



# Morphine-fentanyl conversions



**Fentanyl is 100-150 times more potent than oral morphine**

## Converting from oral morphine to fentanyl

- Total oral dose of morphine in 24 hours (long acting + breakthrough doses) = mg
-  Divide by 100 to get total fentanyl dose in 24 hours = mg (convert to mcg by x1000)
-  Divide by 24 to get the hourly mcg dose of fentanyl

(NB- patches take 12-24 hours to reach peak levels therefore apply patch at last dose of long acting oral morphine)

Eg

- 90mg Bd oral morphine with no break through doses = 180mg total daily
-  Divide by 100 = 1.8mg fentanyl = 1800mcg of fentanyl in 24 hours
-  Divide by 24 = 75mcg fentanyl every hour = 75mcg patch

Break through =  $\frac{1}{6}$  180mg morphine = 30mg oramorph

## Converting from fentanyl to oral morphine

- Hourly dose of fentanyl x24 = total daily dose of fentanyl in mcg
- Divide by 1000 = total daily dose of fentanyl in mg
- Times by 100 = total daily dose of oral morphine in mg
- Divide by 2 = Bd dosage of oral morphine

Eg

- 50mcg fentanyl x 24 = 1200mcg of fentanyl in 24 hours
- Divide by 1000 = 1.2mg of fentanyl in 24 hours
- Times by 100 = 120mg oral morphine in 24 hours
- = 60mg Bd of long acting oral morphine

**Conversion tables are based on conversion of 150 x more potent therefore dose equivalents are more cautious**

**On converting from one opiate to another it is often better to reduce dose of new opiate as patient may have less tolerance to it than the previous opiate.**