



# Winter Preparedness For Horses

## Cold Stress

Generally, a 1% increase in a horse's energy requirement is needed to replace the energy lost from cold weather for every degree that the temperature falls below the horse's thermo-neutral zone.

Equines more vulnerable to cold, damp weather:

- Foals and geriatrics
- Injured, sick, low body condition score
- Moist or wet coat due to rain or sweat
- Body clipped
- Horse's not acclimatized to cold weather

Can reduce cold stress by providing shelter from wind, rain, and cold.

Horse's kept in shelters can conserve up to 20% more body heat than horses without shelter



## Feeding



The best way to ensure a horse's energy intake is kept up throughout the winter is by supplying good quality hay free-choice. Heated water also helps maintain appetite and digestive function.

Need to precondition horses for winter by increasing fat thickness and body condition.

The main source of heat in horses is the energy obtained from feed.

A horse's energy intake is the most critical factor in determining how quickly a horse adjusts to cold weather.



Typically, horses require 10-21 days to acclimatize to cold weather.

## Shelter

Single-sided windbreaks with a top cover should be used in herds that may have dominance issues.

In herds where horses need to be separated, horses at low end of herd will most likely need more shelter because they are generally in the least favourable body condition.

Alternatives to sheds include: groups of trees and coulees.



At -15°C, human intervention must occur as the horse's physiology will change and extra feed or shelter will be required

## Transport

When transporting horses in winter make sure to provide increased bedding or insulation. Loading horses beyond loading density recommendations can lead to frostbite because horses are unable to move and reposition themselves in the trailer. Openings in the trailer should be adjusted to prevent wind chill, yet provide adequate ventilation. This could include replacing bottom slats in vehicles, closing nose vents, and protecting animals from cross-winds.

Young animals should be given special provisions: they must be kept dry and provided with bedding. Bedding, such as straw, should be provided for all animals when the temperature is below 10°C. Also ensure horses are protected from freezing rain and wind blowing into the side of the trailer as this can cause loss of heat and lead to hypothermia, even if the temperature is above freezing.

## References

[http://oklahomafarmreport.com/wire/news/2011/12/02340\\_HorseWinter12222011\\_110830.php](http://oklahomafarmreport.com/wire/news/2011/12/02340_HorseWinter12222011_110830.php)

NFACC - Code of Practice for the Care and Handling of Horses

<http://www.omafr.gov.on.ca/english/livestock/horses/facts/info-coldweather-man.htm>

<http://www.omafr.gov.on.ca/english/crops/facts/makinghorsehay.htm>

[http://www.omafr.gov.on.ca/english/livestock/horses/facts/info\\_haylage.htm](http://www.omafr.gov.on.ca/english/livestock/horses/facts/info_haylage.htm)

<http://princetonvet.net/prepare-livestock-winter-weather/>