BC Renal Agency
An agency of the Provincial Health Services Authority

Opioid Conversion Table

Doses in each column are considered equianalgesic and interchangeable at the doses shown with cautions noted in the footnotes. Equianalgesic doses may vary considerably than those predicted, especially with higher opioid doses, and should be used with caution and modified according to response.

DRUG	PARENTERAL DOSE (IV/subcutaneous)	PO DOS
Morphine	10 mg[1]	20–30 mg
Hydromorphone[2]	2 mg	4 mg
Fentanyl	100 mcg (0.1 mg) Patch[3]	NA
Codeine	120 mg (subcutaneous only)[4]	200 mg
Oxycodone	NA[5]	20 mg
Methadone	—	2–4 mg[6]

See Analgesic Chart for detailed information on each agent

1 Oral to parenteral potency varies between 2:1 and 3:1; morphine is not recommended in the management of chronic pain in dialysis patients due to accumulation of toxic metabolite, morphine-3-glucuronide

2 Hydromorphone-3-glucuronide, toxic metabolite, accumulates if dialysis is stopped

3 Fentanyl transdermal patch is not recommended in opioid-naïve patients. Previous opioid should be tapered over first 12 hours of fentanyl as absorption is delayed.

Recommended conversion from **oral daily hydromorphone** equivalent to fentanyl is as follows:

Hydromorphone (mg/24 hrs)	Fentanyl (mcg/hr)
12–26	25
27–35	37
36–44	50
45–53	62
54–62	75
63–71	87
72–80	100

Adequate breakthrough medication should always be provided when using long-acting opioids, but especially when switching to fentanyl, as predicted doses of fentanyl are sometimes too conservative. A withdrawal syndrome may also occur when switching to fentanyl, which responds to tapering doses of the previous opioid.

For frail elderly patients, use more conservative conversion or a lower strength patch (e.g. hydromorphone 12 to 26 mg in 24 hrs → fentanyl 12 mcg/hr patch).

4 Codeine is not recommended in the management of chronic pain in dialysis patients.

5 Percocet contains acetaminophen 325 mg + oxycodone 5 mg per tab. To make 20 mg of oxycodone, four Percocet tablets q4h are required, which contain toxic amount of acetaminophen. The maximum recommended acetaminophen dose is 4000 mg or 12 x Percocet tabs per 24 hrs.

6 Methadone has a prolonged and variable half-life; regular dosing increases potency. A 10:1 initial conversion ratio for morphine oral equivalent to methadone is recommended for most patients. Extreme caution is necessary when switching from high doses of other opioids to methadone due to extreme individual variability. Initial dose should not exceed 15mg per day. Prescribing methadone requires additional education by College of Physicians and Surgeons—to obtain a special methadone prescribing license for pain and chemical dependency. Baseline QTc and repeat ECG recommended. Beware of multiple drug interactions.

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