



Summertime Skin Concerns for Horses

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Anyone that owns horses knows full well that summer, with its heat, humidity, hot sun and insects, can be a time of itchy, scratchy, bug bitten misery for our trusty steeds. With the skin being the body's largest and most important organ, skin problems can be many and difficult to both identify and manage for horse owners and veterinarians. Two of the more common skin conditions horses develop in the hot summer months are sunburn and insect allergies. As horse owners, we can minimize these two uncomfortable skin conditions for our horses if we are armed with a little bit of knowledge.

Sunburn is most often seen in horses with pink skin (lacking pigment) which is found underneath most white hair on horses. This includes white markings on the face and legs, and any white areas on Paint or pinto horses. Dark skin provides more protection from the sun's ultraviolet rays so, under normal conditions, horses with minimal white are not usually susceptible to a simple case of sunburn. With that said, it is important to know that sunburn in horses is not only linked to the horse's skin color. Sun sensitivity (photosensitivity) is also known to be enhanced by certain plants such as alsike clover, ragwort, buckwheat, perennial rye and St. John's wart. These plants contain photodynamic agents which make a horse more sensitive to sunburn. As light sensitive compounds in the forage are absorbed from the gut into the bloodstream they travel to the skin where they react with the UV rays from the sun. The resulting damage and death of skins cells causes the skin to develop redness, swelling, cracking and eventually to slough off. Horses that develop liver disease might also suffer from photosensitization as the liver is not longer able to filter out the normal chlorophyll products of



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plants. Furthermore, medications, such as tetracycline, are known to make some horses more photosensitive than normal.

Sunburn manifests as redness, swelling, cracking, blistering, oozing and peeling skin. It is no doubt painful to the horse and is very unsightly. Photosensitivity typically produces more severe lesions including open sores that become crusty scabs than does simply sunburn. Furthermore, if the horse gets sunburned on its withers, over its back, or on its loins, you most likely won't be able to put a saddle on those sunburned areas so your horse will be out of service until the sunburn heals.

If your horse is showing signs of sunburn, the most logical first step is to limit its exposure to the sun, especially during the most intense hours of sunlight. This is easily achieved by stabling your horse during the day. Sunscreen or zinc oxide sun block products made for people offer effective sunburn protection for horses too. In fact, many grooming products and fly sprays contain sunscreen so you may already be protecting your horse from the sun without even realizing it. There are also fly masks and fly sheets on the market that claim to have UV ray barriers to aid in preventing sunburn. Of course, if your horse develops a case of sunburn, in addition to taking the actions listed above, you should also determine if your pasture contains any plants that could be contributing to the problem and take steps to eliminate them.

Hypersensitivity to insect bites is one of the most common allergic conditions in horses. The resulting itchy swellings along the neck, back and underline of a horse is commonly known as "sweet itch". This is an allergic response to the saliva of biting gnats and flies. The most



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troublesome of these biting insects is the gnat or “no-see-um” (*Culicoides* sp.). Other culprits include blackflies, horn flies and mosquitos.

Gnats feed on horses at dawn and dusk. Thus an easy way to reduce your horse’s exposure to gnats keep them stabled during these times. Additionally, using fans in the stalls or loafing area is a great idea as air movement keeps gnats away from the horses since they are not strong fliers. Using permethrin based fly sprays may also make a difference. Here again, fly sheets with a tight weave, especially those with a belly guard, may really make a difference as well. Keeping the stable area free of manure and standing water, the natural breeding grounds for flies and mosquitos, will help too.

Allergy shots are available for horses with serious insect allergies. Intradermal skin testing (IDST) can help determine the insect(s) to which your horse is most allergic. A desensitizing vaccine can then be custom made for your horse. Approximately half to three-quarters of horses respond positively to this process; however, six to 12 months is needed before the full benefits will be realized. Additionally, the maintenance shots are usually given every two weeks.

Trying to prevent skin problems by protecting your horse early in the season (with fly sheets, repellents, sunblock products, turn-out management or allergy shots) is better than having to deal with it after the horse develops a reaction. Once your horse has skin problems many of these preventatives may be very irritating on the damaged skin making the problem difficult to resolve.