

HALF LIFE (hours)	DURATION (hours)
1.5-2	3-7
3-4	4-6
2-3	4-5
15-190 (N.B. Huge Variaton)	6-12
13-22 (Patch) 7 (Lozenge) 12-22 (Buccal) 15-25 (Intranasal)	48-72 (Patch) 60+ min (Lozenge) 120+ min (Buccal) 120+ min (Intranasal)
3	4-6
3.3-4.5	4-6
7-10	4-6

GUIDELINES

- Evaluate pain on all patients using a 0 -10 scale
 - Mild pain: 1 – 3
 - Moderate pain: 4 – 7
 - Severe pain: 8 – 10
- For chronic moderate or severe pain:
 - Give baseline medication around the clock
 - Order 10% total daily dose as a PRN given q 1-2h for oral and q 30-60 min for SC/IV
 - For continuous infusion, PRN can be either the hourly rate q 15 minutes or 10% of total daily dose q 30-60 minutes.
 - Adjust baseline upward daily in amount roughly equivalent to total amount of PRN
 - Negotiate with patient target level of relief, but usually at least achieving level <4.
- In general, oral route is preferable, then trans-cutaneous > subcutaneous > intravenous.
- When converting from one opioid to another, some experts recommend reducing the equianalgesic dose by 1/3 to 1/2, then titrate as in #2 above.
- Elderly patients, or those with severe renal or liver disease, should start on half the usual starting dose.
- If parenteral medication is needed for mild to moderate pain, use half the usual starting dose of morphine or equivalent.
- Refer to PDR for additional fentanyl guidelines.
- Naloxone (Narcan) should only be used in emergencies:
 - Dilute naloxone 0.4 mg with 9 ml NS
 - Give 0.1mg (2.5 ml) slow IVP until effect
 - Monitor patient q15 minutes
 - May need to repeat naloxone again in 30-60 minutes
- Short-acting preparations should be used acutely & post-op. Switch to long-acting preparations when pain is chronic and the total daily dose is determined.

Information adapted from Facts and Comparisons 2008 and APS Principles of Analgesic Use in the Treatment of Acute Pain and Cancer Pain (4th Ed.) 1999.

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Equianalgesic Table for Adults

Half-life, Duration,
Dosing and Guidelines
(Tailor care to individual needs.)

The 5th Vital Sign Pain[®]

Community Principles of Pain Management

Adapted by Specialty Advisory Group, 2002
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Reviewed and adopted by AAHPM, 2009

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Additional pain management resources are
available at CompassionAndSupport.org



Compassion and Support
at the End of Life
CompassionAndSupport.org

MEDICATION	EQUIANALGESIC DOSE (for chronic dosing)		USUAL STARTING DOSES Adult > 50KG; for opioid naive patients (♦1/2 dose for elderly, or severe renal or liver disease)		COMMENTS	PAIN	
	IM/IV onset 15-30 min	PO onset 30-60 min	PARENTERAL	PO			
MORPHINE	10 mg	30 mg	2.5-5 mg SC/IV q3-4h (♦1.25-2.5 mg)	5-15 mg q3-4h IR or Oral Solution (♦2.5-7.5 mg)	IR tablets (15,30 mg); Rectal suppository (5,10,20,30 mg) Oral Solution (2 mg/ml, 4 mg/ml); Conc (20 mg/ml) can give buccally ER tablets (15, 30, 60, 100, 200 mg) q8-12h (MS Contin) ER capsules (10,20,30,50,60,70,80,100,130,150,200mg) q12-24h (Kadian) ER capsules (30,45,60,75,90,120mg) q24h (Avinza) Not recommended in renal failure		
OXYCODONE	Not Available	20 mg	Not Available	5-10 mg q3-4h IR or Oral Solution (♦2.5 mg)	IR capsule (5mg); IR tablets (5,10,15,20,30mg) Oral solution (5mg/5ml) Concentrate (20mg/ml) ER Tablets (10,15,20,30,40,60,80mg) q8-12h (Oxycontin)-Designed with abuse-deterrent properties APAP Combo - 2.5-10mg oxycodone combined with 300-325mg APAP; Ibuprofen combo and ASA combo also available Combos generally not recommended for chronic use Not enough literature regarding dosing in renal failure. Use caution.		
HYDROMORPHONE	1.5 mg	7.5 mg	0.2-0.6 mg SC/IV q2-3h (♦0.2 mg)	1-2 mg q3-4h (♦0.5-1 mg)	Tablets (2,4,8mg); Oral solution (1mg/ml); Suppository (3mg) ER tablets (8,12,16,32mg) - Designed with abuse-deterrent properties Use carefully in renal failure.		
METHADONE (see separate sheet with detailed dosing information)	1/2 oral dose 2mg PO methadone = 1mg parenteral methadone	24 hour oral morphine < 30 mg 31-99 mg 100-299 mg 300-499 mg 500-999 mg 1000-1200 mg > 1200 mg	Oral morphine: methadone ratio 2:1 4:1 8:1 12:1 15:1 20:1 consider consult	1.25-2.5 mg q8h (♦1.25 mg) Consider Palliative Care or Pain Service Consult	2.5-5 mg q8h (♦1.25-2.5 mg) Consider Palliative Care or Pain Service Consult	Tablets (5,10mg); Solution (1mg/ml, 2mg/ml); Concentrate (10 mg/ml) Usually q12h or q8h; Long variable t½; and high interpatient variability Small dose change makes big difference in blood level. Tends to accumulate with higher doses, always advise "hold for sedation" Because of long half-life, do not use methadone prn unless experienced Many drug interactions with commonly used medications When converting from oral to parenteral, cut dose in half for safety When converting from parenteral or oral, keep dose the same Acceptable with renal disease	
FENTANYL	100 mcg (single dose) t 1/2 and duration of parenteral doses variable	24 hour MS dose 30-59 mg 60-134 mg 135-224 mg 225-314 mg 315-404 mg	Initial patch dose 12 mcg/hr 25 mcg/hr 50 mcg/hr 75 mcg/hr 100 mcg/hr	25-50 mcg IM/IV q1-3h (♦12.5-25 mcg)	Transdermal patch 12 mcg/hr q72h (Use with caution in opioid naive and in unstable patients because of the 12 hour delay in onset and offset)	Transdermal patch (12,25,50,75,100mcg) If transitioning from IV Fentanyl to patch, the hourly rate is the patch dose; eg. if patient is on 50mcg/hr IV, start with a 50mcg patch. Buccal film (200-1200mcg), Buccal tablet (100-800mcg), Nasal solution (100 & 400mcg/act), SL tablet (100-800mcg), Lozenge (200-1600mcg); SL spray (100-1600mcg) Indicated for breakthrough cancer pain only N.B. Incomplete cross-tolerance already accounted for in conversion to fentanyl; when converting to other opioid from fentanyl, generally reduce equianalgesic amount by 50% IV: very short acting; associated with chest wall rigidity. Acceptable in renal failure, monitor carefully if using long term	
CODEINE	130 mg	200 mg	15-30 mg IM/SC q4h (♦7.5-15 mg) IV Contraindicated	30-60 mg q3-4h (♦15-30 mg)	Tablets (15,30,60mg); Solution (30mg/5ml); APAP combo solution (12mg with 120 APAP/5ml) APAP combo tablets (30 mg or 60 mg codeine w/300mg APAP) Monitor total acetaminophen dose		
HYDROCODONE	Not available	30 mg	Not Available	5 mg q3-4h (♦5 mg)	APAP combo tablets - 2.5-10mg hydrocodone with 300-325mg APAP; APAP combo solution - 2.5mg hydrocodone with 108mg APAP per 5ml IBU combo tablets - 2.5-10mg hydrocodone with 200mg ibuprofen ER tablets (10, 15, 20, 30, 40, 50mg) – Not an abuse-deterrent formulation Monitor total acetaminophen or ibuprofen dose		
OXYMORPHONE	1 mg	10 mg	1-1.5 mg IM/SQ q4-6h (♦0.5 mg)	10 mg q4-6h IR TABLET (♦5 mg)	IR tablets: 5, 10mg ER tablets: 5, 7.5, 10, 15, 20, 30, 40mg – Designed with abuse-deterrent properties Use carefully in renal failure and liver impairment		

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