

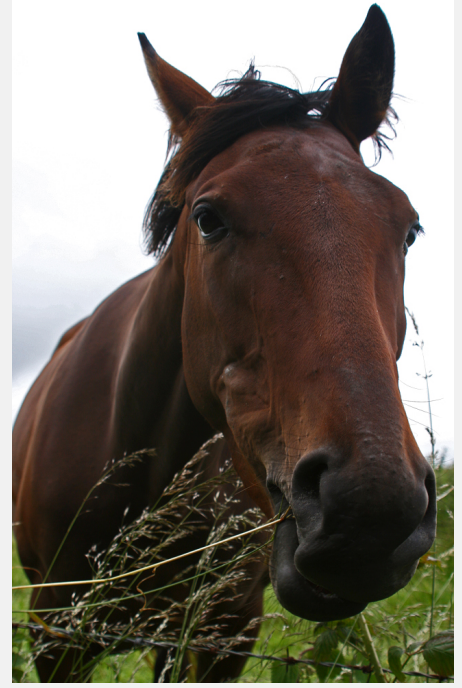


HOW TO PROVIDE STABLE LIVING

Everyone knows that babies cry when they're in pain and that they suck their thumb to soothe. But did you know that horses can do this in their own way?

Why care about pain/stress

- While humans can easily communicate when they are in pain, animals like horses cannot (3).
- When horses are in pain, **they exhibit behavioral cues and physiological changes:**
 - Heart rates and Blood pressure (11)
 - Kicking at abdomen
 - Weight shifting
 - Head shaking (3, 1)
 - Tension in lips and chin (8)
 - Eye blinks
 - Aggression, Hostility and Lethargic behavior (9)
- These can assist researchers in determining **horse welfare** as well as use it in **clinical research** (16).



"Horse" by MarilynJane

Stereotypies and why we should care

- A **stereotypy** is a repetitive, invariant behavioral pattern that has no obvious function or goal. (13)
- In humans, this can appear as digit-sucking. (12)
- In horses, this can appear as repetitive head, limb or body movements such as stall weaving and cribbing. (6)
- **Stall weaving** is when a horse sways it weight from one side to the other, resulting in a repetitive swinging head and neck movement. (6)
- Stereotypies are generally thought to be associated with reduced animal welfare as their development is correlated with sub-optimal environments. (4) However, this is **not necessarily true**.
- The occurrence of a stereotypy **does not** affect a horse's quality of life in every case and it is **not** an accurate indicator of current suffering. (5; 12)



"Horse in Stable at Keeneland in Lexington, Kentucky" by PEO, Assembled Chemical Weapons Alternatives

What causes horse pain/stress

Researchers have been interested in studying what causes pain/stress in horses. They have identified many **direct** and **indirect** causes of pain. Some of the significant causes of pain include:

- Routine and emergency **surgeries** e.g. castration and celiotomy (incision at the abdomen) (7,18)
- Back pain due to **extensive riding** (14,17)
- **Transportation and isolation** when moving horses across farms (11)



What causes horse stereotypies

In a horse's natural habitat, the majority of their time is spent interacting with their herd and grazing. (15) However, in **captive environments** such as stables, this **natural behavior is restricted** and can result in stereotypy development (2). These risk factors include:

- lack of foraging behavior (19)
- lack of environmental stimulus (4)
- social isolation (2, 15)
- increased hours of work (4)
- foals of dominant mares (20)
- foals weaned in constricted spaces such as barns (20)
- breed (more common in Thoroughbreds) (10)
- sex (more common in males) (10)



What can we do?



"horse" by shumpei_sano_exp7

- Many equine stereotypies can result in **physiological problems**, such as leg inflammation leading to lameness in weaver horses. (6)
- Treatment should focus on addressing the underlying cause for the stereotypy rather than the behavior itself (i.e. **no weaver bars**). Some successful mitigation strategies include:
 - **placing mirrors in the stall** to mimic social interaction (15)
 - implementing an **open-wall stall designs** to improve visual horizons. (6)
 - **equine environmental enrichment** like providing a tongue-activated liquid feeder (19) and commercial items such as bottles and rope (2).



"HORSES" by lovecatz



Credit: Christina Perez

WE ALL WANT WHAT'S BEST FOR OUR FARM ANIMALS



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