

A GUIDE TO EQUIVALENT DOSES FOR OPIOID DRUGS

This is to be used as **a guide** rather than a set of definitive equivalences. Most data on doses is based on single dose studies so is not necessarily applicable in chronic use. Individual patients may metabolise different drugs at varying rates. The advice is always to calculate doses using morphine as standard and to adjust them to suit the patient and the situation. Some of these doses have by necessity been rounded up or down to fit in with the preparations available.

| Oral Morphine | | | Subcutaneous Morphine | | Subcutaneous Diamorphine | | Oral Oxycodone | | | Subcutaneous Oxycodone | | Fentanyl Transdermal | Subcutaneous Alfentanil | | Subcutaneous Fentanyl | |
|----------------|-------------------|----------------------|-----------------------|-----------------------|--------------------------|-----------------------|----------------|-------------------|----------------------|------------------------|-----------------------|----------------------------|-------------------------|----------------------|--|-----------------------------|
| 4 hr dose (mg) | 12hr SR dose (mg) | 24hr Total dose (mg) | 4 hr dose (mg) | 24 hr total dose (mg) | 4 hr dose (mg) | 24 hr total dose (mg) | 4hr dose (mg) | 12hr SR dose (mg) | 24hr total dose (mg) | 4 hr dose (mg) | 24 hr total dose (mg) | Patch strength (microgram) | 4 hr dose (mg) | 24hr total dose (mg) | 4 hr dose (microgram) | 24hr total dose (microgram) |
| 5 | 15 | 30 | 2.5 | 15 | 1.25 | 10 | 2.5 | 7.5 | 15 | 1.25 | 7.5 | 12 | 0.125 | 1 | 25 | 200 |
| 10 | 30 | 60 | 5 | 30 | 2.5-5 | 20 | 5 | 15 | 30 | 2.5 | 15 | 25 | 0.25 | 1.5 | 50 | 300 |
| 15 | 45 | 90 | 7.5 | 45 | 5 | 30 | 7.5 | 25 | 50 | 3.75 | 25 | 25 | 0.5 | 3 | 100 | 600 |
| 20 | 60 | 120 | 10 | 60 | 7.5 | 40 | 10 | 30 | 60 | 5 | 30 | 37 | 0.75 | 4 | Syringe pump volume issues likely above 500 micrograms/24hours | |
| 30 | 90 | 180 | 15 | 90 | 10 | 60 | 15 | 45 | 90 | 7.5 | 45 | 50 | 1 | 6 | | |
| 40 | 120 | 240 | 20 | 120 | 12.5 | 80 | 20 | 60 | 120 | 10 | 60 | 75 | 1.25 | 8 | | |
| 50 | 150 | 300 | 25 | 150 | 15 | 100 | 25 | 75 | 150 | 12.5 | 75 | 75 | 1.5 | 10 | | |
| 60 | 180 | 360 | 30 | 180 | 20 | 120 | 30 | 90 | 180 | 15 | 90 | 100 | 2 | 12 | | |
| 70 | 210 | 420 | 35 | 210 | 25 | 140 | 35 | 105 | 210 | 17.5 | 100 | 125 | 2.5 | 14 | | |
| 80 | 240 | 480 | 40 | 240 | 27.5 | 160 | 40 | 120 | 240 | 20 | 120 | 125 | 2.5 | 16 | | |
| 90 | 270 | 540 | 45 | 270 | 30 | 180 | 45 | 135 | 270 | 22.5* | 135 | 150 | 3 | 18 | | |
| 100 | 300 | 600 | 50 | 300 | 35 | 200 | 50 | 150 | 300 | 25* | 150 | 150 | 3.5 | 20 | | |
| 110 | 330 | 660 | 55 | 330 | 37.5 | 220 | 55 | 165 | 330 | 27.5* | 165 | 175 | 3.75 | 22 | | |
| 120 | 360 | 720 | 60 | 360 | 40 | 240 | 60 | 180 | 360 | 30* | 180 | 200 | 4 | 24 | | |

Reproduced with kind permission of Margaret Gibbs, St Christopher's Hospice (original chart 2010).

* this dose requires using 50mg in 1ml injection as it would otherwise be too large a volume for a sc injection. **Caution with this strength.**

- A PO morphine;transdermal fentanyl dose conversion ratio of 150:1 is used
- This chart has been amended to incorporate the availability of Fentanyl Transdermal 12 mcg patches and to include approximate equivalent doses of subcutaneous Fentanyl.
- The dose conversion ratio of SC diamorphine: SC alfentanil from 10-6:1. It is prudent to use the more conservative ratio when switching from one to the other e.g. if switching from diamorphine to alfentanil, use dose conversion ratio 10:1 so that 10mg diamorphine = 1mg alfentanil. If switching from alfentanil to diamorphine use dose conversion ratio 6:1 so that 1mg alfentanil = 6mg diamorphine.

Please seek specialist advice if you are uncertain about what to prescribe.