Intranasal fentanyl – dosage chart and administration

Intranasal fentanyl is an effective analgesic for children. It does not require IV access or an injection. It is rapid in onset and titratable.

It is indicated as initial analgesia for children aged 1 year or older with moderate or severe pain, for example from burns, fractures or dislocations, major lacerations or as an adjunct to painful procedures being performed under nitrous oxide.

It is contraindicated when there is altered conscious sate, bilateral blocked nose, epistaxis or fentanyl allergy.

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| --- | --- | --- | --- | --- |
| **Weight estimate(kg)** | **Initial dose**  **(1.5mcg/kg)** | **Volume - initial dose (ml)** | **Top-up dose**  **(0.75 - 1.5mcg)** | **Volume - top up dose (ml)** |
| 10 | 15 mcg | 0.3 ml | 7.5 - 15 mcg | 0.15 - 0.3 ml |
| 12 | 18 mcg | 0.35 ml | 9 - 18 mcg | 0.2 - 0.35 ml |
| 14 | 20 mcg | 0.4 ml | 10 - 20 mcg | 0.2 - 0.4 ml |
| 16 | 24 mcg | 0.5 ml | 12 - 24 mcg | 0.25 - 0.5 ml |
| 18 | 27 mcg | 0.55 ml | 13.5 - 27 mcg | 0.25 - 0.55 ml |
| 20 - 24 | 30 mcg | 0.6 ml | 15 - 30 mcg | 0.3 - 0.6 ml |
| 25 - 29 | 37.5 mcg | 0.75 ml | 18.75 - 37.5 mcg | 0.35 - 0.75 ml |
| 30 - 34 | 40 mcg | 0.8 ml | 20 - 40 mcg | 0.4 - 0.8 ml |
| 35 - 39 | 52.5 mcg | 1.05 ml | 26.5 - 52.5 mcg | 0.5 - 1.5 ml |
| 40 - 44 | 60 mcg | 1.2 ml | 30 - 60 mcg | 0.6 - 1.2 ml |
| 45 - 49 | 67.5 mcg | 1.35 ml | 67.5 mcg | 0.65 - 1.35 ml |
| > 50 | 75 mcg | 1.5 ml | 37.5 - 75 mcg | 0.75 - 1.5 ml |

**Note:** Volumes have been rounded to the nearest 0.05ml

**Dosing**

* + Use 100mcg/2ml strength fentanyl solution for intravenous use
  + **Initial dose - 1.5 mcg / kg**
  + A second dose of **0.75 - 1.5mcg/kg** may be administered 10 minutes after the first to provide further analgesia if required
  + If further analgesia is required after second dose, consider alternative or additional analgesia

**Preparation and Administration**

* + Draw up appropriate dose for weight (see table below) plus 0.1ml extra to the first dose (to account for the dead space in the device)
  + Attach Mucosal Atomiser Device (e.g. MAD300) on to the end of the syringe
  + With the child sitting at approximately 45 degrees or with head to one side, insert the device loosely into the nostril and press the plunger quickly to deliver half the dose
  + Deliver remainder into other nostril. If not possible, remainder can be delivered into same nostril after a 1-2 minute delay (to allow for absorption).

**Note:** Do **NOT** draw up 0.1ml extra for second dose when re-using the delivery device (MAD)