

## Equilibrium Stellar Safety Headcollar – tried & tested

We all know accidents with headcollars happen, but you think “it’ll never happen to me!”, however independent research by Dr David Marlin showed it is far more common than you realise, 1 in 3 people had experienced a horse being injured because of a headcollar accident. But it’s okay because you use a leather headcollar right? Well, according to the research even a leather headcollars could suspend a weight of 200kg before it will break!

So, the Equilibrium team set out to design a headcollar that will break when you need it to, to prevent injury, but doesn’t break so easily that you have a loose horse galloping about! The result was the Equilibrium Stellar® Safety Headcollar.

The Stellar® Field Safe Headcollar has been scientifically tested to have a consistent release point where the headpiece releases when poll pressure is applied, with an average of 83kg of downward force. Our research indicates that this is strong enough for safe horse handling, but low enough to prevent serious injury to the horse in the event of an incident.

### Key features

- Reusable safety release system prevents injury to the soft tissue and nerves on the face, poll and neck of the horse.
- Scientifically tested. <https://doi.org/10.1177/17543371211039610>
- Smart, durable material. Made from PVC with stainless steel fittings.
- Neoprene padding for comfort, on the headpiece and nosepiece.
- Ideal for traveling.
- Perfect as a field safe headcollar.
- Weather-proof, drop it in the mud and after a quick wipe it looks brand new again!
- UK Patent Application No. 2000234.1.
- Ideal for use with the Field Relief Muzzle Protector.
- Matching Stellar Leadrope.

### Testing

We approached Dr David Marlin to find out if there was any research on headcollars. He couldn’t find anything in scientific literature, which we found quite surprising as headcollars are used so frequently.

## Initial Survey

Dr David Marlin started researching by conducting a survey of 5615 horse owners\* to find out their experience with using headcollars. This included how often they use them and the problems associated with them.

Again, the results were surprising.

Almost 1 out of 3 people experienced a horse being injured as a result of a headcollar.

More than 1 in 7 people have been injured in a headcollar related incident.

There were 167 horse fatalities as a result of a headcollar.

Diving into the horse injuries – it didn't seem to matter what headcollar they were using. There were combinations of standard headcollars, safety headcollars and safety devices, however baler twine was associated with a higher risk of injury.

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

## Scientific Testing

There are a lot of different headcollar 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 headcollars broke or released at.

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

Each headcollar was tested in a standardised way which was repeatable. They were tested 6 times. For headcollars which broke, there was a new one tested each time. For safety headcollars 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 an appropriate load for headcollars to release at, especially if they are a safety headcollar.

### Field Testing

When handling horses, we can't afford for a headcollar to release at too low a force, because it's not practical to use. However if the headcollar 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.

\* <https://beva.onlinelibrary.wiley.com/doi/10.1111/eve.13480>

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More info:

<https://drdavidmarlin.com/how-safe-are-headcollars-latest-research-published-by-dr-david-marlin-dr-jane-williams-and-dr-kirstie-pickles/>

Interview with dr David Marlin about the Stellar and his research

<https://fb.watch/9XnOfsqfLm/>