

Equianalgesic Dosing Chart

All equivalencies are approximate; use this chart as a guideline only.

** Note: always consider decreasing dose of new drug by 30% - 50% to account for incomplete cross tolerance*

Oral Routes:	Ratio
Morphine 10 mg = Percocet 1 tab (5/325) = Oxycodone 5 mg	2:1
Morphine 10 mg = Codeine 100 mg = 3 Tylenol #3 tabs (90/900)	1:10
Morphine 10 mg = Hydromorphone 2 mg	5:1

Oral to Subcutaneous Routes: Ratio 2 (po): 1 (sc)

Morphine 10 mg po = Morphine 5 mg sc
Hydromorphone 10 mg po = Hydromorphone 5 mg sc

Subcutaneous Equianalgesia:

Morphine 10 mg sc = Hydromorphone 2 mg sc

Conversion to Transdermal Fentanyl. There are various accepted methods.

1. Morphine 60-134 mg po in 24 hrs = Fentanyl 25 mcg patch q72h (CPS, page 783, table 3, 2007)
Note: this range of morphine is very broad which may result in significant under dosing.
2. **Morphine 2 mg po in 24 h = 1 mcg/hour of fentanyl transdermal**, rounded to the nearest patch size, e.g. 216 mg of oral morphine per 24 hours is approximately equianalgesic to a 100 mcg/hour fentanyl transdermal patch. (*Breitbart W. An alternative algorithm for dosing transdermal fentanyl for cancer-related pain. Oncology 2000; 14:695-702*)
Note: This dose may be excessive when used in a medically compromised patient and/or the frail elderly; use clinical judgment

Guidelines for Calculating Breakthrough Doses (BTD)

Calculate approximately 10 % of the total daily dose of the scheduled opioid and administer it as needed for uncontrolled pain.

The breakthrough dose is calculated in the same way no matter what route of administration is being used (*Managing Cancer Pain The Canadian Healthcare Professional's Reference 2005, Chapter 5 page 35*)

For opioids taken by mouth:

e.g. Morphine 15 mg q12h po = 30mg po total in 24 hours
10 % of 30 mg = 3 mg (max. dose) po **q1h prn** for breakthrough pain

For opioids taken sc:

e.g. Morphine 10 mg q4h sc = 60 mg sc in 24 h
10% of 60 mg = 6 mg (max. dose) sc **q1h prn**

For CSCI:

e.g. Morphine 2.5mg q1h sc continuous infusion = 60mg in 24 hours
10% of 60mg = 6 mg (max. dose) sc **q1h prn* or 3mg q1/2h prn**

**Clinical judgment may indicate the need to lower the calculated dose.*