

INDUCTION AND INTUBATION

INDUCTION EQUIPMENT

■ Supplies for IV catheter placement

- IV catheter (see *Equipment* chapter for size selection), T-port, tape, injection cap, normal (non-heparinized) saline for flush
- Local analgesia for IV catheter (if needed for pet comfort and decreased stress):
 - Liposomal lidocaine cream applied for 30 minutes

OR

- Local block using lidocaine and sodium bicarbonate at a 9:1 ratio

■ ET tubes (see *Equipment* chapter for size selection)

- Three sizes appropriate for pet, cuff leak tested
- Water soluble lubricant
- Tie to secure ET tube

■ Laryngoscope

- Small (small dogs and cats) or large blade (medium and large dogs)
- Test light function prior to induction

■ Anesthesia machine and checklist (see *Equipment* chapter for breathing circuit selection and proper leak testing)

■ Induction agent

■ Monitors

PROCEDURE

1 Pre-induction

- Veterinarian performs physical examination post-premedication
- Evaluate HR and rhythm, RR, MM color, CRT
- Ensure completion of *Anesthetic Machine Checklist*
- Ensure completion of *Pre-induction Timeout Checklist* (if utilized)
- Secure induction equipment

2 Induction

- Place patient in sternal recumbency
- Pre-oxygenate if indicated
- Administer induction agent TO EFFECT
- Evaluate patient for readiness of intubation

3 Intubation

- Extend head and neck
- Open mouth and appropriately place laryngoscope
- Place largest allowed size of endotracheal (ET) tube
- Confirm breathing, HR and rhythm, MM color and CRT
- Ensure ET tube positioning
- Secure ET tube
- Attach to breathing circuit
- Inflate ET tube cuff
- Turn on vaporizer
- Lubricate eyes
- Apply all monitoring equipment

PROPOFOL

Dosing for healthy pets with premedication	4 - 6 mg/kg IV
Dosing without premedication	6 - 8 mg/kg
Optimal dosing to limit cardiopulmonary depression (apnea and hypotension)	<ul style="list-style-type: none">■ Administer 1 mg/kg slowly over 15 seconds■ Continue with increments of approximately 0.5 mg/kg over 15 seconds until intubation can be achieved

SIGNS A PET IS READY FOR ET INTUBATION:

- Pet relaxation
- Eyes roll ventrally
- Palpebral reflex weak or absent
- Jaw tone relaxes
- Loss of swallowing, coughing during intubation attempts

For additional information see the *Induction, Monitoring and Recovery* chapter

INDUCTION AND INTUBATION

OXYGEN FLOW RATES FOR ANESTHESIA (L/min)

**NRB Circuit Rates – same throughout procedure
(150 - 300 mLs/kg/minute)**

Weight (kg)	Low	High	Average
1.00	0.50	0.50	0.50
2.00	0.50	0.60	0.50
3.00	0.50	0.90	0.60
4.00	0.60	1.20	0.80
5.00	0.75	1.50	1.00
6.00	0.90	1.80	1.20
7.00	1.05	2.10	1.40

Rebreathing Circuit Rates

Weight (kg)	50 - 100 mL/kg/min		20 - 30 mL/kg/min	
	Transition		Maintenance	
	Low End	High End	Low End	High End
8.00	0.50	0.80	0.50	0.50
10.00	0.50	1.00	0.50	0.50
12.00	0.60	1.20	0.50	0.50
14.00	0.70	1.40	0.50	0.50
16.00	0.80	1.60	0.50	0.50
18.00	0.90	1.80	0.50	0.54
20.00	1.00	2.00	0.50	0.60
22.00	1.10	2.20	0.50	0.66
24.00	1.20	2.40	0.50	0.72
26.00	1.30	2.60	0.52	0.78
28.00	1.40	2.80	0.56	0.84
30.00	1.50	3.00	0.60	0.90
32.00	1.60	3.20	0.64	0.96
34.00	1.70	3.40	0.68	1.02
36.00	1.80	3.60	0.72	1.08
38.00	1.90	3.80	0.76	1.14
40.00	2.00	4.00	0.80	1.20
42.00	2.10	4.20	0.84	1.26
44.00	2.20	4.40	0.88	1.32
46.00	2.30	4.60	0.92	1.38
48.00	2.40	4.80	0.96	1.44
50.00	2.50	5.00	1.00	1.50

Remember: Minimum oxygen flow rate of 0.5 L/min

FLUID THERAPY CHART

Weight (kg)	CANINE	FELINE
	Maintenance mLs to administer	
	5mL/kg/hr	3 mL/kg/hr
0.5	2.5	1.5
1	5	3
2	10	6
3	15	9
4	20	12
5	25	15
6	30	18
7	35	21
8	40	24
9	45	27
10	50	30
11	55	33
12	60	36
13	65	39
14	70	
15	75	
16	80	
17	85	
18	90	
19	95	
20	100	
21	105	
22	110	
23	115	
24	120	
25	125	
26	130	
27	135	
28	140	
29	145	
30	150	
31	155	
32	160	
33	165	
34	170	
35	175	
36	180	
37	185	
38	190	
39	195	
40	200	
41	205	
42	210	
43	215	
44	220	
45	225	
46	230	
47	235	
48	240	
49	245	
50	250	