

Do horses experience pain?



1

How painful is that horse?

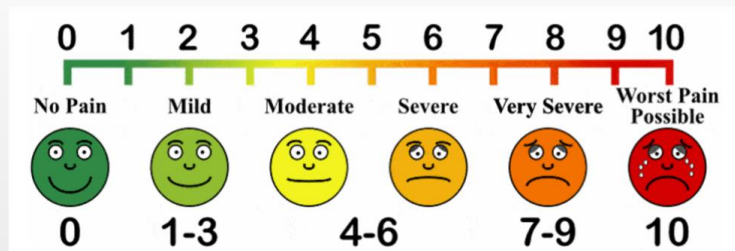


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How do you “measure” pain in patients who don’t speak?

3

Visual Analog Scale



4

Visual Analog Scale

Muir W. In, Equine Internal Medicine. 2004.

0	5	10
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Alert

Active

Playful

Interactive

Performs work normally

Eats, drinks, defecates

Anxious/uneasy

Less attentive

Uncomfortable

Reduced activity

Mouths food

Plays in water

Laying down

Reluctant to work

Focused stare

Depressed

Tense/trembling

Hypersensitive

Restless

Abnormal posture

Tachycardia

Tachypnea

Inappetant

5



6



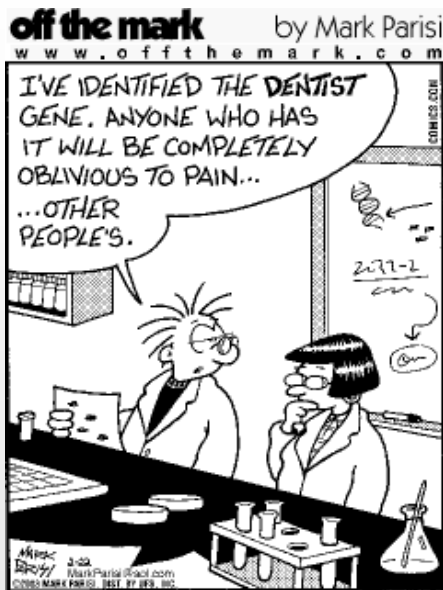
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Survey of Horse Owners and Veterinarians



- Web-based survey (Qualtrics)
- Link distributed through social media, horse organizations, AAEP, email groups

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Thank you!

- Dr. Macarena Sanz
- Dr. Jamie Kopper
- Dr. Jen Gold
- Dr. Debora Mattei



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Horse Owner and Veterinarian Questionnaires

- Introduction
- Attitudes and beliefs
- Assessment of pain severity
- Access to pain control drugs (owners)
- Pain management protocols (veterinarians)
- Education, advanced training, employment (veterinarians)
- Experiences with horses
- Demographics



553 horse owners
263 equine veterinarians

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What are horse owners' attitudes and beliefs about recognition of pain in their horses?

I am confident that my veterinarian accurately recognizes pain in my horses when it is present.
88.4% agree

I am confident that I accurately recognize pain in my horses when it is present.
87.8% agree

What are veterinarians' attitudes and beliefs about recognition of pain in their equine patients?

I am confident that I accurately recognize pain in my equine patients when it is present.
84.4% agree

I am confident that my clients accurately recognize pain in their horses when it is present.
13.0% agree

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Pain Scores for Naturally Occurring Conditions

- Severe acute laminitis
- Chronic suspensory desmitis
- Subsolar abscess
- Simple fracture of first phalanx
- Chronic osteoarthritis of tarsal joints, both hind legs
- Melting corneal ulcer
- Acute pleuropneumonia
- Acute gas colic
- Acute large colon volvulus
- Impaction colic of large colon
- Acute rectovaginal tear in a post-foaling mare
- Septic tibiotarsal joint in a foal
- Neonatal isoerythrolysis
- Umbilical abscess in a foal

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Post-procedure (24 hrs) Pain Scores

- Uncomplicated castration of a yearling colt
- Cryptorchid castration of a yearling colt
- Strangulating volvulus with resection of small intestine
- Simple large colon displacement
- Repair of simple fracture of first phalanx
- Repair of simple laceration over pectoral muscles
- Sinus flap to repel abscessed maxillary cheek tooth
- Routine dental float on a 20 yo horse
- Removal of "wolf teeth" in a young horse
- Umbilical hernia repair in a foal
- Ruptured bladder repair in a foal

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Scenario 1

■ Q3.3



A healthy yearling colt was gelded (castrated) 24 hours ago with appropriate sedation and pain medication given at that time. No additional pain medication has been given to this horse since the surgery and it would be expected that the medication given at the time of surgery would no longer be providing any pain relief after 24 hours.



On a scale from 0 (no pain at all) to 10 (the worst possible pain), how painful do you think this horse is?

0 1 2 3 4 5 6 7 8 9 10

No pain at all | ● ● ● ● ● ● ● ● ● ● | Worst possible pain

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Scenario 2

■ Q3.5



An adult Quarter Horse mare has a hoof abscess at the toe of a front hoof. You find her in the paddock and she is not bearing any weight. No treatment has been administered.



On a scale from 0 (no pain at all) to 10 (the worst possible pain), how painful do you think this horse is?

0 1 2 3 4 5 6 7 8 9 10

No pain at all | ● ● ● ● ● ● ● ● ● ● | Worst possible pain

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Scenario 3

■ Q3.6



Twenty-four hours ago an adult Quarter Horse gelding sustained a laceration or cut to the chest area (his pectoral muscles) due to an encounter with a barbed wire fence. The laceration is approximately 12 inches in length and extends approximately 1 inch deep into the muscle. This laceration was repaired with stitches or staples by an experienced veterinarian. Pain medications were administered at the time the injury was initially treated but no additional pain medications have been given.

On a scale from 0 (no pain at all) to 10 (the worst possible pain), how painful do you think this horse is?

0 1 2 3 4 5 6 7 8 9 10

No pain at all | ● ● ● ● ● ● ● ● ● ● | Worst possible pain

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Scenario 4

■ Q3.7



An adult Quarter Horse mare has untreated moderate gas colic.


On a scale from 0 (no pain at all) to 10 (the worst possible pain), how painful do you think this horse is?


0 1 2 3 4 5 6 7 8 9 10


No pain at all | ● ● ● ● ● ● ● ● ● ● | Worst possible pain

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Scenario 5

 Q3.8 An adult male Quarter Horse gelding has an untreated fracture of the lower leg (pastern bone) that occurred within the last hour.


 On a scale from 0 (no pain at all) to 10 (the worst possible pain), how painful do you think this horse is?


 0 1 2 3 4 5 6 7 8 9 10


No pain at all | | Worst possible pain

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Scenario 6

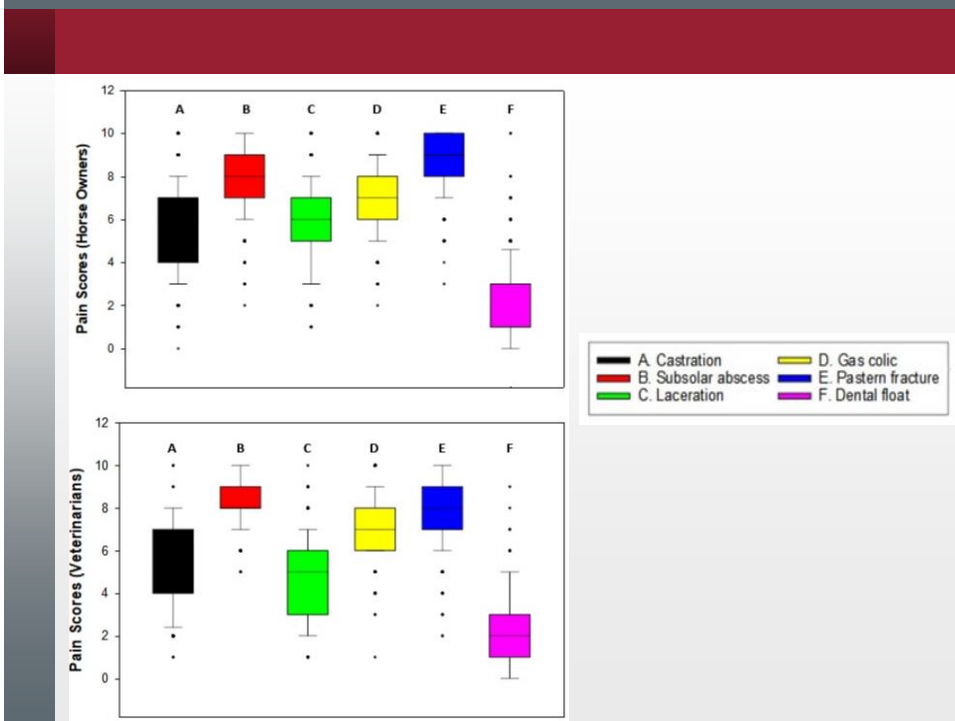
 Q3.9 A 20 year old Quarter Horse gelding had a routine dental float yesterday. Sedation was administered at the time of the procedure but no additional medications have been given since that time.

 On a scale from 0 (no pain at all) to 10 (the worst possible pain), how painful do you think this horse is?

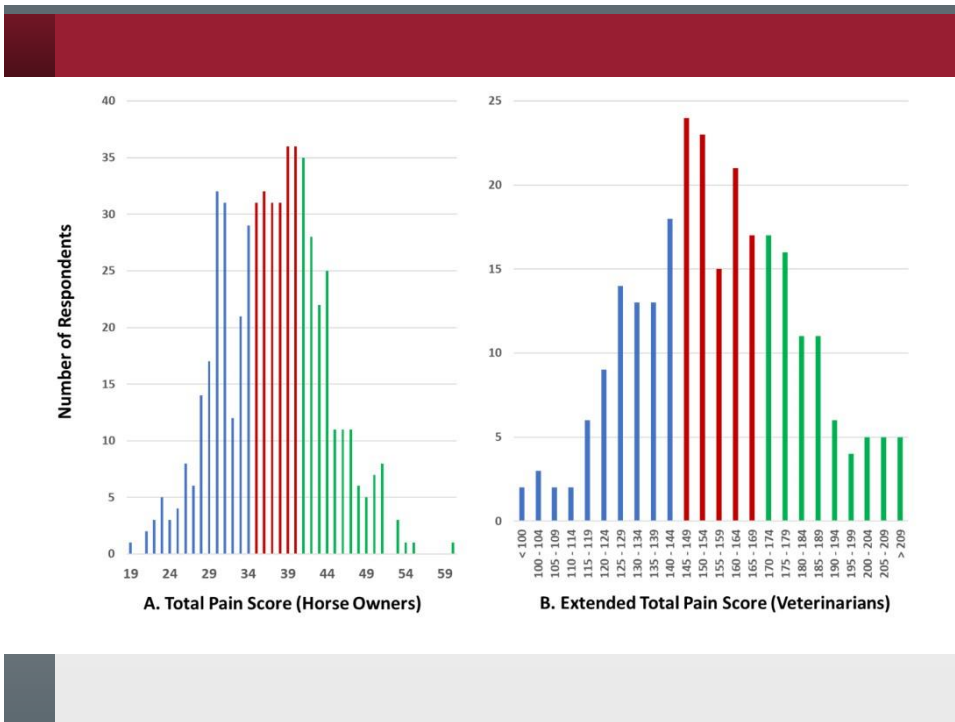
 0 1 2 3 4 5 6 7 8 9 10

No pain at all | | Worst possible pain

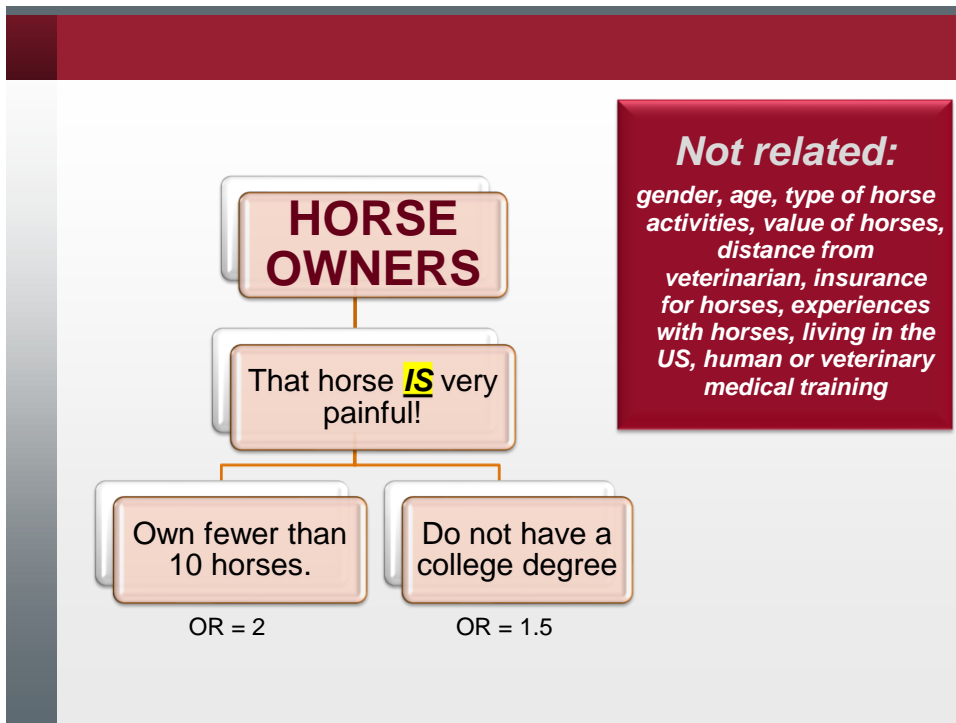
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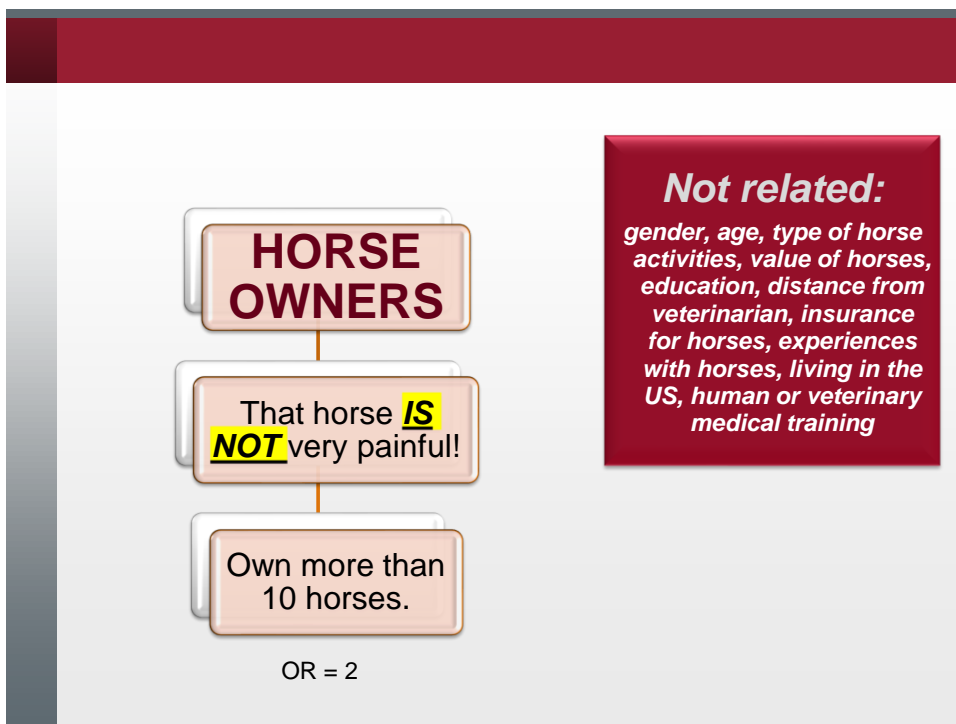
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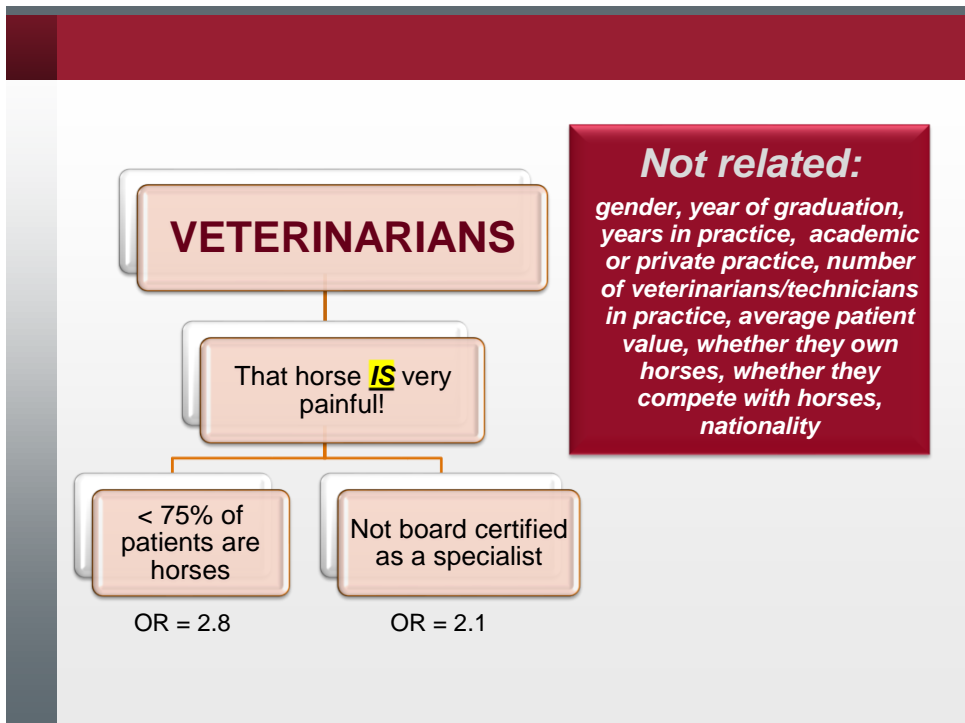
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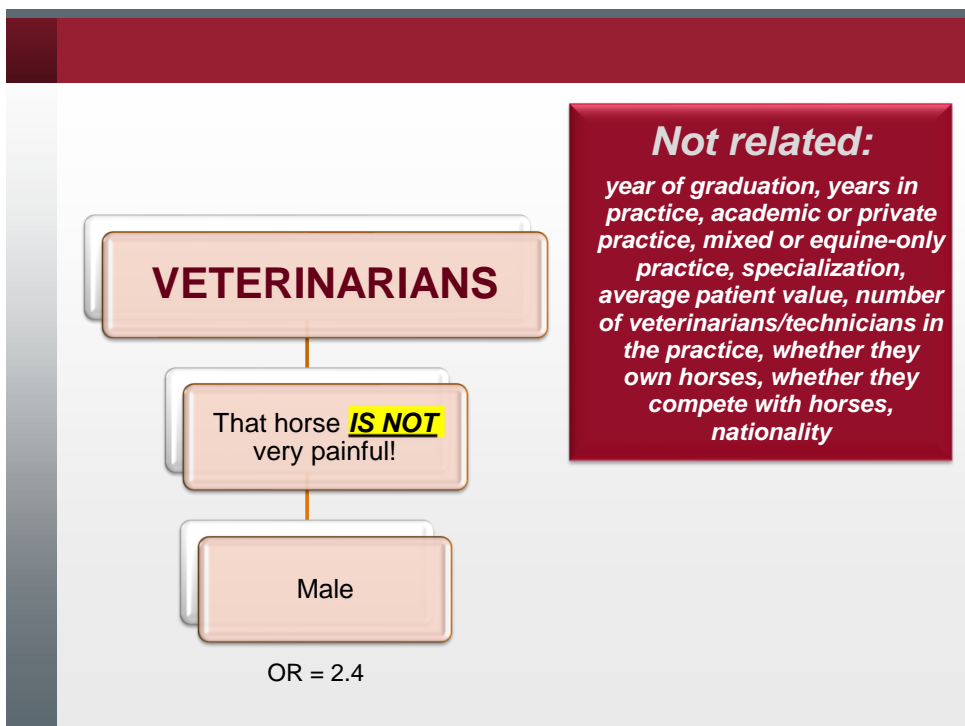
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27



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Pain Scores for Naturally Occurring Conditions

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How painful is this horse?

Male and Female Veterinarians

Pain scores for naturally occurring conditions

- No differences between genders except:
 - ✓ Neonatal isoerythrolysis in a foal
 - ✓ Umbilical abscess in a foal

Pain scores 24 hours after a specified procedure or surgery

- Women provided higher pain scores for every scenario (P < 0.001)

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Horse Owners and Analgesic Medications



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What do horse owners say about compliance with analgesic medication instructions?

If my veterinarian prescribes drugs for pain management, I always administer the drugs to my horses exactly as prescribed.

92.0% agree

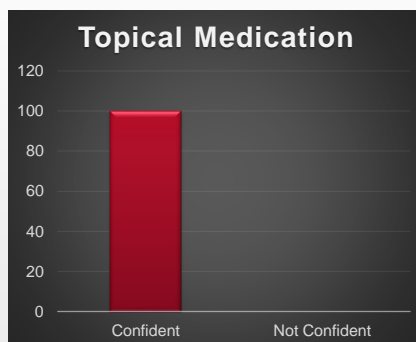
What do veterinarians say about owner compliance with analgesic medication instructions?

If I prescribe drugs for pain management for an equine patient, my clients administer the drugs exactly as prescribed.

29.6% agree

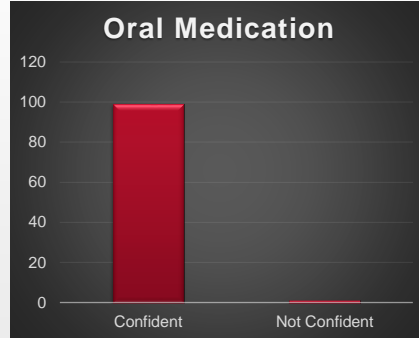
33

How confident are horse owners in their ability to administer medications to their own horses?



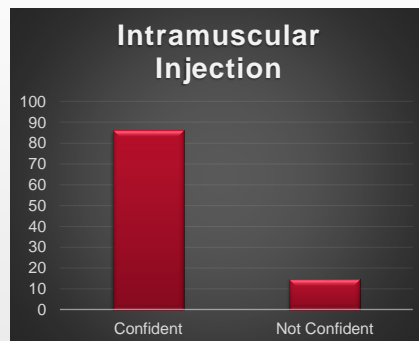
34

How confident are horse owners in their ability to administer medications to their own horses?



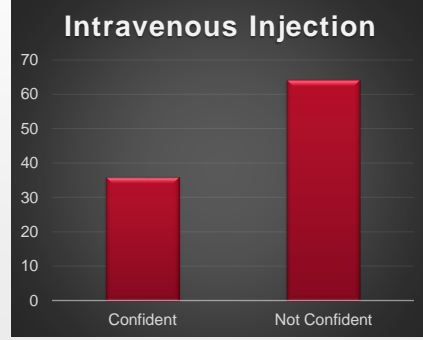
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How confident are horse owners in their ability to administer medications to their own horses?



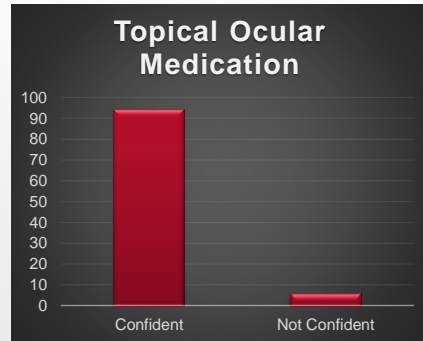
36

How confident are horse owners in their ability to administer medications to their own horses?



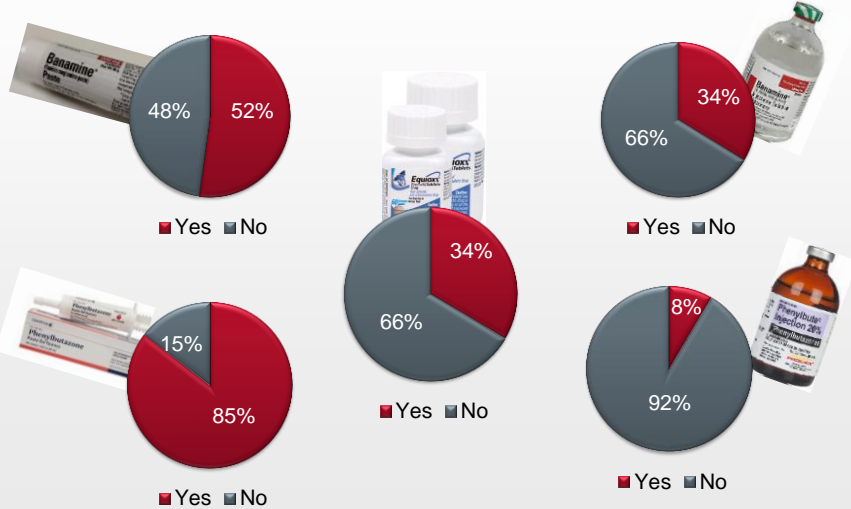
37

How confident are horse owners in their ability to administer medications to their own horses?



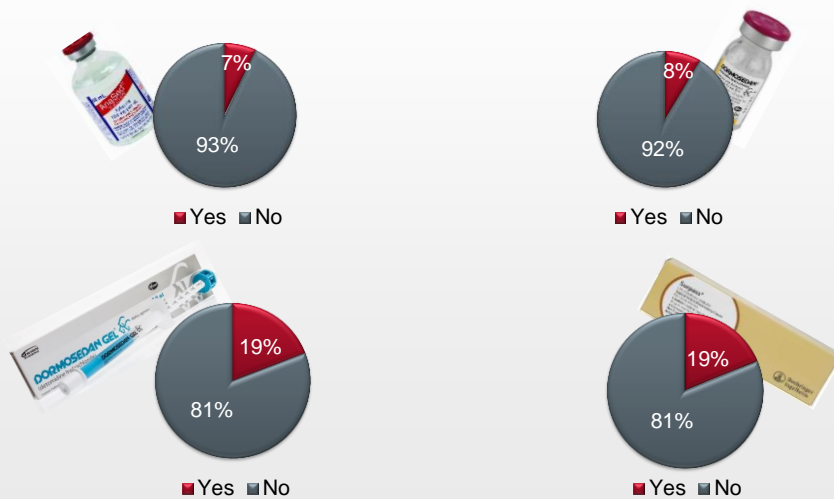
38

Which of the following drugs do you currently have **AVAILABLE** at your home or stable for immediate use?



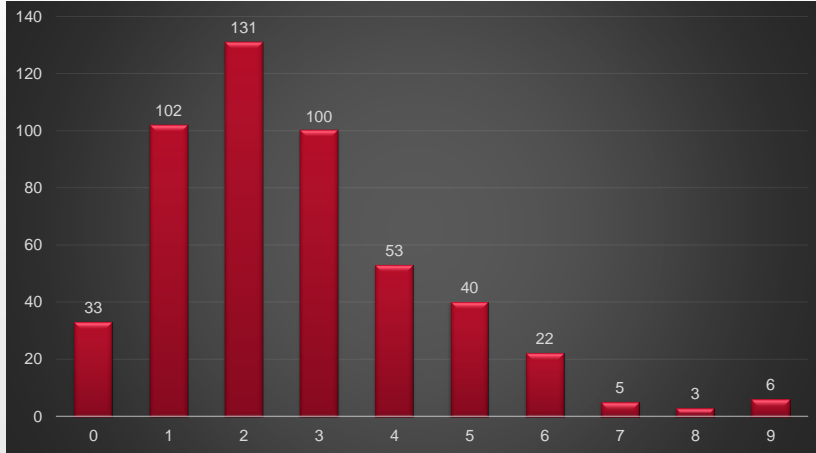
39

Which of the following drugs do you currently have **AVAILABLE** at your home or stable for immediate use?



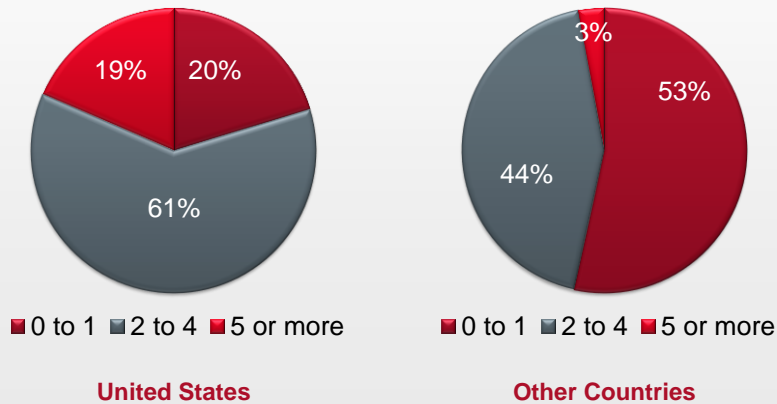
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What is the total number of types of analgesic drugs available at your stable for immediate use for your personal horses?

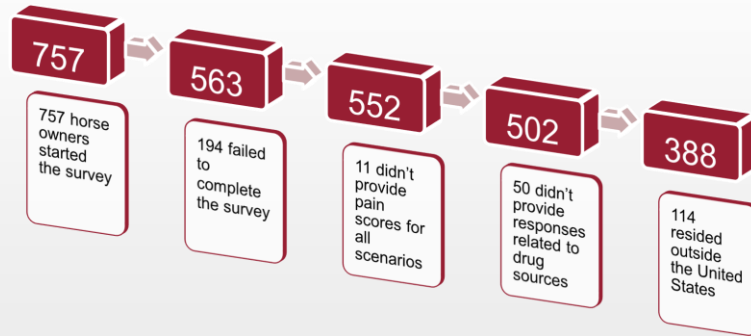


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How many types of drugs do horse owners have *AVAILABLE?*



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What are the characteristics of the US horse owner who has many types of drugs **AVAILABLE** for immediate use for their personal horses?



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What characteristics of the US horse owner **ARE** associated with having many types of drugs available for use?

- Multivariable logistic regression – which of these factors are most important?
 - *Lifetime number of horses owned or managed*
 - *At least some of the horses are insured*
 - *Average value of the horses is higher*



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What are the characteristics of the US horse owner that are **NOT** associated with having a wide variety of drugs available for use?

- Educational level, medical training
- DVM travel time to respond to emergencies
- Perceived level of pain that horses are experiencing
- Obtaining drugs without a valid VCPR
- Age
- Gender



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What are the characteristics of the US horse owner who at least occasionally obtains analgesic drugs without a valid **VCPR**?



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Principals of Veterinary Medical Ethics of the AVMA

A veterinarian shall provide competent veterinary medical clinical care under the terms of a veterinarian-client-patient relationship (VCPR), with compassion and respect for animal welfare and human health.

What is a Veterinarian-Client-Patient Relationship (VCPR)?

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What is a VCPR?

The veterinarian-client-patient relationship is the basis for veterinary care. To establish such a relationship the following conditions must be satisfied:

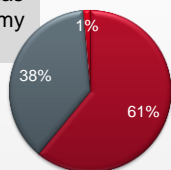
1. The licensed veterinarian has assumed the responsibility for making medical judgments regarding the health of the patient(s) and the need for medical therapy and has instructed the client on a course of therapy appropriate to the circumstance.
2. There is sufficient knowledge of the patient(s) by the veterinarian to initiate at least a general or preliminary diagnosis of the medical condition(s) of the patient(s).
3. The client has agreed to follow the licensed veterinarian's recommendations.
4. The licensed veterinarian is readily available for follow up evaluation or has arranged for:
 - i. Emergency or urgent care coverage, or
 - ii. Continuing care and treatment has been designated by the veterinarian with the prior relationship to a licensed veterinarian who has access to the patient's medical records and/or who can provide reasonable and appropriate medical care.
5. The veterinarian provides oversight of treatment.
6. Such a relationship can exist only when the veterinarian has performed a timely physical examination of the patient(s) or is personally acquainted with the keeping and care of the patient(s) by virtue of medically appropriate and timely visits to the operation where the patient(s) is(are) kept or both.
7. Patient records are maintained.

<https://www.avma.org/resources-tools/avma-policies/veterinarian-client-patient-relationship>

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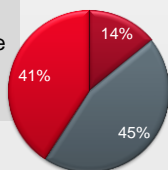
When you need pain medication for your horses, how often do you obtain such drugs from each of the following sources?

From a DVM who has recently examined my horse



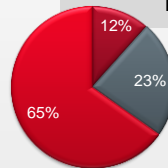
■ Frequently ■ Occasionally ■ Never

From a DVM who has not examined my horse but knows me and my horses



■ Frequently ■ Occasionally ■ Never

From a pharmacy using a prescription from a DVM

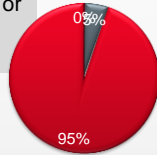


■ Frequently ■ Occasionally ■ Never

50

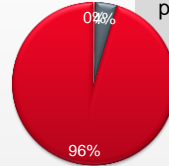
When you need pain medication for your horses, how often do you obtain such drugs from each of the following sources?

From a DVM who has never seen or examined my horses



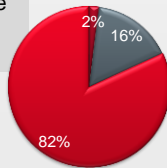
■ Frequently ■ Occasionally ■ Never

From an on-line pharmacy without a DVM prescription



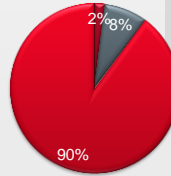
■ Frequently ■ Occasionally ■ Never

From a feed store or similar local business



■ Frequently ■ Occasionally ■ Never

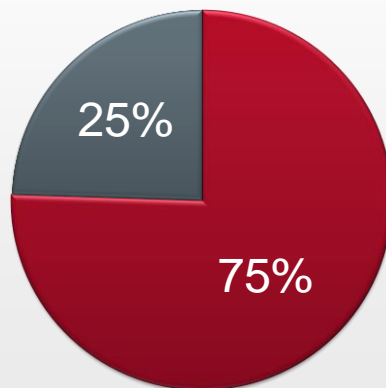
From a catalog or on-line feed store or similar business



■ Frequently ■ Occasionally ■ Never

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How many owners always obtain analgesic drugs from a source with a valid VCPR?



■ Always ■ Not always

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What are the characteristics of the US horse owner who at least occasionally obtains analgesic drugs without a valid VCPR?

- Multivariable logistic regression – which of these factors are most important?
 - *Age*
 - *Gender*



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What are the characteristics of the US horse owner that are **NOT** associated with obtaining analgesic drugs without a valid VCPR?

- Educational level, medical training
- Equine experiences
 - Value of horses
 - Experiences with painful horses
- Drug experiences
 - Number of drugs available for immediate use
 - Confidence in personal ability to administer drugs



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