

# Pain Algorithm

**MILD PAIN**  
Pain Scale Rating 1/5 (0-5 Scale) or 1-3/10 (0-10 Scale)

**Complete Pain Assessment.**  
Establish probable cause of pain when possible. Determine goal for pain relief with patient and acceptable time frame for when relief will occur.  
**Always combine pharmacological interventions with non-pharmacological interventions.**  
**ANALGESICS SHOULD NOT BE HELD UNTIL CAUSE OF PAIN IS DETERMINED**

Initiate Non-Pharmacological Intervention

\*Partial Relief / No Relief: **Pain Goal Not Met**

Relief: **Pain Goal Met**

**EXAMPLES OF ANALGESIC CHOICES**

acetaminophen ibuprofen celecoxib (Celebrex) refexocib (Vioxx)	650 mg q 4 hrs po or pr 200 mg 2-3 tabs q4hrs po 100 mg po bid 12.5-25 mg po qd	☐ MDD 4000mg ☐ MDD 3200 mg ☐ MDD 400mg ☐ MDD 50mg
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Continue Non-Pharmacological Interventions

\*Partial Relief / No Relief: **Pain Goal Not Met**

**REASSESS**

- ▶ Review initial pain assessment for changes
- ▶ Analgesics given as ordered
- ▶ Need for upward titration
- ▶ Need for adjuvant meds?
- ▶ Need to give before activities?
- ▶ Is time interval appropriate?

\*Partial Relief / No relief: **Pain Goal Not Met**

\*Consult physician. Develop plan for ongoing communication with physician until patient's pain goal is met. Consider initiation of Moderate Pain Algorithm

Relief: **Pain Goal Met**

Continue interventions as needed  
Reassess at regular intervals  
Titrate as needed

☐ MDD = Maximum Daily dose  
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**MODERATE PAIN**  
**Pain Scale Rating 2-3/5 (0-5 Scale) or 4-6/10 (0-10 Scale)**

**Complete Pain Assessment.**  
 Establish probable cause of pain when possible. Determine goal for pain relief with patient and acceptable time frame for when relief will occur.  
**Always combine pharmacological interventions with non-pharmacological interventions.**  
**ANALGESICS SHOULD NOT BE HELD UNTIL CAUSE OF PAIN IS DETERMINED.**

Initiate Non-Pharmacological Interventions

**Examples of Analgesic Choices**

Tylenol # 2,3,4 (300mg acetaminophen/ 15mg (#2), 30mg (#3), 60mg (#4) mg codeine	1-2 tabs po	q 4hrs
Ultram (tramadol) 50 mg	1-2 tabs po	q 6hrs
Lortab 2.5/500 (2.5mg hydrocodone/500 mg acetaminophen)	1-2 tabs po	q 4hrs
Roxicet (5mg oxycodone/325 mg. acetaminophen)	1-2 tabs po	q 4hrs
Percocet 2.5/325, 5/325, 7.5/500 mg of oxycodone/acetaminophen	1-2 tabs po	q 4hrs
Vicodin (5mg hydrocodone/500 acetaminophen)	1-2 tabs po	q 4hrs
Vicodin ES (7.5 hydrocodone/750 mg acetaminophen)	1-2 tabs po	q 4hrs
Lortab 7.5/500 (7.5mg hydrocodone/500 mg acetaminophen)	1-2 tabs po	q 4hrs
Vicoprofen 7.5/200 (7.5 hydrocodone/200 ibuprofen)	1-2 tabs po	q 4hrs

NOTE: Maximum Daily Dose (MDD) of acetaminophen is 4000 mgs

Continue Non-Pharmacological Interventions

**\*Partial Relief / No relief: Pain Goal Not Met**

**REASSESS**

- ▶ Review initial pain assessment for changes
- ▶ Analgesics given as ordered?      ▶ Need to give before activities?
- ▶ Need for upward titration?        ▶ Is time interval appropriate?
- ▶ Need for adjuvant meds?

**\*Partial Relief / No Relief : Pain Goal Not Met**

**\*Consult physician. Develop plan for ongoing communication with physician until patient's pain goal is met. Consider initiation of Severe Pain Algorithm**

**Relief: Pain Goal Met**

Continue interventions as above. Reassess at regular intervals. Titrate as needed. **If pain is constant, convert to long acting drug at equianalgesic dose.** (See Reference Information)

**SEVERE PAIN**  
**Pain Scale rating 4-5/5 (0-5 Scale) or 7-10/10 (0-10 Scale)**

**Complete Pain Assessment.**  
 Establish probable cause of pain when possible. Determine goal for pain relief with patient and acceptable time frame for when relief will occur.  
**Always combine pharmacological interventions with non-pharmacological interventions.**  
**ANALGESICS SHOULD NOT BE HELD UNTIL CAUSE OF PAIN IS DETERMINED.**

Initiate Non-Pharmacological Interventions

**Examples of Analgesic Choices**  
 Immediate Release, Short Acting Drugs (lowest dose available is listed)  
 Note: There is no ceiling dose or maximum daily dose for these drugs

morphine sulfate		
Tabs	10 mg	q 2-4hr po or sl
Elixir	20mg/ml or 2mg/ml	q 2-4 hrs po or sl
Suppository	10 mg	q 2-4 hrs pr
Parenteral	1-2mg	q 15-30 min SC or IV
oxycodone		
Tabs	5mg	q 2-4 hrs po
Elixir	5mg/ml or 20mg/ml	q 2-4 hrs po
hydromorphone (Dilaudid)		
Suppository	3mg	q 4 hrs pr

**NOTE: Dilaudid 3mg suppository is equianalgesic to morphine sulfate 15 mg po or pr**

\*Partial Relief / No Relief : **Pain Goal Not Met**

Continue Non-Pharmacologic Interventions

- REASSESS**
- ▶ Review initial pain assessment for changes
  - ▶ Analgesics given as ordered
  - ▶ Need for change to different opioid
  - ▶ Need to change route of administration
  - ▶ Need for upward titration
  - ▶ Need for adjuvant drugs?
  - ▶ Need to give before activities?
  - ▶ Is time interval appropriate?

\*Partial Relief / No Relief, **Pain Goal Not Met.** Consult with physician. Develop plan for ongoing communication with physician until patient's pain goal is met.

**Relief: Pain Goal Met**

Reassess at regular intervals. Titrate as necessary to maintain pain control. **If pain is constant convert to long acting drugs, at equianalgesic dose.** (See Reference Information)

## REFERENCE INFORMATION

### *Opioid Equivalency Table*

Equianalgesic doses are approximate. Individual patient response must be observed. **Caution:** The doses listed ARE NOT recommended starting doses

Short Acting Drugs	Dose (mg) Parenteral	(mg) Oral	Duration (hour)
morphine (MS soluble, MSIR) <sup>1,2,3</sup>	10	30	2-4
hydromorphone (Dilaudid) <sup>1,2,3</sup>	1.5	7.5	2-4
oxycodone <sup>4</sup>		30	2-4
hydrocodone <sup>5</sup>		30	2-4

- 1 Available as a liquid
- 2 Available as a suppository
- 3 May be used as an IV or subcutaneous infusion
- 4 Percocet contains varying strengths of oxycodone and acetaminophen per tablet. (2.5/325, 5/325, 7.5/500) Read label carefully.
- 5 Available only in combination with acetaminophen, ASA, or NSAID in tablet form; dosages range from 2.5-10.0 mg/tablet.

### REFERENCE TABLE

Long Acting Drug	Strength available	Duration/Hr
Oramorph SR(1)	15, 30, 60, 100 mg	8 - 12
MS Contin(1)	15, 30, 60, 100, 200mg	8 - 12
Kadian(2)	20, 50, 100 mg	12 - 24
Oxycontin(1,3)	10, 20, 40, 80, 160 mg	8 - 12
Duragesic (4)	25,50,75,100 mcg	48 - 72

1. Must be given as intact pills, cannot be crushed or used in G or J tubes
2. Capsule may be opened and sprinkled in food.
3. Consult package insert for conversion ratios for short acting to long acting opioids.
4. 24 hour po morphine dose ÷2=mcg/hr for the transdermal fentanyl patch (Duragesic)

#### ADJUVANT ANALGESICS

#### STARTING DOSE

##### *Anticonvulsants*

Gabapentin (Neurontin) po	100mg q 8 hrs
Clonazepam (Klonopin) po	0.5 mg q 8 hrs
Carbamazepine (Tegretol) po	100 mg BID

##### *Antidepressants*

Desipramine (Norpramin)po	10 mg QHS
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##### *Corticosteroids*

Dexamethasone (Decadron) po	2-8 mg BID
Prednisone 40-80 po	40-80 mg daily



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