### Animal Health

#### Lip Lesions

**SEBWAT parameter**

(Standardised Equine-Based Welfare Assessment Tool)

**Lip Lesions**

**Welfare issue**

- The animal displays lesions in the corners (commissures) of the mouth on one or both sides.
- These lesions are usually caused by the bit placed in the animal's mouth, which is attached to the bridle and reins, and used to control the animal during riding or driving.
- Bit injuries will show as rubbed (abrasions), pinches, or tears (lacerations) and will be located in the corners of the mouth. Other injuries in this area may be caused if the animal has eaten a caustic substance; however, these can be differentiated as burns and/or blisters and are likely to also appear on the tongue. The animal may also injure the lips by accidental laceration, e.g. if falling and scratching the head on the ground; these lesions are unlikely to be located specifically at the lip corners.

**Welfare significance**

- Equids have sensitive mouths and lips, therefore abrasions or lacerations in the corners of the mouth are likely to be very painful.
- Bit-related oral damage is often not only the visible lip lesions in the corners of the mouth but may also include bruising or lesions on the gums, palate and tongue, which will be more difficult to see. Therefore, lip lesions are likely to be an under-estimation of the true extent of bit-related injury to working equids. Damage to the mouth caused by the bit can become permanent.
- Bits with a severe curb (long shanks designed to increase the leverage exerted on the animal’s mouth) can even lacerate the tongue. It is important to remember that the more damage is done to the animal's mouth, the less responsive the animal will eventually become during riding/driving, as scar tissue is less sensitive than normal tissue. This can be misinterpreted as stubbornness or bad behaviour and increase the rider/driver’s frustration leading to rough handling and cruelty.
- Oral pain can inhibit the animal from eating and drinking normally, particularly if the pain is severe or chronic. This may reduce the animal's ability to eat and drink, potentially leading to a loss of condition, dehydration or colic in addition to continued pain and suffering.
- Worsening pain and delayed healing of lesions is likely to occur if owners continue to work the animals with a bit in the mouth before oral wounds have completely healed. In some cases, even after wound healing, there may be continued discomfort.
- Pain in the mouth is likely to have behavioural effects on the animal, such as showing reluctance to be bridled, becoming head-shy, throwing the head up when pressure is applied to the reins, opening the mouth (yawning), headshaking or holding the bit between the teeth.
- Some of these behavioural responses may trigger negative reactions from the owner, as they may interpret that the animal is being ‘naughty’. This could lead to increased aggressive handling interactions.

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1, 2, 4 Anderson (2005)
3 Brooke (2013)
Possible causation

Rough handling/driving

- The animal’s mouth can be damaged accidentally through poor technique such as a rider using the reins for balance, or pulling harshly on the reins when driving.
- Sometimes deliberate abuse can occur from rough handling as a result of anger or frustration with the animal, and the rider/driver may deliberately pull on the reins sharply to ‘punish’ the animal.
- Equines naturally run away from painful/fearful stimuli (the flight response), this means that an equine experiencing pain the mouth may well be prone to bolting or become difficult to stop. Unfortunately, this will often result in greater pressure being applied to the reins by the owner, causing more pain. Conversely, some animals may become reluctant to go forward, which could result in the rider/handler whipping the animal to make it go forward.

Bit type and fit

- The materials used to make the bit, the quality of workmanship and condition are important. Sharp edges, rough surfaces, or a bit that is too thin will easily damage the mouth. A bit that is too narrow will pinch the lips creating lesions, and cheek pieces that are too tight will cause the bit to be positioned too high in the mouth.
- Home-made bits made from materials such as wire, chain or nylon will do a great deal of damage to the animal’s mouth as the thin wire or rope will increase the pressure on the sensitive tissue of the mouth, whilst a chain will increase friction and cause bruising.
- Bits made of iron will rust, whilst materials such as nickel or plastic will wear away creating sharp edges which can easily cause lesions.
- Bits with loose rings may nip, either if they are too narrow or the equid has thick, fleshy lips. In these instances fixed rings may be better.
- Studies have shown that jointed bits are more likely to be associated with lesions than straight-bar bits5.
- A study in Lesotho found that curb bits were the most common bit type in the area and that these were regularly found to be too large and/or fitted too low, risking injury to the mouth6. In many cases the bridles and bits (and other harness) were found to be ill-fitting, dirty and in poor condition.
- A more severe bit (e.g. a thin bit, a jointed bit, or one with a curb action) is more likely to cause injury in the wrong hands compared to a thicker, straight bit.

5 Brooke (2013)
6 Upjohn (2011)
Means of resolution

- The use of well-made, well-fitting bits should be encouraged.

- Bits should be made of smooth stainless steel or smooth rubber (although commercially-made bits in other materials such as iron, copper and plastic are available). Soft materials that will wear away quickly and develop sharp edges should be avoided.

- Bits should never be made from materials such as chain or wire, which will damage the mouth.

- Whatever material the bit is made from, it should be inspected regularly for wear and tear, including sharp edges, cracks, damage, and thin areas which could cause injury or cause the bit to break.

- The fit of the bit should be checked to ensure it is not too large, too small or too bulky for the animal’s mouth.

- The fit of the bridle is also important. If the bit is too high it will injure the corners of the mouth, but if too low it will hit against the teeth and cause discomfort.

- The bit should be removed during rest so that the animal can eat, drink and rest without the bit in its mouth. This will also give the lips and mouth time to rest and give the handler the opportunity to check the lips for early signs of injury.

- Bits must be cleaned frequently. When the bit is removed it should be rinsed to remove saliva and food debris which will increase friction on the lips causing sores.

- Riders and drivers should be educated to handle the reins gently so as not to injure the animal’s mouth. Training could be offered to improve handling, riding and driving. Equids should not be tied by the reins in case of injury if the animal moves suddenly.

- Involving the whole community of relevant stakeholders, including harness and bit makers as well as owners is important to improve bit selection, fit and maintenance.

- Applying ointment to the lip lesions is not an adequate means of resolution and may be counter-productive as the owner may perceive this as a cure and not adjust the bit. Ointment will have no effect on the lesions as it is likely to be licked off immediately and topical applications containing steroids will actually delay healing.

Refer to the Working Equid Veterinary Manual, Community Engagement work plans or strategies and the Handling Guidelines before conducting an intervention.

Animal with bridle and harnessing removed to enable more comfortable resting during work.

Brooke (2013)
References

