

October 12, 2015

Where's your head at: equine PPE

WITH a husband involved in health and safety in the veterinary workplace, we've had many discussions about personal protective equipment (PPE) – mainly around the use of protective headgear while working with horses.

A study by BEVA and figures provided by the Health and Safety Executive suggest equine vets have the highest risk of injury in the civilian employment sector^{1,2}. The study indicates that, within an average working lifetime, equine vets are likely to sustain seven to eight injuries that will impede their work. Injuries not only impact upon our professional life, they can affect our families.

So, it is prudent for us to consider personal protection to preserve our ability to work for many years in the future.

The study showed leg injuries were most common, followed by head injuries, which accounted for 23 per cent of the recorded incidents¹. Nearly half the injuries reported were due to a hindlimb kick, which has been recorded as generating up to a tonne of force³, so vets who specialise in lameness may be at an increased risk. Other procedures, such as endoscopy of the upper respiratory tract, also appear to confer increased risk to the clinician¹.

While considering the horse's temperament is important in predicting risk to vet or handler, veterinary procedures are not routinely encountered by the horse so even the most predictable horse may react in an unforeseen way. In an attempt to protect ourselves,

VICKY ROWLANDS

BVM&S, CertEP, MRCVS

Practice Notes



the competence of the handler should also be considered. Wherever possible, handlers should be experienced in working with horses undergoing veterinary treatment as they are more likely to predict and preempt any adverse reactions from the horse. If there is any doubt about safety, sedation should be used; perhaps the short-acting α -2 agonist xylazine should become more of a stock drug in equine vets' cars?

Unfortunately, inadvertent complacency can sometimes result in severe injuries even when a horse is sedated.

Once the risk is acknowledged, use of PPE, including hard hats, gloves, body protectors and steel toe-capped boots, should be considered. Many professional horse handlers, such as those loading racehorses into starting stalls, will use all this equipment. Why would we, as vets imposing difficult and stressful treatments on these flight animals, not follow suit?

As vets, we are also responsible for nurses, handlers or owners working under our direction so we should consider mandatory use of some PPE. The difficulty is the practical implementation of these procedures and deciding who

requires what equipment⁴. Certainly, it would be appropriate for horse handlers to wear hard hats, gloves and steel toe caps whenever they are handling horses. As a bare minimum, this should be instigated when horses are trotted up and lunged. The argument then becomes whether the rules should only apply to nurses. Horse owners are equally, if not more likely, to sustain an injury at the time of veterinary treatment and they may be less likely to understand the inherent risks veterinary treatment will bring.

Life-saving

Discussion regarding helmet usage when riding horses has virtually been eliminated as most governing bodies have stipulated use of helmets and required standards. Even British dressage team riders are now seen competing with crash helmets rather than the traditional top hat. But this does not account for the number of injuries that occur when handling horses rather than riding.

According to International Helmet Awareness Day, approximately 20 per cent of accidents resulting in head injuries occur while the person is on the ground⁵ – putting

vets, handlers and nurses in this risk bracket. Despite this statistic, most people still fail to consider the importance of wearing hard hats when handling horses on the ground. One very small study has shown wearing a helmet prevented serious head injury³, although it suggested the addition of a face shield would be beneficial.

Another study shows wearing a hard hat increases the chance of survival from a head injury by 80 per cent⁶.

As the BEVA study shows, equine vets suffer a significant number of head injuries, so surely donning a hard hat before treating a horse should become second nature. The time taken to do this may just save a life or prevent a life-changing brain injury. Some vets will argue facial injuries are more likely than brain injuries when treating horses, but any action that reduces a brain injury can only be worthwhile, if not for us as individuals, then for our nearest and dearest.

Steel toe caps should be worn, although some people are resistant to this as they are concerned the horse will step on the area not covered by the steel, or even prevent the owner pulling his or her foot out from under the horse's foot. Leather boots will certainly reduce the severity of injuries and should be chosen in preference to cloth footwear. Although the importance of steel toe-capped

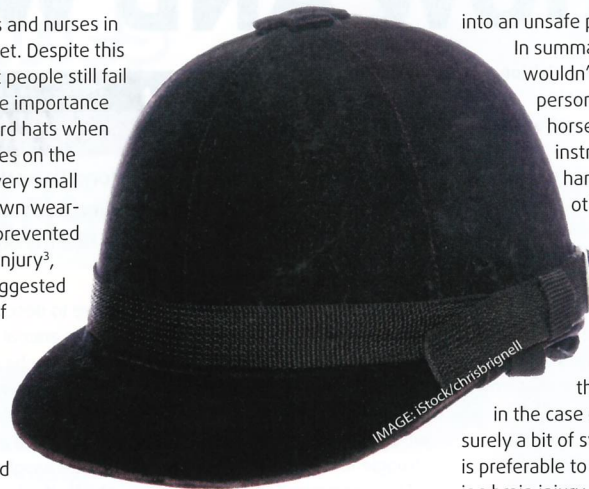


IMAGE: iStock/ChrisOrinell

into an unsafe position.

In summary, why wouldn't we and other persons handling horses under our instruction wear hard hats and other protective equipment? Protective equipment is unlikely to affect your ability to do the job and,

in the case of hard hats, surely a bit of sweaty hat hair is preferable to a life-changing brain injury. When thinking about the equine and veterinary industries in 10 or 20 years, I can only visualise mandatory use of appropriate PPE, possibly even driven by the insurance industry rather than practices themselves.

After researching this article, my hard hat will be used much more frequently when I return to work after my maternity leave (and I think my husband will be checking).

References

1. BEVA (2014). Survey reveals high risk of injury to equine vets, *Veterinary Record* 175(11): 263.
2. www.beva.org.uk/_uploads/documents/table-of-occupations.docx
3. Davidson SB et al (2015). Ten years of equine-related injuries: severity and implications for emergency physicians, *J Emerg Medicine* – www.ncbi.nlm.nih.gov/ezproxy.liv.ac.uk/pubmed/26049279
4. A Practitioner Ponders (2015). Keeping a good head on your shoulders, *In Practice* 37(1): 48.
5. www.chronofhorse.com/article/10-things-remember-international-helmet-awareness-day
6. Carmichael SP et al (2014). On and off the horse: mechanisms and patterns of injury in mounted and unmounted equestrians, *Injury* 45(9): 1,479-1,483.

surely rank below the importance of using a hard hat, I would be willing to bet most equine practitioners wear steel toe caps routinely whereas they rarely consider using protective headgear. Is this due to vanity or not wanting to make owners think we lack confidence? In some circumstances, it may be worth considering the use of body protectors if there is a risk of blunt trauma or crush injuries. The most likely scenario is when anaesthetising horses in a confined knock-down box, although this is probably less commonly considered than use of hard hats and steel toe-capped boots.

Occasionally, the situation, the horse, the handler or the available equipment may be insufficient to safely undertake the desired procedure. In this case, the vet concerned should have the confidence to refuse treatment until the situation can be made safer, rather than being pressured