

Opioid Conversion Chart

There are differences in the literature regarding opioid conversion ratios. The conversion ratios listed below are the conversion ratios commonly used in practice at Our Lady's Hospice and Care Services (OLH&CS). The information outlined below is intended as a guide only. **ALL OPIOID CONVERSIONS OUTLINED BELOW ARE APPROXIMATE ONLY.** Therefore, all medication doses derived using the information below should be checked and prescribed by an experienced practitioner. The dosage of a new opioid is based on several factors including the available equi-analgesic dose data, the clinical condition of the patient, concurrent medications and patient safety. It is recommended that the new dose should be reduced by 30-50% to allow for incomplete cross-tolerance. The patient should be monitored closely until stable when switching opioid medications. Prescribers should be mindful of available opioid formulations and their strengths when prescribing, and should ensure that doses prescribed equate to a volume which is measurable.

GOLDEN RULE: WHEN CHANGING FROM ONE OPIOID TO ANOTHER ALWAYS CONVERT TO MORPHINE FIRST.

ORAL MORPHINE TO ORAL OPIOIDS		ORAL OPIOIDS TO PARENTERAL OPIOIDS		PARENTERAL MORPHINE TO OTHER OPIOIDS		TRANSDERMAL OPIOID TO ORAL MORPHINE	
PO → PO	RATIO	PO → IV/SC	RATIO	IV/SC → IV/SC	RATIO	TD → PO	RATIO
Morphine → Oxycodone	1.5:1	Morphine → Morphine	2:1	Morphine → Oxycodone	1.5:1 ^a	Buprenorphine → Morphine	1:100
Morphine → Hydromorphone	5:1	Oxycodone → Oxycodone	2:1	Morphine → Hydromorphone	5:1	Fentanyl → Morphine	1:100
		Hydromorphone → Hydromorphone	2:1	Morphine → Alfentanil	15:1		
				Morphine → Fentanyl	50:1		

(Note: This table does not incorporate recommended dose reductions of 30-50%.)

MORPHINE 24 hour dose		OXYCODONE ^a 24 hour dose A 2:1 ratio with morphine may also be used. See preparations outlined below.		HYDROMORPHONE 24 hour dose		FENTANYL		ALFENTANIL ^b 24 hour dose	BUPRENORPHINE
ORAL	IV/SC	ORAL	IV/SC	ORAL	IV/SC	TRANSDERMAL [#]	IV/SC ^y (24 hour dose)	IV/SC	TRANSDERMAL [#]
5mg	2.5mg	3.33mg	1.66mg	1mg	0.5mg	-	-	-	-
12mg	6mg	8mg	4mg	2.4mg	1.2mg	-	120micrograms	0.4mg	5 micrograms/hour
14.4mg	7.2mg	9.6mg	4.8mg	2.88mg	1.44mg	6 micrograms/h	144micrograms	0.48mg	-
24mg	12mg	16mg	8mg	4.8mg	2.4mg	-	240micrograms	0.8mg	10 micrograms/hour
28.8mg	14.4mg	19.2mg	9.6mg	5.76mg	2.88mg	12 micrograms/h	288micrograms	0.96mg	-
36mg	18mg	24mg	12mg	7.2mg	3.6mg	-	360micrograms	1.2mg	15 micrograms/hour
50mg	25mg	33.33mg	16.66mg	10mg	5mg	-	500micrograms	1.67mg	20 micrograms/hour
60mg	30mg	40mg	20mg	12mg	6mg	25 micrograms/h	600micrograms	2mg	25 micrograms/hour
100mg	50mg	66.67mg	33.33mg	20mg	10mg	-	1mg	3.33mg	-
120mg	60mg	80mg	40mg	24mg	12mg	50 micrograms/h	1.2mg	4mg	52.5 micrograms/hour
160mg	80mg	106.67mg	53.33mg	32mg	16mg	-	1.6mg	5.33mg	70 micrograms/hour [*]
180mg	90mg	120mg	60mg	36mg	18mg	75 micrograms/h	1.8mg	6mg	
240mg	120mg	160mg	80mg	48mg	24mg	100 micrograms/h	2.4mg	8mg	

^aNational and international guidelines also support the use of a 2:1 ratio when switching between morphine and oxycodone.

Oxycodone is available as immediate release capsules 5mg, 10mg and 20mg, liquid 1mg/ml or 10mg/ml and sustained release tablets 5mg, 10mg, 20mg, 40mg and 80mg. Oxycodone solution for injection is available in 10mg/ml and 50mg/ml strengths.

^b See 'The Use of Alfentanil in a Syringe Driver in Palliative Medicine' document available from the Palliative Meds Info webpages <http://www.olh.ie/7-departments/166-palliative-meds-info/>. Doses have been rounded to the nearest whole number or the nearest appropriate decimal point.

[#] Transdermal fentanyl and buprenorphine patches are prescribed in micrograms/hour. Equivalent doses are based on the 24 hour dose of fentanyl or buprenorphine received from a patch. See product literature for further information.

^y IV/SC fentanyl is included in this table to assist with opioid rotation from fentanyl where patients are admitted to OLHCS on IV/SC fentanyl. IV/SC fentanyl is not routinely used in OLHCS.