What type of sedation can I use on the farm?

The following are options for sedating a horse. Many of these sedatives have more than one route in which it can be administered, but the safest method for an owner on the farm is the oral route. Reasons to give sedation include transportation, working with fractious horses or to help take the edge off after surgery.

Acepromazine oral powder packet

Acepromazine may be prescribed as a pre-anesthetic or as a mild tranquilizer. Acepromazine is a rapid-acting tranquilizer used as an aid for controlling fractious horses during examination, treatment, trailer loading, and transportation. The mechanism of action is a depression effect on the central nervous system causing sedation, muscular relaxation and activity reduction. This sedative can be given in various forms: by mouth, intramuscular and intravenous. The most common form used on the farm is the oral powder packet made by Wedgewood. This is dispensed in pre-measured, individual packets that can be used to top-dress feed. Packets are available from 10mg/10mg to 75mg/10mg.

Method	Dosage	Concentration	Period	Duration
Oral	0.25-1.0 mg/lb	10 mg/tablet	Treatment	NA
Oral	0.25-1.0 mg/lb	25 mg/tablet	Treatment	NA
Intramuscular injection	2-4 mg/100lb	10 mg/ml	Treatment	NA
Intravenous injection	2-4 mg/100lb	10 mg/ml	Treatment	NA

This oral form is not FDA approved and is used extra-label for horses. Animals that are exhibiting symptoms of stress, debilitation, cardiac disease, or shock require additional care and attention when treated with tranquilizers

Dormosedan Gel

Dormosedan Gel or detomidine hydrochloride, is a safe and effective mild standing sedative for use prior to routine horse care procedures. This is an FDA approved oral sedative that owners can safely administer using a dosing syringe. This sedative is administered by mouth, under the tongue for absorption through the horse's mucous membranes. The syringe delivers the product in 0.25ml increments and is intended for a one time use and should be properly discarded after use. The following table shows the dose volume to be given according to the body weight of the horse:

BODY WEIGHT (lb)	DOSE VOLUME (mL)
330-439	1.00
440-549	1.25
550-659	1.50
660-769	1.75
770-879	2.00
880-989	2.25
990-1,099	2.50
1,100-1,209	2.75
1,210-1,320	3.00

It is important not to use Dormosedan Gel in horses that have pre-existing atrioventricular (AV) or sinoatrial (SA) block, with severe coronary insufficiency, cerebrovascular disease, respiratory disease, or chronic renal failure. Handle gel-dosing syringes with caution to avoid direct exposure to skin, eyes or mouth. It is best to give the sedative 45 minutes before the stressful event. Duration and level of sedation are dose-dependent but usually range from 90 to 180 minutes.

Oral Reserpine

Reserpine is an indole alkaloid anti-hypertensive and anti-psychotic drug. The most common legitimate use in horses is for long-term sedation for enforced rest when recovering from injury, and for this purpose it is very helpful. Reserpine binds to the storage vesicles of neurotransmitters, particularly norepinephrine, serotonin and dopamine. It takes many hours or days to reach full effect and continues to have some subtle sedative effects for many days after the last dose. This sedation can be given intramuscularly or orally. Use caution when administering reserpine in show horses, as the recommended FEI withdrawal is 90 days. The most common adverse effect is diarrhea, which we see regularly. The diarrhea usually resolves with a lower dose of the drug. Different horses vary greatly in their sensitivity to the drug, and other side effects may include colic, sweating, depression, droopy eyes and a dropped penis.

Method	Dosage (click row for calculator)	Concentration	Period	Duration
Oral	0.002-0.008 mg/kg [1]	0.1 mg/tablet	Daily	NA
Oral	0.002-0.008 mg/kg [1]	0.25 mg/tablet	Daily	NA
Intramuscular injection	0.002-0.008 mg/kg [1]	0.5 mg/ml	Daily	NA
Intramuscular injection	0.002-0.008 mg/kg [1]	2.5 mg/ml	Daily	NA

Conclusion

While the horse is sedated, it is important to keep the animal in a quiet, comfortable environment before, during and after treatment. If the horse is stressed while giving the sedative, you may not reach the proper level of sedation as intended. The horse should also be held off of food until the sedative has worn off. Before administering any of these sedatives, make sure that your horse has had a recent exam performed by a veterinarian to ensure that the chosen sedative will be safe and effective for your horse.