

How to manage rain rot By Dr. Suzanne Mund, DVM, MSc

Q. What's rain rot?

Rain rot (or rain scald) is a bacterial skin disease that often behaves like a fungus. It causes an infection under the horse's skin that makes pustules of pus. The skin over top of these pustule will eventually slough off, taking off some hair. These small pieces of scab attached to hair are described as "paintbrush lesions" because they resemble a fine paintbrush.

If the disease progresses, the horse may have areas of alopecia (hair loss) on its shoulders, back and rump — the characteristic pattern of rain falling off the horse's back. Rain rot may also be found on a horse's face and under its mane.

Q. What causes the disease?

The main bacterial pathogen is *Dermatophilus congolensis*, but because it can be difficult to find the actual bacterium by examining a skin smear or using PCR (polymerase chain reaction) testing, some researchers suspect that other bacteria are involved. Veterinary researchers aren't sure if the bacteria "live" on an affected horse or if they are picked up in the horse's environment. Some horses may also be considered as carriers of *D. congolensis*. It's certainly possible that one carrier is infecting others in the herd, but the disease is probably more of a reflection of the horses' environment and how they are being managed rather than the infection being spread from horse to horse.

Q. Is rain rot more prevalent in some locations?

While rain rot is mainly found in tropical locations, cases can also develop in more temperate climates such as in Western Canada, southern Ontario and B.C. The disease is more likely linked to the horse's environment or its housing conditions. For example, while I was interning in Florida, I saw multiple cases of rain rot because it rains a great deal there — especially during the winter. There are also many biting insects that cause breaks in the horse's skin, and that's how the bacterium enters the horse's system.

In Western Canada, veterinarians see cases of rain rot during the winter when horses have thick coats. When there's wet snow, horses can get a blanket of crusty snow on their backs. If owners don't brush off the snow, it will slowly melt and keep the horses' skin damp — making them more susceptible to rain rot.

Q. Are there other factors that make horses more susceptible?

If not used properly, blankets may lead to rain rot. For example, if you blanket a horse while it's still sweaty from a workout, the damp environment under the blanket could potentially promote the condition. Another situation is when owners blanket horses that have full winter coats: the animals get overheated and sweat. In these cases, rain rot can develop in the horses' armpit and groin areas.

Q. How do you treat the disease?

We use a chlorhexidine (antibacterial) soap to wash the specific areas showing signs of rain rot, and then we dry these areas very well. Once the skin is soft, you can gently scrape off some of the scabs. I recommend repeating this process

every day or two for about a week, and then once a week until the pustules disappear. During treatment, try to keep your horse out of the rain as much as possible. It's also a good idea to use only one set of brushes, blankets and tack per horse. In most cases, antibiotics aren't used as treatment, but if it's a severe case, we may need to give systemic antibiotic drugs to help the horse get over the acute phase.

In addition to treating the disease, we discuss making changes to the horse's environment (ensuring that the animal has access to adequate shelter) and management practices (not blanketing horses unless it's necessary). If the problem persists, there may be other reasons that make the horse vulnerable. Rain rot can develop in elderly horses or immunocompromised animals. Neglect can also lead to rain rot: malnourished horses aren't healthy enough to fight off the bacterial infection.

Q. How can you prevent rain rot?

If your horses are turned out all the time, give them a place to go where they can completely get out of the rain. If the climate is very humid, give them a shady place to get out of the sun. You can even set up fans so horses can dry themselves off. If your horse's skin is hypersensitive to insect bites, your veterinarian can give intramuscular doses of long-acting steroids to reduce the urge to scratch and damage skin.

Q. Once a horse has had rain rot, is it more likely to develop it again?

It depends on why the horse got it in the first place. If a horse is immunocompromised or malnourished, it will be more susceptible. If a horse gets rain rot because it doesn't have a place to get out of the rain and nothing is done to change that situation, it will likely get the disease again. Treating and managing rain rot can be a drawn out process. If it's a one-time event, then the disease is straightforward to treat. But if the horse has underlying issues that make it more susceptible to rain rot, then you need to work with your veterinarian to identify and address the reason why your horse is more prone to the disease.

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