

## BIRDS

Anatomical and physiological characteristics of birds often make anesthesia in these species hazardous. Special precautions must be taken when surgical procedures are to be performed.

- Birds should not be fasted preoperatively, as prolonged fasting depletes the limited liver glycogen reserve.
- To avoid fatal overdoses, all birds should be weighed accurately before the administration of anesthetics.
- All birds large enough should be intubated regardless of the type of anesthesia used.
- After the anesthetic procedure, it is best to tape the wings loosely to the body to prevent emergence trauma.
- A darkened area with an environmental temperature of 85-95 °F (29-33 °C) is ideal for recovery.

Ideal injection sites:

IM injections: pectoral muscle, thigh  
IV injections: wing vein, jugular vein

Anesthetic dosages can vary depending on the species. The dosages below are primarily for galliforms (chickens) and columbiforms (pigeons). Please consult the ARP if other types of birds are to be utilized.

### Suggested Anesthetic Agents

#### Anticholinergics

	Dose (mg/kg)	Route	Frequency
Atropine <sup>1</sup>	0.5	IM, IV, IO	once

#### Analgesics

	Dose (mg/kg)	Route	Frequency
Butorphanol	0.1-0.5	SC,IM	q12h
Carprofen	2 5-10	IM PO	q24h coated feed available
Flunixin meglumine	1-10	IM	
Ketoprofen	2	IM, SC	q24h

## Anesthetics - INJECTABLE

	Dose (mg/kg)	Route	Frequency
Ketamine hydrochloride	100-200 Repeat 0.10 mg/kg as needed	IM	as needed
0-.25-0.50kg BW	50-100 Repeat 0.10 mg/kg as needed	IM	as needed
0.50-3.0kg BW	20-100 Repeat 0.10 mg/kg as needed	IM	as needed
>3.0kg BW	20-50 Repeat 0.10 mg/kg as needed	IM	as needed
Ketamine HCl/Diazepam (Valium <sup>®</sup> )	25/2.5	IV,IM	once
Ketamine HCl/Xylazine (Rompun <sup>®</sup> ) <sup>3</sup>	20-25/1-5	IV,IM	once
Medetomidine	2	IM	
Thiopental sodium (Pentothal <sup>®</sup> ) <sup>2</sup>	50-60	IV	once

<sup>1</sup>Give 5-10 minutes before anesthetic induction.

<sup>2</sup> Narrow margin of safety. Give all barbiturates "to effect".

<sup>3</sup> Xylazine can produce marked cardiovascular and respiratory depression in birds.

## Anesthetics - INHALANT (requires scavaging system or fume hood)

	Induction%	Maintenance %
Halothane (Fluothane <sup>®</sup> )	2.0-4.0	0.9-1.5
Isoflurane (Forane <sup>®</sup> )	3.5-4.5	1.0-3.0

## Reversal Agents

	Reverses Effects of	Dose (mg/kg)	Route	Frequency
Atipamezole (Antisedan <sup>®</sup> )	Medetomidine	3.75-10	IV,SC	
Yohimbine	Xylazine			

Maintain using constant air flow with O<sub>2</sub> by nose cone or endotracheal tube.