Why do we get sick in the winter months?

Dr. Christine King

Seattle, WA

Rather than adding one more article on "winterizing your horse" to the pile already out there, I thought I'd explore why the incidence of illness rises when the temperature drops. Why do we (and our horses) get more colds and other disorders in the winter than in the summer? Why is there a "cold season"?

One obvious reason is that during the colder, wetter months we tend to bunch together indoors. In the interest of comfort, we shut out the fresh, clean air and end up rebreathing stale air that may be contaminated with viruses, bacteria, fungi, and other microbes, not to mention dust, smoke, pet dander, carbon dioxide (and even some carbon monoxide), and other common irritants and pathogens.

The same sort of thing tends to happen with our horses. We bring them inside, out of the cold and the rain, and shut the barn doors behind them. But while we may think we're doing the horses a favour, we're actually increasing their risk for developing respiratory diseases. Not only is there a greater risk for transfer of infectious agents among horses, the quality of the air also declines in a closed barn, especially if hay is stored under the same roof as the horses or inferior quality bedding material is used.

A closed barn can be a disastrous place for a horse with heaves (recurrent airway obstruction, or RAO; formerly called chronic obstructive pulmonary disease, or COPD). But even horses who don't have heaves can develop inflammatory small airway disease in this situation. This less severe form of bronchitis/bronchiolitis can go undetected, as the main symptoms are occasional cough and a slight reduction in exercise tolerance. For most pleasure horses, it's not all that big of a deal; but if you're asking for peak athletic performance from a horse, then even low-grade small airway disease can significantly limit performance. Accumulation of mucus and inflammatory debris in the lower airways also increases the risk for bacterial infection in these airways and the lung tissue.

I think another reason we're more likely to get sick in the winter months is because cold air temperatures are a challenge for our bodies to deal with. Add in wind and rain, and it's even more difficult for the body to maintain its internal temperature within the range that is needed for optimal health and function. Both circulation and immune system function are impaired when the body is put under cold stress, as are any number of more specific cellular processes. And if either circulation or immune function is impaired, then illness is likely to develop.

Traditional Chinese Medicine (TCM) has an interesting perspective on this issue. In this medical paradigm, cold, wind, and dampness are three of the external factors or environmental influences that can cause disease. (The others are heat, summer heat, and dryness.) So, our Pacific northwest winter is characterized by three of the six "pernicious evils" listed in the TCM paradigm of disease!

In fact, the TCM approach views the occurrence of disease as an imbalance between the body's defenses (the Defensive Qi or Chi) and the invasion or influence of one or more of those environmental factors. Those external conditions are actually considered true causes of disease, not just contributing factors.

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When these natural phenomena invade a body that is already in a state of disharmony or imbalance, one of two things can happen. If the body is in a relatively good state of health (adequate Defensive Qi), then the resulting illness remains superficial, and the body rapidly recovers. However, if the pathogenic influence is stronger than the body's defenses, then more severe illness may result.

That all makes good sense to me, and it fits nicely with what the western medical (i.e. science-based) paradigm knows about the body's various functions. It has been my experience that the horses who develop colds, pastern dermatitis (mud fever, greasy heel, or scratches), dermatophilus infections (rain scald or rain rot), foot abscesses, or other infections during the colder months weren't all that healthy to begin with.

And that brings me to my definition of health. Good health is more than just the absence of disease. It is a vitality of body, mind, and spirit. A healthy body has a vibrancy that is difficult to put into words but is unmistakable when you see it. Although, we're so used to putting up with chronic, low-grade health issues in ourselves and in our animals that sometimes I think we've forgotten what good health really looks and feels like.

To be in good health is also to have a resilience to illness and injury. It's having a robust constitution which resists disease and rapidly restores health and function if illness or injury does happen to overwhelm the body's resources.

One of the foundations for good health is good nutrition. I've written at length about the horse's diet, so I won't go into all that again here. Suffice it to say that the closer you can get to the diet Nature intended for the horse, the better the horse's health will be. Herbs and nutraceuticals that support or stimulate circulation and immune function can be useful, but they're no substitute for a good basic diet that is rich in a variety of plant nutrients, including antioxidants.

Just one quick thing about diet: feeding plenty of good quality hay or other forage is important during the cold weather, as the breakdown of dietary fiber in the large intestine actually generates heat as well as calories, thereby helping the horse maintain his body temperature. Grain and other high-calorie, readily digestible foods do not warm the body to the same extent. Unless the horse is significantly overweight, feeding hay at a rate of about 2% of body weight per day (20 lbs of hay for a 1000-lb horse) is a good starting point.

Other foundations for good health include clean water, clean air, daily exercise, plenty of rest, protection from environmental extremes, a sense of safety, and a sense of belonging (i.e. good social bonds). In the context of managing horses in the Pacific northwest, protection from environmental extremes includes the provision of at least some dry footing each day and shelter from rain and wind.

That's all I'll say about winterizing your horse. I hope I've gotten you thinking about health and wellness from a broader perspective, and about how you can help your horse get through this winter in good health, given the particular resources available to you.

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