



✓ = Do Not Substitute

**UNSAFE ABBREVIATIONS - please use bolded items**

- 1. 'Daily' not 'qd'
- 2. 'micrograms' not 'µg'
- 3. 'Vidarabine' not ARA-A
- 4. 'Units' not 'u'
- 5. 'Morphine' not 'MSO4' or 'MS'
- 6. 'International Units' not 'IU'
- 7. 'Methotrexate' not 'MTX'
- 8. 'Every other day' not 'Q.O.D.'
- 9. 'Magnesium Sulfate' not 'MgSO4'
- 10. No trailing zeros (1mg not 1.0 mg)
- 11. Always use leading zeros (0.1 mg not .1 mg)

<input checked="" type="checkbox"/>	<b>HYDROMorphone (DILAUDID) PCA Orders (Patient Controlled Analgesia) for PCA Pump</b> <i>Pain Management / Equianalgesic Charts on Reverse</i>																																				
	<input type="checkbox"/> HYDROMorphone 0.2 mg/mL ( 6 mg per 30 mL) 48 hr stability/New order required within 72 hrs <b>NOTE: HYDROMorphone (DILAUDID) 1.5 mg IV equivalent to Morphine 10 mg IV</b>																																				
	<b>Loading Dose</b> _____ mg (optional) (suggest 0 – 0.6 mg) When initiating treatment for acute pain, the clinician should ensure that the patient receives a loading dose to achieve adequate analgesia. If pt has received an adequate loading dose prior to initiating PCA, then no loading dose is needed.																																				
	<b>PCA Dose</b> _____ mg (suggest 0.1 – 0.3 mg)																																				
	<b>Continuous Rate</b> _____ mg / hour (suggest 0 – 0.2 mg / hour) <b>Warning:</b> Continuous rate is appropriate in opioid tolerant patients and patients with poor pain control after repeated bolus dosing.																																				
	<b>Lockout Interval</b> _____ minutes. (suggest 10 or 15 minutes)																																				
	<b>Hourly dose limit</b> _____ mg (1 hr lockout) (maximum amount of drug/hr including continuous rate)																																				
	<b>EXAMPLES</b>																																				
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">PCA Dose</th> <th style="width: 25%;">Continuous</th> <th style="width: 25%;">Lockout Interval</th> <th style="width: 25%;">1 Hour Limit</th> </tr> </thead> <tbody> <tr><td>0.1 mg</td><td>0 mg / hour</td><td>10 minutes</td><td>0.6 mg</td></tr> <tr><td>0.1 mg</td><td>0.1 mg / hour</td><td>10 minutes</td><td>0.7 mg</td></tr> <tr><td>0.2 mg</td><td>0 mg / hour</td><td>10 minutes</td><td>1.2 mg</td></tr> <tr><td>0.2 mg</td><td>0.1 mg / hour</td><td>10 minutes</td><td>1.3 mg</td></tr> <tr><td>0.2 mg</td><td>0.2 mg / hour</td><td>15 minutes</td><td>1 mg</td></tr> <tr><td>0.3 mg</td><td>0 mg / hour</td><td>15 minutes</td><td>1.2 mg</td></tr> <tr><td>0.3 mg</td><td>0 mg / hour</td><td>10 minutes</td><td>1.8 mg</td></tr> <tr><td>0.3 mg</td><td>0.1 mg / hour</td><td>15 minutes</td><td>1.3 mg</td></tr> </tbody> </table>	PCA Dose	Continuous	Lockout Interval	1 Hour Limit	0.1 mg	0 mg / hour	10 minutes	0.6 mg	0.1 mg	0.1 mg / hour	10 minutes	0.7 mg	0.2 mg	0 mg / hour	10 minutes	1.2 mg	0.2 mg	0.1 mg / hour	10 minutes	1.3 mg	0.2 mg	0.2 mg / hour	15 minutes	1 mg	0.3 mg	0 mg / hour	15 minutes	1.2 mg	0.3 mg	0 mg / hour	10 minutes	1.8 mg	0.3 mg	0.1 mg / hour	15 minutes	1.3 mg
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	<b>Routine Patient Care Orders:</b> <ul style="list-style-type: none"> <li>• No additional IV, IM, or po opioids should be administered while patient is receiving PCA</li> <li>• Start IV NS at 40 mL per hour, if patient does not have IV orders</li> <li>• If patient persistently complains of pain greater than 5 on the pain scale, notify ordering physician</li> <li>• Monitor respiratory status, level of sedation, pain rating and side effects every 1 - 2 hours for the first 24 hours, then every 4 hours while on PCA. Monitor vital signs every 4 hours while on PCA*</li> <li>• Discontinue PCA and contact ordering physician for <b>respiratory rate less than 12 per minute*</b></li> <li>• Patient is to be on continuous pulse oximetry. Place order for RT Oximetry/Medication Monitoring. (Excluded are palliative care/hospice/code level 3 patients unless otherwise ordered.)</li> <li>• Patient to receive oxygen to maintain SaO<sub>2</sub> at 92% or greater. (Excluded are palliative care/hospice/code level 3 patients unless otherwise ordered.)</li> <li>• NARCAN (naloxone) 0.4 mg vial available on division</li> <li>• Administer NARCAN for <b>respiratory rate less than 8, apnea, or patient unresponsive</b> per NARCAN Protocol. Contact ordering physician STAT. See "Protocol for Administration and Titration of IV NARCAN"</li> <li>• Give patient and patient's family PCA pamphlet</li> </ul> <p>*See "Protocol for Administration of HYDROMorphone (DILAUDID) Using a PCA Pump"</p>																																				
	<b>Additional Orders:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> metoclopramide 10 mg IV over 2 minutes every 6 hours prn for nausea/vomiting</li> <li><input type="checkbox"/> ondansetron 4 mg IV over 2-3 minutes every 6 hours prn for nausea/vomiting</li> <li><input type="checkbox"/> diphenhydramine 25 mg IV over 1 minute every 6 hours prn for pruritis</li> <li><input type="checkbox"/> nalbuphine 2.5 mg IV over 3-5 minutes x 1 prn for pruritis. May repeat in 1 hour x 1</li> <li><input type="checkbox"/> ketorolac <input type="checkbox"/> 15 mg <input type="checkbox"/> 30 mg IV every 6 hours prn for breakthrough pain (not to exceed 5 days)</li> </ul>																																				
	<hr/> <b>Date / Required      Time / Required      Physician Signature / Required</b>																																				

**HYDROMorphone PCA Orders  
for PCA Pump**

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**St. Luke's Hospital**

232 S. Woods Mill Road    Chesterfield, MO 63017

## Pain Management / Equianalgesic Charts

					Equianalgesic Dose	
Drug	Brand Name	Onset	Peak	Half Life	IM	Oral
Butorphanol	Stadol	10 min	60 min	3-5 hours	2 mg	N/A
Codeine		15-30 min	30-60 min	4-6 hours	120 mg	200 mg
Fentanyl	Sublimaze	7-8 min	20-30 min	1-2 hours	0.1 mg	N/A
Hydrocodone		30 min-1hr	1-2 hours	4-8 hours	N/A	N/A
Hydromorphone	Dilaudid	15-30 min	30-60 min	2-4 hours	1.5 mg	7.5 mg
Meperidine	Demerol	10-45 min	30-60 min	3-4 hours	75 mg	300 mg
Methadone	Dolophine	30-60 min	30-60 min	15-30 hours	10 mg	20 mg
Morphine		15-60 min	30-60 min	2-4 hours	10 mg	30 mg
Nalbuphine	Nubain	< 15 min	60 min	5 hours	10 mg	N/A
Oxycodone	Oxycontin	15-30 min	30-60 min	3-4 hours	N/A	30 mg
Propoxyphene	Darvon	30-60 min	2-2.5 hours	3.5-15 hours	N/A	130 mg

### HYDRomorphone PCA Orders for PCA Pump

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