**CLIENT EDUCATION HANDOUT**

**Customer Name, Street Address, City, State, Zip code**

**Phone number, Alt. phone number, Fax number, e-mail address, web site**

***Isocoma pluriflora* Toxicosis**

**Basics**

**Overview**

• Other name is rayless goldenrod and was previously known as *Isocoma wrightii*

*•* Hungry or thirsty horses that are unfamiliar with a given area are more likely to consume *Isocoma pluriflora*

• Affected horses stand with their legs wide apart and develop swelling near the thoracic inlet and along the ventral neck

• There may be a pulse in the jugular veins

• There is an increased heart rate and changes in the heart rhythm, best evaluated on a monitor

• Cardiac arrhythmias often are present and detectable on auscultation

• Environmental conditions such as drought result in less desirable forages or weeds being consumed

**Signs**

• Affected horses stand with their legs wide apart and develop swelling near the thoracic inlet and along the ventral neck

• There may be a jugular pulse and associated rapid heart rate

• Changes in the heart rhythms are often present and detectable on auscultation and on monitoring

**Causes**

• Generally, it is believed horses need to consume the plant for 2–3 days or approximately 1–2% of their body weight

**Risk Factors**

• The largest risk factor is drought and the loss of other forages

• No cases of rayless goldenrod intoxication have been documented in horses, although intoxication is suspected to occur

• However, cases of alkali disease were reported in the early 1900s in horses and are believed to be from *Isocoma pluriflora*

• The toxin is the same as that found in *Eupatorium rugosum* (white snakeroot), and presumptive evidence exists that the same clinical signs could be expected—heart muscle degeneration, muscle tremors, ataxia, reluctance to walk, heavy sweating, myoglobinuria, and depression

• Horses eating white snakeroot have an onset of clinical signs within 2–3 weeks after ingestion

**Treatment**

• The veterinarian should initiate decontamination with activated charcoal, and a saline cathartic may be helpful, especially to reduce or prevent the toxin from recirculation through the liver

• Heart monitoring is required and abnormal rhythms and rates need to be treated accordingly

• Recovery may be quite long

• Intravenous administration of glucose-containing fluid by the veterinarian may be indicated with low blood glucose

• Horses that survive may be left with a severely scarred heart and circulatory dysfunction; therefore, symptomatic and supportive care is always appropriate

**Appropriate Health Care**

• Supportive care and lots of rest. This may take many months, depending upon how severely the horse is affected

**Activity**

• Activity will need to be limited for many months to allow the animal to recover

• The length of time of restricted activity will be determined by your veterinarian based on the condition of your horse

**Diet**

• High-quality hay and forage is necessary

**Medications**

• Pain control or drugs to support the heart may be necessary based upon the severity of the horse’s condition. Consult your veterinarian

**Follow-Up**

**Possible Complications**

• Horses may have damaged heart muscle

• This may require a long time to heal

**Expected Course and Prognosis**

• Horses may take months to heal, and the length of time to heal will depend upon how severely the horse is affected

**Key Points**

• Affected horses stand with their legs wide apart and develop swelling near the thoracic inlet and along the ventral neck

• Changes in the heart rhythm are often present and detectable on auscultation and on monitoring

• Horses may take months to heal, and the length of time to heal will depend upon how severely the horse is affected



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