

SHEEP AND GOAT FORMULARY

Note that all of these doses are approximations and must be titrated to the animal's strain, age, sex and individual responses. Significant departures from these doses should be discussed with a veterinarian. Doses will also vary depending on what other drugs are being administered concurrently.

All doses are listed as milligrams per kilogram (mg/kg) unless otherwise noted.

DRUG NAME	DOSE (mg/kg) & ROUTE	FREQUENCY	NOTES
Inhalation anesthetics			
Recommended: Isoflurane or Halothane or Sevoflurane	1-3% inhalant to effect (up to 5% for induction). Up to 8% for Sevoflurane	Whenever general anesthesia is required	Concurrent preemptive analgesia is recommended for survival surgery Must use precision vaporizer.
Ketamine combinations			
Ketamine alone	10 mg/kg IM	For surgery also use a local anesthetic at the surgery site	
Ketamine-Xylazine	11 mg/kg IM + 0.22 mg/kg IM		
Diazepam	0.1-0.2 mg/kg IV	As needed	Particularly effective in sheep as a sedative and muscle relaxant
Reversal agents			
Atipamezole	~ 1.0 subcutaneous or IV	Any time medetomidine or xylazine has been used	More specific for medetomidine than for xylazine (as a general rule, Atipamezole is dosed at the same <i>volume</i> as Medetomidine, though they are manufactured at different concentrations).
Other injectable anesthetics and tranquilizers			
Pentobarbital	20-30 mg/kg IV		Quite rapidly metabolized by ruminants, light surgical anesthesia lasts only 15 to 20 minutes in adult animals
Telazol	13 mg/kg IM, IV		
Opioid analgesia			
Recommended: Buprenorphine	0.005 - 0.01 mg/kg IM, SC	Every 4-6 hours	
Butorphanol	0.5 mg/kg SC	Every 2-3 hours	Skin must be properly prepped and patch placed under a protective jacket
Butorphanol	0.15 mg/kg	Every 6-8 hours	
Non-steroidal anti-inflammatory analgesia (NSAID) -- Note that prolonged use may cause renal, gastrointestinal, or other problems			
Carprofen	1.5-2 mg/kg SC, IV	Every 24 hours	For sheep
Phenylbutazone	6 mg/kg IM, IV, PO	Every 6-12 hours	
Aspirin	100 mg/kg PO	Every 12 hours	
Flunixin	1.1-2.2 mg/kg IM, IV	Discuss frequency with veterinary	Consult with vet services regarding repeated administration

		services	
Local anesthetic/analgesics (lidocaine and bupivacaine may be combined in one syringe for rapid onset and long duration analgesia)			
Bupivacaine	1-2 mg/kg maximum dose, mixed with lidocaine at 1-4 mg/kg lidocaine	Use locally before making surgical incision	
Lidocaine	1-4 mg/kg maximum dose, mixed with bupivacaine at 1-2 mg/kg bupivacaine	Use locally before making surgical incision	