Appendix 1. Conversion ratios for morphine equivalent dosages of included opioid types.

|  |  |
| --- | --- |
| **Oral Opioid Types** | **Morphine Equivalent Conversion Factor** |
| Butorphanol | 7.00 |
| Codeine | 0.15 |
| Hydrocodone | 1.00 |
| Hydromorphone | 4.00 |
| Levorphanol | 11.00 |
| Oxycodone | 1.50 |
| Oxymorphone | 3.00 |
| Meperidine | 0.10 |
| Methadone | 3.00 |
| Nalbuphine | 1.00 |
| Propoxyphene | 0.23 |
| Pentazocine | 0.37 |
| **IV/IM Opioid Types** |  |
| Fentanyl | 2.40 |
| Hydrocodone | 1.00 |
| Meperidine | 0.30 |
| Morphine | 3.00 |
| **Other** |  |
| Transdermal Fentanyl | 2.40 |
| Transmucosal Fentanyl | 0.125 |