

## **Bacteria: Don't Let it Get Under Your Skin**

By LA Pomeroy

Can a bug bite lead to laminitis?

Localized skin swellings or lesions – like hives -- usually represent an acute allergic reaction, triggered by something as innocuous as an insect bite, or exposure to a toxin or contaminant in a plant, feed or bedding, or to chemicals that come into direct contact with the skin.

An acute reaction is a red flag that a horse's first line of defense, its skin, has been compromised, leaving the rest of the body open to infection. In the case of hives, a small circular spot on the skin can – according to researchers at the University of California (UC) Davis Center for Equine Health -- start a chain reaction of more severe allergic reactions including difficulty in breathing, swelling of the eyelids and nostrils, and yes, sometimes, even laminitis.

The skin of the horse is its largest organ. “It represents one of its most important organs for defense against disease, both because of its location as the outer membrane of a complex biological machine, and because the horse's size makes for a larger surface area available for possible attack from infectious microbes or environmental toxins,” said Dr. Gregory L. Ferraro, with the UC Davis Center.

Many common equine skin conditions are actually subsets of one all-inclusive term, *dermatitis*.

*Contact irritant dermatitis* is known by a myriad of terms – “rain rot,” “summer sores,” “scratches,” “grease heel” -- that represent a group of skin problems rather than one specific condition. What many of them share – in addition to the telltale signs of swollen, red, oozing and crusted lesions -- is the presence of bacterial or fungal infection.

*Atopic* and *insect-induced dermatitis* result from allergic reactions to molds and airborne allergens, or to insect bites (most commonly, *Culicoides* sp., known as midges or “no-see-ums”). The signs of atopic dermatitis include hair loss, hives or rashes, and can lead to secondary bacterial infections from scales or crusts in those affected areas. The blood-sucking bites of stable, horn, deer, horse, and black flies can also result in an itchy dermatitis. More seriously, a horse attacked by large numbers of flies can have a hypersensitive reaction so acute it can lead to a rapid pulse, drops in respiration and temperature, listlessness, abortion in pregnant mares and, in severe cases, death.

“Bacterial and fungal infections of the skin can occur anytime or anyplace, secondary to an injury to or irritation of the skin, such as a wound, an insect bite or chemical burn,” noted Dr. Ferraro.

Bacterial infection can play havoc with nutritionally compromised or weak animals. In one tragic example, an equine rescue arrived too late to save an emaciated 12 year-old gelding encrusted with rain rot. Sadly, the horse failed to survive the rescue's trailer ride back to their sanctuary.

Keep bacteria from getting under your horse's skin with an emollient designed to assure that first line of defense remains supple and strong.

Arenus's SORE NO-MORE® Sports Salve relies on a beneficial blend of herbs and oils, in a proprietary extract of witch hazel bark and leaves that support skin health. Its smooth, creamy base features Tamanu Seed Oil (*Colophyllum tacamchaca*), a remarkable skin-supporting agent. Its oil is used in humans on insect bites and cracked skin, and the seed has a unique capacity to promote formation of new tissue, making the Tamanu seed invaluable in wound healing.

SORE NO-MORE Sports Salve also contains a natural trio of emollients; Sunflower seed oil (*Helianthus annuus*) rich in Vitamin E oil and antioxidants, Petrolatum derived from natural sources, and Aloe vera gel (*Aloe barbadensis Leaf*) to help skin retain moisture. SORE NO-MORE Sports Salve also contains Arnica, Rosemary, Lobelia, and Lavender to support hair growth and skin elasticity.

Bugs and allergens may be annoying but the bacteria and infections that can ride tandem with them don't have to get under your horse's skin. Make your best defense a great offense by using SORE NO-MORE Sports Salve. Learn more at [www.arenus.com](http://www.arenus.com)

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