

**ORANGE COUNTY EMS AGENCY  
PARAMEDIC PHARMACOLOGY HANDBOOK**

<b>MEDICATION:</b> DOPAMINE HYDROCHLORIDE (Intropin)	<b>ADULT DOSE</b>	<b>PEDIATRIC DOSE</b>	<b>SIDE EFFECTS</b>	<b>PRECAUTIONS/COMMENTS</b>
<p><b>CLASSIFICATION:</b> Sympathomimetic</p> <p><b>MECHANISM OF ACTION:</b></p> <ul style="list-style-type: none"> <li>• Stimulates alpha, beta, and dopaminergic receptors:               <ul style="list-style-type: none"> <li>– At lower doses: beta adrenergic effects (increased heart rate, increased force of contraction, increased cardiac output) and dopaminergic effects (dilation of renal and mesenteric blood vessels) dominate.</li> <li>– At higher doses: alpha adrenergic effects (peripheral vasoconstriction) dominate, and at doses greater than 20 mcg/kg/min, constriction of renal and mesenteric vessels occurs.</li> </ul> </li> </ul> <p><b>INDICATIONS:</b></p> <ul style="list-style-type: none"> <li>• Cardiogenic shock.</li> <li>• Distributive shock:               <ul style="list-style-type: none"> <li>– Septic shock after adequate fluid administration.</li> <li>– Neurogenic shock.</li> <li>– Anaphylaxis with hypotension.</li> </ul> </li> </ul> <p><b>DOSAGE FORM:</b></p> <ul style="list-style-type: none"> <li>• 400 mg/10 mL, 10 mL prefilled syringe</li> <li>• 400 mg/250 mL D5W, prefilled bag</li> </ul>	<ul style="list-style-type: none"> <li>• 2-20 mcg/kg/min IV infusion. Titrate to signs of adequate perfusion.</li> <li>• Prepare a concentration of 1600 mcg/mL (400 mg/250 mL NS).</li> </ul>	<ul style="list-style-type: none"> <li>• 5-20 mcg/kg/min IV infusion. Titrate to signs of adequate perfusion.</li> <li>• Prepare a concentration 320 mcg/mL (80 mg/250 mL NS).</li> </ul>	<ul style="list-style-type: none"> <li>• Dysrhythmias</li> <li>• Hypertension</li> </ul>	<ul style="list-style-type: none"> <li>• Use cautiously in patients with tachydysrhythmia.</li> <li>• Ventricular dysrhythmias may occur requiring a reduction in infusion rate.</li> <li>• Higher dosages (10-20 mcg/kg/min) may cause excessive vasoconstriction.</li> <li>• Alkaline solutions inactivate dopamine; do not infuse simultaneously with NaHCO<sub>3</sub>.</li> <li>• Administer with approved rate flow regulator.</li> <li>• See dopamine dose/flow rate chart.</li> </ul>

*Ben [Signature]*

**DOPAMINE HYDROCHLORIDE (INTROPIN)**

<b>Adult</b>	<b>400 mg/250 mL</b>		<b>mcg/kg/min x kg x 0.0375</b>	
	<b>5 mcg/kg/min</b>	<b>10 mcg/kg/min</b>	<b>15 mcg/kg/min</b>	<b>20 mcg/kg/min</b>
<b>35 kg</b>	5 mL/hr	10 mL/hr	20 mL/hr	25 mL/hr
<b>40 kg</b>	7.5 mL/hr	15 mL/hr	20 mL/hr	30 mL/hr
<b>45 kg</b>	7.5 mL/hr	15 mL/hr	25 mL/hr	30 mL/hr
<b>50 kg</b>	7.5 mL/hr	15 mL/hr	25 mL/hr	35 mL/hr
<b>55 kg</b>	10 mL/hr	20 mL/hr	30 mL/hr	40 mL/hr
<b>60 kg</b>	10 mL/hr	20 mL/hr	35 mL/hr	45 mL/hr
<b>65 kg</b>	10 mL/hr	20 mL/hr	35 mL/hr	45 mL/hr
<b>70 kg</b>	10 mL/hr	25 mL/hr	40 mL/hr	50 mL/hr
<b>75 kg</b>	10 mL/hr	25 mL/hr	40 mL/hr	55 mL/hr
<b>80 kg</b>	15 mL/hr	30 mL/hr	45 mL/hr	60 mL/hr
<b>85 kg</b>	15 mL/hr	30 mL/hr	45 mL/hr	60 mL/hr
<b>90 kg</b>	15 mL/hr	30 mL/hr	50 mL/hr	60 mL/hr
<b>95 kg</b>	15 mL/hr	35 mL/hr	50 mL/hr	70 mL/hr
<b>100 kg</b>	20 mL/hr	35 mL/hr	55 mL/hr	70 mL/hr
<b>110 kg</b>	20 mL/hr	40 mL/hr	60 mL/hr	80 mL/hr
<b>120 kg</b>	20 mL/hr	45 mL/hr	70 mL/hr	90 mL/hr
<b>130 kg</b>	25 mL/hr	50 mL/hr	70 mL/hr	100 mL/hr
<b>140 kg</b>	25 mL/hr	50 mL/hr	80 mL/hr	100 mL/hr
<b>150 kg</b>	25 mL/hr	55 mL/hr	80 mL/hr	100 mL/hr

<b>Pediatric</b>	<b>80 mg/250 mL</b>		<b>mcg/kg/min x kg x 0.1875</b>	
<b>Use Broselow tape</b>				
	<b>5 mcg/kg/min</b>	<b>10 mcg/kg/min</b>	<b>15 mcg/kg/min</b>	<b>20 mcg/kg/min</b>
<b>3kg</b>	-	5mL/hr	7.5mL/hr	10mL/hr
<b>4kg</b>	-	7.5mL/hr	10mL/hr	15mL/hr
<b>5kg</b>	5mL/hr	10mL/hr	15mL/hr	20mL/hr
<b>6kg</b>	5mL/hr	10mL/hr	15mL/hr	20mL/hr
<b>7kg</b>	5mL/hr	15mL/hr	20mL/hr	25mL/hr
<b>8kg</b>	7.5mL/hr	15mL/hr	20mL/hr	30mL/hr
<b>9kg</b>	10mL/hr	15mL/hr	25mL/hr	30mL/hr
<b>10kg</b>	10mL/hr	20mL/hr	30mL/hr	35mL/hr
<b>11kg</b>	10mL/hr	20mL/hr	30mL/hr	40mL/hr
<b>12kg</b>	10mL/hr	20mL/hr	30mL/hr	45mL/hr
<b>13kg</b>	10mL/hr	25mL/hr	35mL/hr	50mL/hr
<b>14kg</b>	10mL/hr	25mL/hr	40mL/hr	50mL/hr
<b>15kg</b>	15mL/hr	30mL/hr	40mL/hr	55mL/hr
<b>16kg</b>	15mL/hr	30mL/hr	45mL/hr	60mL/hr
<b>17kg</b>	15mL/hr	30mL/hr	50mL/hr	60mL/hr
<b>18kg</b>	15mL/hr	35mL/hr	50mL/hr	70mL/hr
<b>19kg</b>	20mL/hr	35mL/hr	55mL/hr	70mL/hr
<b>20kg</b>	20mL/hr	40mL/hr	55mL/hr	70mL/hr
<b>22kg</b>	20mL/hr	40mL/hr	60mL/hr	80mL/hr
<b>24kg</b>	20mL/hr	45mL/hr	70mL/hr	90mL/hr
<b>26kg</b>	25mL/hr	50mL/hr	70mL/hr	100mL/hr
<b>28kg</b>	25mL/hr	50mL/hr	80mL/hr	100mL/hr
<b>30kg</b>	30mL/hr	55mL/hr	80mL/hr	100mL/hr
<b>32kg</b>	30mL/hr	60mL/hr	90mL/hr	125mL/hr
<b>34kg</b>	30mL/hr	60mL/hr	100mL/hr	125mL/hr