FAR WEST LHD – Palliative Care Guide to Equivalent Doses for Strong Opioids

- **This table is to be used as a guide rather than a set of definitive equivalences.** Some doses have been rounded up or down to fit in with the preparations available.
- Always take a thorough pain history - question if the pain is responsive to opioids and the role of adjuvant analgesics before adjusting a dose of opioid.
- **Morphine should always be used as first line opioid**, but adjust dose to suit the patient and clinical situation. In renal failure, consider Buprenorphine or Fentanyl first line, but start low and titrate slowly.
- Remember individual patients may metabolise different drugs at varying rates. When switching from one opioid to another, allow for incomplete cross tolerance by dose reducing the new opioid by 30-50%.
- **Be aware of opioid toxicity – pin point pupils, myoclonic jerks, confusion, drowsiness, slowed respiration rate. NEVER treat opioid toxicity with naloxone unless first discussed with Palliative Care Team.**

ORAL MORPHINE			SUBCUTANEOUS MORPHINE		ORAL OXYCODONE			SUBCUTANEOUS OXYCODONE		TRANSDERMAL BUPRENORPHINE	TRANSDERMAL FENTANYL Δ	SUBCUTANEOUS FENTANYL	
Ordine * Sevredol ** Apomorph***	MS Contin	Kapanol	Morphine Sulphate Morphine Hydrochloride * Morphine Tartrate ***		Endone * OxyNorm**	OxyContin	-	OxyNorm (Oxycodone Hydrochloride)		Norspan	Denpax, Durogesic, Dutran, Fenpatch	Fentanyl Citrate	
* 1,2,5,10mg/mL ** 10 & 20mg tabs *** 30mg tablet	5,10,15,30,60, 100&200 mg tabs 20,30,60,100 & 200mg susp'n	10, 20, 50 & 100mg tablets	* 5, 10, 15 & 30 mg/mL ** 50 & 100 mg/5mL *** 120mg/1.5mL & 400mg/5mL		* 5mg tablets ** 5, 10 & 20mg capsules ** 5mg/5mL liq'd	5, 10, 15, 20, 30, 40 & 80mg tablets	-	10mg/mL 20mg/2mL 50mg/mL		5, 10 & 20 mcg/hr patches	12, 25, 50, 75 & 100 mcg/hr patches	50mcg/mL 100mcg/2mL 500mcg/10mL	
4-hr IR dose	12-hr SR dose (twice daily)	24-hr SR dose (once daily)	4-hr dose	24-hr total dose	4-hr IR dose	12-hr SR dose (twice daily)	24-hr total dose	4-hr dose	24-hr total dose	Patch strength *(change every 7 days)*	Patch strength *(change every 3 days)*	4-hr dose	24-hr total dose
1 - 2 mg	5 mg	10 mg	-	-	-	-	-	-	-	5 mcg/hr	-	12.5mcg	100 mcg
2.5 mg	10 mg	20 mg	1.25 mg	5 mg	1-2.5 mg	5 mg	10 mg	1 mg	5 mg	10 mcg/hr	-	25 mcg	200 mcg
5 mg	15 mg	30 mg	2.5 mg	10 mg	2.5-5 mg	10 mg	20 mg	2.5 mg	10 mg	20 mcg/hr	12* mcg/hr	50mcg	300 mcg
10 mg	30 mg	60 mg	2.5-5 mg	20 mg	5-7.5 mg	20 mg	40 mg	2.5-5 mg	20 mg	-	25 mcg/hr	100 mcg	600 mcg
15 mg	45 mg	90 mg	5 mg	30 mg	10 mg	30 mg	60 mg	5 mg	30 mg	-	37 mcg/hr	150 mcg	900 mcg
SEEK SPECIALIST PALLIATIVE CARE ADVICE REGARDING OPIOID DOSE CONVERSIONS GREATER THAN 100mg ORAL MORPHINE (OR EQUIVALENT) IN 24 HOURS													
20 mg	60 mg	120 mg	7.5 mg	40 mg	10-15 mg	40 gm	80 mg	7.5 mg	40 mg	-	50 mcg/hr	200 mcg	1200mcg
30 mg	90 mg	180 mg	10 mg	60 mg	20 mg	60 mg	120 mg	10 mg	60 mg	-	75 mcg/hr	300 mcg	1800mcg
40 mg	120 mg	240 mg	12.5 mg	80 mg	25-30 mg	80 mg	160 mg	12.5 mg	80 mg	-	100 mcg/hr	400 mcg	2400mcg
50 mg	150 mg	300 mg	15 mg	100 mg	30-35 mg	100 mg	200 mg	15 mg	100 mg	-	125 mcg/hr	500 mcg	3000mcg
60 mg	180 mg	360 mg	20 mg	120 mg	40 mg	120 mg	240 mg	20 mg	120 mg	-	150 mcg/hr	600 mcg	3600mcg
70 mg	210 mg	420 mg	22.5 mg	140 mg	45-50 mg	140 mg	280 mg	22.5 mg	140 mg	-	175 mcg/hr	700 mcg	4200mcg
80 mg	240 mg	480 mg	25 mg	160 mg	50-55 mg	160 mg	320 mg	25 mg	160 mg	-	200 mcg/hr	800 mcg	4800mcg
90 mg	270 mg	540 mg	30 mg	180 mg	60 mg	180 mg	360 mg	30 mg	180 mg	-	225 mcg/hr	900mcg	5400mcg
100 mg	300 mg	600 mg	32.5 mg	200 mg	65-70 mg	200 mg	400 mg	32.5 mg	200 mg	-	250 mcg/hr	1000mcg	6000mcg

Conversion ratio from oral morphine:	3 : 1	1.5 : 1	-	1: 75-100	1 : 100-150	1 : 100-150
Conversion ratio from subcutaneous morphine:			1 : 1	-	-	-
Conversion ratio from oral opioid to same subcutaneous opioid:		From oral oxycodone:	2 : 1	-	From transderm fentanyl:	1 : 1

Δ **Fentanyl** - * Fentanyl: A 12mcg/hr strength is available; but is licensed as a titrating dose NOT as a starting dose. If a patient has not been on an equivalent of 60-90mg of oral morphine per 24 hrs, seek specialist palliative care advice before commencing Fentanyl patch.

Patches in the last days of life – Leave the buprenorphine or fentanyl patch in situ and change regularly as prescribed. If needed, give additional analgesia using a different opioid subcutaneously PRN and syringe driver.
Only in exceptional circumstances should the buprenorphine or fentanyl patch be removed and the equivalent opioid dose given in a syringe driver, and only after discussion with the Palliative Care Team.

HYDROmorphone – HYDROmorphone is 5–7.5 more potent than morphine. In NSW Health facilities, it should only be prescribed under the direction of a pain or palliative care specialist - seek advice when converting from or to oral or subcutaneous HydroMORPHONE.

References:

- Caraceni et al. Use of Opioid Analgesics in the Treatment of Cancer Pain: Evidence-based Recommendations from the EACP (2012). Lancet Oncol 2012; 13: e58-e68. Available at www.epcrc.org
- Trinity Hospice 2012. A Guide to Equivalent Doses for Opioid Drugs (Version 3, 2012). Available online at www.trinityhospice.co.uk
- Eastern Metropolitan Region Palliative Care Consortium (Victoria). Opioid Conversion Guidelines - Guide to Practice (2013). Available at www.emrpcc.org.au
- Palliative Care Expert Group 2016. Therapeutic Guidelines - Palliative Care (Version 4, 2016). eTG Complete Online. Available at www.tg.org.au

FWLHD Palliative Care Team
Opioid Equivalence Chart

SHARE Version
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