

Simplified Opioid Conversion Chart

ORAL MORPHINE (mg)			FENTANYL PATCH (mcg/hr)	SC DIAMORPHINE (mg)		SC MORPHINE (mg)		ORAL OXYCODONE (mg)		SC OXYCODONE (mg)		BUPRENORPHINE PATCH (mcg/hr)	SC ALFENTANIL (mg)	
4 hrly dose	12 hrly MR dose	24 hour dose	Patch strength	4 hrly dose	24 hour dose	4 hrly dose	24 hour dose	4 hrly dose	12 hrly MR dose	4 hrly dose	24 hour dose	Patch strength	4 hrly dose	24 hour dose
5	15	30	12	2.5	10	2.5	15	2.5	5-10	1.25	7.5	35	0.125	1
10	30	60	12-25	2.5	20	5	30	5	15	2.5	15	35	0.25	2
15	45	90	25	5	30	7.5	45	7.5	20	3.75	20	52.5	0.5	3
20	60	120	25-37	7.5	40	10	60	10	30	5	30	70	0.75	4
30	90	180	50	10	60	15	90	15	45	7.5	45	105	1	6
40	120	240	75	12.5	80	20	120	20	60	10	60	140	1.25	8
50	150	300	75	15	100	25	150	25	75	12.5	75	140	1.5	10
60	180	360	100	20	120	30	180	30	90	15	90	140	2	12
70	210	420	125	20	140	35	210	35	105	(17.5)	105	140	2.5	14
80	240	480	125	25	160	40	240	40	120	(20)	120	140	2.5	16
90	270	540	150	30	180	45	270	45	135	(22.5)	135	140	3	18
100	300	600	150	30	200	50	300	50	150	(25)	150	140	3.5	20
110	330	660	175	35	220	55	330	55	165	(27.5)	165	140	3.75	22
120	360	720	200	40	240	60	360	60	180	(30)	180	140	4	24

- All figures are based on the conversions & then rounded up or down. Remember to ensure appropriate 4/12/24hourly columns are used correctly.
- When converting between opioids, re-titration of new opioid may be necessary (considerable inter-patient variation will occur). Always reassess the patient carefully and anticipate the need to titrate the dose either upwards or downwards.
- When first using a different opioid, it is advisable to be cautious in the use of PRN doses. **For example, for a patient on fentanyl patch 75mcg/hr who has never previously received morphine, a PRN dose of 15-20mg may be sufficient at first, rather than the 40-50mg suggested on the chart.**
- When first applying a fentanyl patch or buprenorphine patch regular analgesics should be continued for 12 hours after the initial application.
- When a fentanyl patch is removed and not replaced the fentanyl will continue to work for a further 12 hours.
- When a buprenorphine patch is removed and not replaced the buprenorphine will continue to work for a further 24 hours.
- Patients who have a patch for pain should keep their patch in place and have it changed as usual as stated on their prescription. If the patient is unable to swallow PRN subcutaneous analgesia should be prescribed. If 3 or more PRN doses are needed a syringe driver can be set up over 24 hours **IN ADDITION** to the patch.
- Buprenorphine does not yet have a standard conversion ratio. The figures above are a guideline only. The maximum patch dose is 140mcg/hr.
- Stat doses of oxycodone SC > 15mg are generally impractical because of the volume required.

Conversion ratios: Ensure that you compare the same dose period (i.e. 4/12/24 hours)	PO codeine to PO morphine	Divide total codeine dose by 10
	PO tramadol to PO morphine	Divide total tramadol dose by 5-10
	PO tramadol to TD buprenorphine	≤50mg/day tramadol = 5mcg/hr buprenorphine; 50-100mg/day tramadol = 10mcg/hr buprenorphine; >100mg/day tramadol = 20mcg/hr buprenorphine
	PO codeine to TD buprenorphine	≤30-60mg/day codeine = 5mcg/hr buprenorphine; 60-120mg/day codeine = 10mcg/hr buprenorphine; >120mg/day codeine = 20mcg/hr buprenorphine
	PO morphine to TD fentanyl	Divide total daily dose morphine by 3 to give fentanyl patch strength in mcg/hr
	PO morphine to PO methadone	Divide total daily morphine dose by 3 - 6
	PO morphine to SC diamorphine	Divide morphine dose by 3
	PO morphine to PO oxycodone	Divide morphine dose by 2
PO oxycodone to SC oxycodone	Divide oral oxycodone dose by 2	



Further information regarding Fentanyl Patches:

The information and conversion below should only be used for patients who are currently using a fentanyl patch for chronic pain and require a formulation change to a patch. In all other situations the conversion table above should be use. Previous analgesic therapy should be phased out gradually from the time of the first patch application until analgesic efficacy with fentanyl is attained

Adult patients stabilised on oral opioids for several weeks and who need opioid rotation (conversion ratio oral morphine to transdermal fentanyl approximately equal to 150:1)

Current 24 hour morphine dose (mg)	Current 24 hour oxycodone dose (mg)	Fentanyl patch strength (mcg/hr)	Appropriate 4 hrly PO morphine dose (mg)	Appropriate 4 hrly PO oxycodone dose (mg)
<135	< 68	25	15	7.5
135-224	68-112	50	30	15
225-314	113-157	75	45	20
315-404	158-202	100	60	30
405-494	203-247	125	75	40
495-584	248-292	150	95	45
585-674	293-337	175	110	55
675-764	338-382	200	120	60

Highly tolerant adult patients stabilised on well tolerated opioid therapy for a long period who need opioid rotation (conversion of oral morphine to transdermal fentanyl approximately equal to 100:1)

Current 24 hour morphine dose (mg)	Current 24 hour oxycodone dose (mg)	Fentanyl patch strength (mcg/hr)	Appropriate 4 hrly PO morphine dose (mg)	Appropriate 4 hrly PO oxycodone dose (mg)
≤44	≤22	12	5	2.5
45-89	23-45	25	15	7.5
90-149	46-75	50	30	15
150-299	76-150	75	45	20
210-269	151-135	100	60	30
270-329	136-165	125	75	40
330-389	165-195	150	95	45
390-449	196-225	175	110	55
450-509	226-255	200	120	60

- When first applying a fentanyl patch regular analgesics should be continued for 24 hours after the initial application.
- When removing a fentanyl patch it takes 17 hours for the fentanyl serum concentration to decrease by 50%.
- When first using a different opioid, it is advisable to be cautious in the use of PRN doses.

For example, for a patient on fentanyl patch 75mcg/hr who has never previously received morphine, a PRN dose of 15-20mg may be sufficient at first, rather than the 40-50mg suggested on the chart.

- Patients who have a fentanyl patch for pain should keep their patch in place and have it changed as usual as stated on their prescription. If the patient is unable to swallow PRN subcutaneous analgesia should be prescribed. If 3 or more PRN doses are needed a syringe driver can be set up over 24 hours **IN ADDITION** to the fentanyl patch.