other common conditions with similar signs. If you missed that blog or want a quick recap the first blog can be found here avactaanimalhealth.com/2020/06/11/recognising-equine-summer-allergies/. In this second instalment we move on to discuss what can be done to investigate the route of the problem once the diagnosis has been made.

WHY TEST FOR ALLERGIES?

As the expression goes, knowledge is power. Knowing what your horse is allergic to is the first step towards helping, so that you are able to look after your horse in a way that is specific to their individual needs. It allows you to implement tailored strategies to help reduce contact with the problem allergens and access further options for treatment.

The other thing to consider is that equine allergies frequently occur in combination. In some research published by Avacta Animal Health last year, we found that horses being allergy tested are unlikely to be positive to just one allergen. In fact, the average number of positive allergens was between 4 and 5 and of the horses that were positive to midges, only 7% did not have positive results to other allergens in addition.*

WHAT IS ALLERGY TESTING?

Strictly speaking, allergy testing would be better called allergen identification testing because as already mentioned, it does not diagnose allergy; the diagnosis should be made first by ruling out other conditions. The diagram below outlines what is involved in more detail:



Allergen identification testing can be done in one of two ways:

1. By giving a series of injections containing tiny amounts of different allergens into the skin (normally after referral to a veterinary dermatologist)
2. By sending a blood sample to a veterinary laboratory such as Nextmune UK Laboratories.



When a blood sample arrives with us, we then run a selection of tests to identify what may be contributing to your horse's allergies. We are looking for antibodies in your horse's blood against a large range of different allergens. Antibodies are part of the horse's immune response. In allergic animals the antibodies are produced against certain allergens because they wrongly believe the allergen is a threat to them.



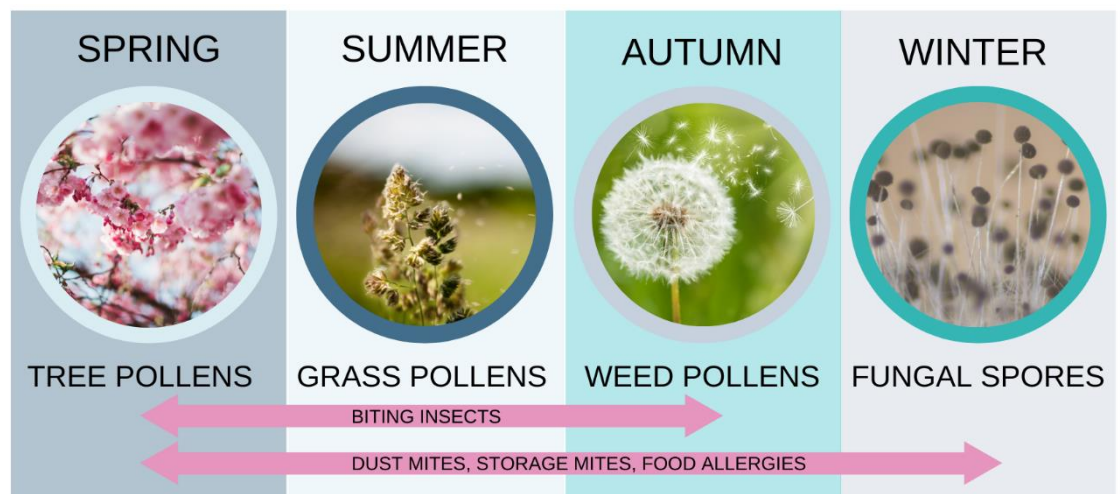
The testing process takes 3-4 days to complete. We then provide a comprehensive report demonstrating which allergens your horse is particularly sensitive to in terms of food (if included), insects and the indoor & outdoor environment. Your vet will then interpret these results alongside your horse's history and discuss the results with you. We'll also provide useful fact sheets to help avoid the problem allergens identified.

WHEN TO TEST

The antibodies being tested for are produced in response to your horse being exposed to a particular allergen, for example a grass pollen. Once the exposure has stopped the number of antibodies found in the blood can

reduce quite quickly. This means that if a blood sample is taken for testing outside of the season in which the allergen is present (for example, testing for a grass pollen in the winter) then antibodies will not be present or detectable. For this reason, the timing of the blood sampling for testing is crucial, and it is important to test when the horse's symptoms are at their worst. This graphic below shows which allergens are prevalent in which season. For more information on specific allergens and their flowering seasons, please take a look at our [website](#).

Your horse's management and lifestyle can also significantly affect their exposure to allergens so this must also be factored in. Many horses are stabled for part of the year which will significantly change to which allergens they are exposed.



INDOOR ENVIRONMENTAL ALLERGENS

- DUST MITES
- STORAGE MITES
- MOULDS
- FOOD



The different types of indoor and outdoor environmental allergens which horses are exposed to

OUTDOOR ENVIRONMENTAL ALLERGENS

- GRASS POLLENS
- TREE POLLENS
- WEED POLLENS
- BITING INSECTS



Certain medications can also affect antibody levels, and therefore affect test results, so your vet may ask you to stop giving them for a certain period of time before taking a blood sample for testing.

Part 3 of this series of blogs will discuss the various options available to help with the management of horses with allergies, and include a number of practical hints and tips.

*Forsyth, J., Halliwell, R.E. & Harrand, R. (2019). Co-reactivity between related and unrelated environmental allergens in equine allergen-specific IgE serology testing in the UK. Vet. Dermatol.; DOI: 10.1111/vde.12786

To stay up to date with the latest news and guidance on Equine Allergy visit our [website](#) or follow us on social media.