

Testing Safety Head Collars

Before we began questioning whether we should make a head collar, we approached Dr David Marlin to find out if there was any information already out there on head collars. After searching, he couldn't find anything in scientific literature – which considering a head collar is used by many horse owners on a daily basis, is quite surprising.

Survey

Dr David Marlin started some research by conducting a large survey of 5615 horse owners/handlers to find out their experience with using head collars, how often they use them and the problems they have had associated with them.

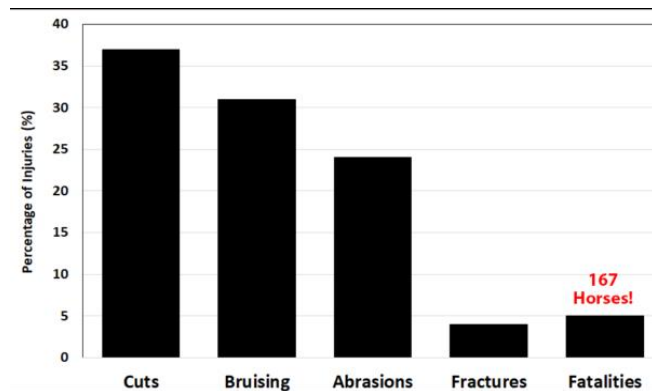
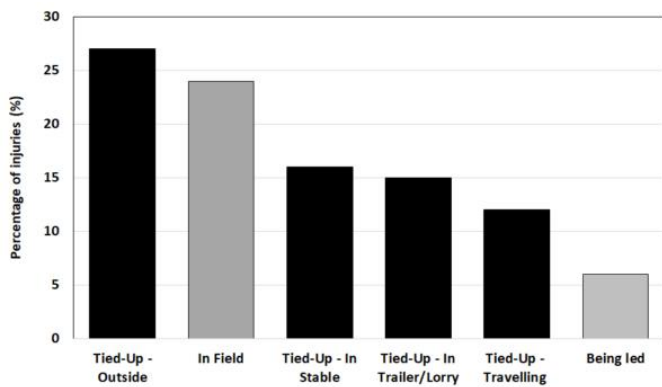
Again, the results were surprising.

31% experienced a horse being injured as a result of a head collar.

15% of people had injured in a head collar related incident.

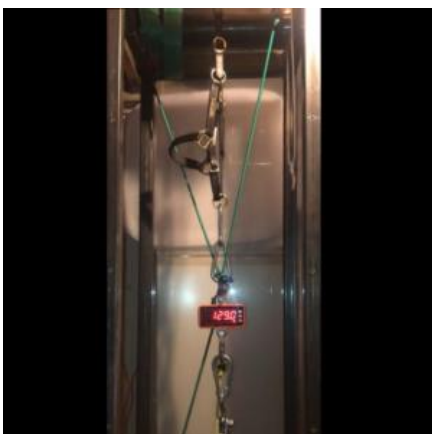
There were 167 horse fatalities as a result of a head collar.

Looking closer into the 30% of injured horses, it didn't seem to matter if they used a standard head collar, safety head collar or a safety device, however baler twine was associated with a higher risk of injury.



These results demonstrated that perhaps, head collars should be investigated in more depth...

Laboratory Testing

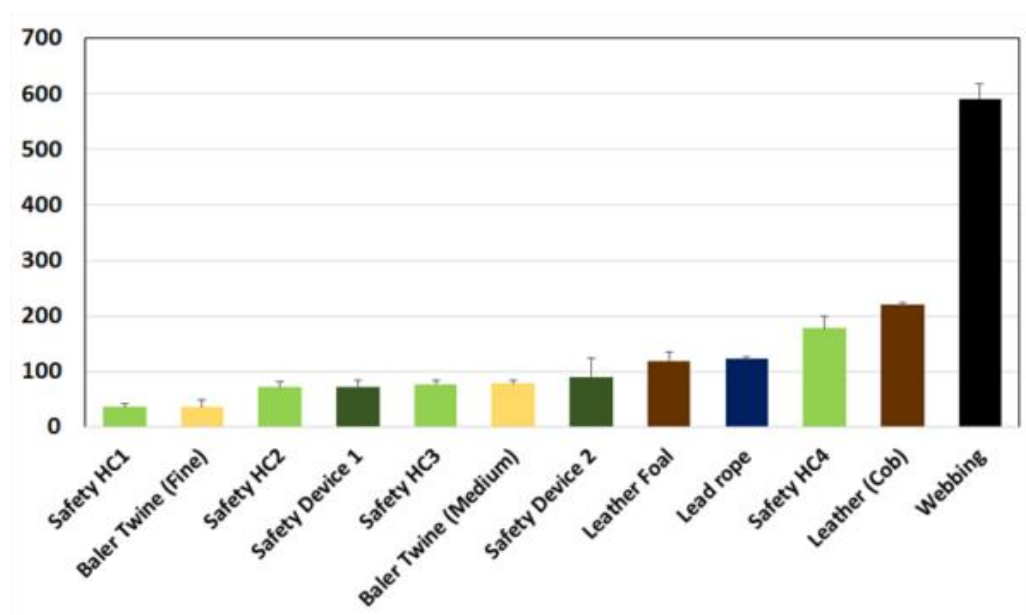


There are a lot of different head collar designs, materials and safety systems. However none of them appear to have been studied in any kind of systematic way.

For the next stage of testing, Dr David Marlin constructed a testing rig, to measure at what load the different head collars broke or released at.

Firstly, typical head collars were identified – webbing, synthetic, rope, leather, safety.

Each head collar was tested in a standardised way which was repeatable. They were tested 6 times. For head collars which broke, there was a new one tested each time. For safety head collars that released, they were re-used if possible.



The results showed that some broke incredibly easily, while others were so strong that they could suspend more than an average horses weight without breaking.

Based on this research, it appears that there is a need for standardisation or an appropriate load for head collars to release at, especially if they are a safety head collar.

Field Testing

When handling horses, we can't afford for a head collar to release at too low a weight (for example, 10kg), because it's not practical to use. However if the head collar doesn't open at all or at a high load, it increases the risk of injury and, as we've seen from the survey results, the injury could even be fatal.

Stellar™ has been independently field tested by Writtle University College on their yard by a variety of people and horses for all general horse handling.