

**DOPAMINE (Intropin®)**  
**(Base Hospital Order Only)**

**Classification:** Sympathomimetic agent (catecholamine)

**Actions:** **Moderate Dose: (5-10 mcg/kg/min) ( $\beta$  receptors)**  
1. Increases inotropy and may increase chronotropy  
2. Increases BP by stimulating  $\beta$ 1 receptors increasing cardiac output with small increase in peripheral vascular resistance.

**High Dose: (Over 10-20 mcg/kg/min) (primarily  $\alpha$  receptors, some  $\beta$ )**  
1. Causes vasoconstriction  
2. Increases inotropy and chronotropy  
3. Increases BP by stimulating  $\alpha$  and  $\beta$ 1 receptors

**Indications:**  
1. Symptomatic bradycardia persisting after prior therapies  
2. Cardiogenic shock with signs/symptoms of CHF or not responding to fluid challenge  
3. Hypotension

**Contraindications:**  
1. **Hypovolemia**  
2. **Tachydysrhythmias**

**Adverse Effects:** **Cardiovascular Respiratory**  
Tachycardia dyspnea  
Hypertension increase O2 demand  
Ventricular irritability  
Chest pain

**Gastrointestinal**  
Nausea/vomiting

**Administration:** **ADULT DOSE**  
400 mg in 250 ml NS (1600 mcg/ml) IV drip, by base physician order: 5-20 mcg/kg/min, titrated to blood pressure.

**PEDIATRIC DOSE**  
400 mg in 250 ml NS (1600 mcg/ml) IV drip, by base physician order: 5-20 mcg/kg/min, titrated to blood pressure.

**Onset:** 5 minutes

**Duration:** 5-10 minutes

**DOPAMINE (Intropin®) (Base Physician Order Only) CONTINUED****Notes:**

- Consider expediting transport in cases requiring Dopamine administration.
- Dopamine may be inactivated by alkaline solutions such as Sodium Bicarbonate.
- Start in the largest possible vein and ensure patency prior to administration, as Dopamine is likely to cause tissue necrosis upon entering the interstitial space.
- Establish a second IV line for other medications, as the Dopamine infusion should not be interrupted.
- In the upper end of the moderate dosage range,  $\alpha$  receptors are stimulated and peripheral vasoconstriction occurs.
- In the high dose range,  $\alpha$  receptors override the dopaminergic receptors, resulting in decreased renal and mesenteric perfusion.

Weight in:		Dose			
		5 mcg/kg	10 mcg/kg	15 mcg/kg	20 mcg/kg
lbs	kg	Microdrips per Minute			
100	45	9	17	26	34
110	50	9	19	28	38
120	55	10	20	31	41
130	59	11	22	33	44
140	64	12	24	36	48
150	68	13	26	38	51
160	73	14	27	41	55
170	77	14	29	43	58
180	82	15	31	46	61
190	86	16	32	49	65
200	91	17	34	51	68
210	95	18	36	54	72
220	100	19	38	56	75
230	105	20	39	59	78
240	109	20	41	61	82
250	114	21	43	64	85
260	118	22	44	66	89
270	123	23	46	69	92
280	127	24	48	72	95
290	132	25	49	74	99
300	136	26	51	77	102
310	141	26	53	79	106
320	145	27	55	82	109
330	150	28	56	84	113
340	155	29	58	87	116