

# DOPAMINE HCl

## Adrenergic Agonist

DOPamine [800mcg/mL] 0.5kg or less

DOPamine [1600mcg/mL] over 0.5kg

Dosing: 2 to 30mcg/kg/min, usual 5-20mcg/kg/min

### Manual Infusion Calculation:

$$\text{Infusion Rate: (mL/hr)} = \frac{\text{Dose (mcg/kg/min)} \times \text{Weight (kg)} \times 60 \text{ (min/hr)}}{\text{Concentration (mcg/mL)}}$$

## DOPamine [800 mcg/mL]

Use in patients weighing 0.5kg or less

Infusion Rate (mL/hr)

weight (kg)	DOPamine Dose mcg/kg/min										
	1	2	3	4	5	8	10	15	20	25	30
0.40	0.03	0.06	0.09	0.12	0.15	0.23	0.30	0.45	0.60	0.75	0.90
0.45	0.03	0.07	0.10	0.14	0.17	0.25	0.34	0.51	0.68	0.84	1.01
0.50	0.04	0.08	0.11	0.15	0.19	0.28	0.38	0.56	0.75	0.94	1.13

To make 50 mL of DOPamine [800mcg/mL]

[40mg/ 50 mL]:

Add 25mL (40mg) of DOPamine [1600mcg/mL premix] to 25 mL of D5W

### Do not administer

Intermittent medications directly through vasoactive line; this will affect flow rate and hemodynamic stability

### Treatment for Extravasation

Phentolamine: NICU Medical team member will infiltrate area with small aliquots of drug within 12 hours of extravasation.

Report immediately.

### Subsequent Doses Supplied by pharmacy as:

DOPamine 40mg/50mL D5W

DOPamine 80mg/50mL D5W

## DOPamine [1600mcg/mL]

Use in patients weighing over 0.5kg

Infusion rate (mL/hr)

weight (kg)	Dopamine Dose mcg/kg/min											
	1	2	3	4	5	8	10	15	20	25	30	
0.50	0.02	0.04	0.06	0.08	0.09	0.14	0.19	0.28	0.38	0.47	0.56	
0.55	0.02	0.04	0.06	0.08	0.10	0.15	0.21	0.31	0.41	0.52	0.62	
0.60	0.02	0.05	0.07	0.09	0.11	0.17	0.23	0.34	0.45	0.56	0.68	
0.65	0.02	0.05	0.07	0.10	0.12	0.18	0.24	0.37	0.49	0.61	0.73	
0.70	0.03	0.05	0.08	0.11	0.13	0.20	0.26	0.39	0.53	0.66	0.79	
0.75	0.03	0.06	0.08	0.11	0.14	0.21	0.28	0.42	0.56	0.70	0.84	
0.80	0.03	0.06	0.09	0.12	0.15	0.23	0.30	0.45	0.60	0.75	0.90	
0.85	0.03	0.06	0.10	0.13	0.16	0.24	0.32	0.48	0.64	0.80	0.96	
0.90	0.03	0.07	0.10	0.14	0.17	0.25	0.34	0.51	0.68	0.84	1.01	
0.95	0.04	0.07	0.11	0.14	0.18	0.27	0.36	0.53	0.71	0.89	1.07	
1.00	0.04	0.08	0.11	0.15	0.19	0.28	0.38	0.56	0.75	0.94	1.13	
1.10	0.04	0.08	0.12	0.17	0.21	0.31	0.41	0.62	0.83	1.03	1.24	
1.20	0.05	0.09	0.14	0.18	0.23	0.34	0.45	0.68	0.90	1.13	1.35	
1.30	0.05	0.10	0.15	0.20	0.24	0.37	0.49	0.73	0.96	1.22	1.46	
1.40	0.05	0.11	0.16	0.21	0.26	0.39	0.53	0.79	1.05	1.31	1.58	
1.50	0.06	0.11	0.17	0.23	0.28	0.42	0.56	0.84	1.13	1.41	1.69	
1.60	0.06	0.12	0.18	0.24	0.30	0.45	0.60	0.90	1.20	1.50	1.80	
1.70	0.06	0.13	0.19	0.26	0.32	0.48	0.64	0.96	1.28	1.59	1.91	
1.80	0.07	0.14	0.20	0.27	0.34	0.51	0.68	1.01	1.35	1.69	2.03	
1.90	0.07	0.14	0.21	0.29	0.36	0.53	0.71	1.07	1.43	1.78	2.14	
2.00	0.08	0.15	0.23	0.30	0.38	0.56	0.75	1.13	1.50	1.88	2.25	
2.20	0.08	0.17	0.25	0.33	0.41	0.62	0.83	1.24	1.65	2.06	2.48	
2.40	0.09	0.18	0.27	0.36	0.45	0.68	0.90	1.35	1.80	2.25	2.70	
2.50	0.09	0.19	0.28	0.38	0.47	0.70	0.94	1.41	1.88	2.34	2.81	
2.60	0.10	0.20	0.29	0.39	0.49	0.73	0.96	1.46	1.95	2.44	2.93	
2.80	0.11	0.21	0.32	0.42	0.53	0.79	1.05	1.58	2.10	2.63	3.15	
3.00	0.11	0.23	0.34	0.45	0.56	0.84	1.13	1.69	2.25	2.81	3.38	
3.20	0.12	0.24	0.36	0.48	0.60	0.90	1.20	1.80	2.40	3.00	3.60	
3.40	0.13	0.26	0.38	0.51	0.64	0.96	1.28	1.91	2.55	3.19	3.83	
3.60	0.14	0.27	0.41	0.54	0.68	1.01	1.35	2.03	2.70	3.38	4.05	
3.80	0.14	0.29	0.43	0.57	0.71	1.07	1.43	2.14	2.85	3.56	4.28	
4.00	0.15	0.30	0.45	0.60	0.75	1.13	1.50	2.25	3.00	3.75	4.50	
4.50	0.17	0.34	0.51	0.68	0.84	1.27	1.69	2.53	3.38	4.22	5.06	
5.00	0.19	0.38	0.56	0.75	0.94	1.41	1.88	2.81	3.75	4.69	5.63	
5.50	0.21	0.41	0.62	0.83	1.03	1.55	2.06	3.09	4.13	5.16	6.19	
6.00	0.23	0.45	0.68	0.90	1.13	1.69	2.25	3.38	4.50	5.63	6.75	

To make 50 mL of DOPamine [1600 mcg/mL]

[80mg/ 50 mL]:

Pyxis machine stocks a premix bag 400 mg/250 mL (1600 mcg/mL). Draw up 50 mL of this solution

### Compatibility :

Y site Compatible with TPN, intralipids, DOBUTamine and milrinone.

**Incompatible** with SMOF lipids.

#### References:

LHSC NICU Medication Manual accessed online August 29th, 2014.

LHSC PCCU Standard Concentrations reference sheet

LEXI-COMP Online—Lexi-Drugs Online. Dopamine HCl

LHSC NICU Medication Manual

Dosing Guidelines for Drugs Used in the Paediatric Critical Care Unit, Children's Hospital LHSC 2009

Drug Compatibilities with All-in-one T.P.N. Baxtar 2000

Micromedex 2.0 (Healthcare Series— IV Compatibility, Y-Site)

Reference sheet prepared September 2019