

Animals Resources Program (ARP)
Drug Formulary for Laboratory Animals

DOGS

Anticholinergics

	Dose (mg/kg)	Route	Frequency
Atropine	0.04	IM,SC	once
Glycopyrrolate (Robinul-V®)	0.01	IM,SC	once
Scopolamine	0.01-0.02	IM,SC	once

Tranquilizers

	Dose (mg/kg)	Route	Frequency
Acepromazine Preanesthesia	0.05-0.1	IM,SC,IV,PO	once
Sedation (alone)	0.55-1.1	IM,C,IV,PO	once
Chlorpromazine (Thorazine®)	0.5;1.1;3.3	IV,IM,PO	q6-24h
Diazepam (Valium®)	0.5-1.0 (maximum 20 mg)	IV	q4h
Xylazine hydrochloride (Rompun®) ¹	1.1-2.2 (1.1)	IM,SC,(IV)	q4h

¹ Always use atropine to prevent bradycardia

Analgesics

	Dose (mg/kg)	Route	Frequency
Aspirin	25-35	PO	q8h
Butorphanol tartrate (Torbutrol ®)	0.2-0.8	IM	q1-3h
Buprenorphine (Buprenex ®CV)	0.01-0.02	IV, IM,SC	q4-8h
Meperidine (Demerol HCl®)	5-10 (Duration of analgesia 45 min.)	SC,IM	q2-3h
Morphine ³	.025-1.0 (Duration of analgesia 6 hr)	SC,IM	q2-6h
Oxymorphone (Numorphan®)	0.02-0.1	IV,IM	q2-4
Pentazocine (Talwin-V®)	1.0-3.0	IM,IV	q3h

Nonsteroidal Anti-inflammatory Drugs (NSAID)

	Dose (mg/kg)	Route	Frequency
Carprofen (Rimadyl®)	2.2	PO	Twice daily
Etodolac (EtoGesic®/Lodine®)	10-15	PO	Once daily
Ketoprofen	1-2	IM,IV,SC,PO	Once daily
Meloxicam (Metacam®)	.02 (initial dose), 0.1	PO	Once daily
Tepoxalin (Zubrin™)	20 (initial dose), 10	PO	Once daily

Narcotic Antagonists

	Dose (mg/kg)	Route	Frequency
Nalorphine (Nalline®)	.02-.05 (not to exceed 5 mg total dose)	IV,IM	To effect
Naloxone (Narcon®)	0.04	IV,IM,SC	To effect

Neuromuscular Blockers

	Dose (mg/kg)	Route	Frequency
D-tubocurarine ⁴	0.04	IV	
Gallamine triethiodide (Flaxedil®) ⁴	1	IV	q10-20 min
Succinylcholine	0.07	IV	

⁴Effects may be reversed by neostigmine 2-5 mg IV and atropine 0.04 mg/kg (to counter muscarinic effects of neostigmine).

Anesthetics – INJECTABLE

	Dose (mg/kg)	Route	Frequency
Alpha-chloralose*	100	IV	q6-10h
Fentanyl/droperidol (Innovar-Vet® - 0.628 mg/mL & 20mg/mL)	1 mL/7-10 kg	IM	q30-40 min
	1 mL/12-30 kg	IV	q30-40 min
Ketamine HCl/Diazepam	5.0-10.0/0.25	IV	once
Methohexital (Brevital®)	11	IV	To effect
Pentobarbital sodium (Nembutal®)	25-30	IV	To effect
Thiopental sodium (Pentothal®)	25-30	IV	To effect
Urethane *	1000	IV	once

* Terminal studies only

Anesthetics – INHALANT⁵

	Induction (%)	Maintenance (%)
Halothane (Fluothane®)	4.0	.09-1.5
Isoflurane (Forane®)	3.5-4.5	1.0-3.0
Nitrous oxide ⁶	50-75	50-66

⁵ These agents should be used only in ways that prevent exposure to personnel. Induce anesthesia in a closed container and maintain with a nose cone in an appropriately ventilated hood, or use endotracheal intubation.

⁶ Will not induce anesthesia alone in the dog; must be combined with other inhalants.