

## Administration of intranasal Fentanyl

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### Quick guide to dosing:

**1.5 micrograms/kg (maximum dose 75 micrograms)** via a 1ml syringe and mucosal atomiser.

### 1.0 Introduction

- Nasal fentanyl is a fast acting analgesic for the relief of moderate to severe pain.
- The nasal route for opiate administration is now well recognized as having several advantages over the intravenous route in Paediatric Emergency Medicine.

### 2.0 Scope

This guideline applies to all medical staff in the Children's Emergency Department who will be administering intranasal fentanyl for the pain management of acutely presenting patients.

### 3.0 Indication for use

Initial analgesia for traumatic injuries e.g. fractures, burns/scalds, fingertip injuries  
Procedures: suturing, painful dressing changes.

### 4.0 Contraindications

- Children <10kg
- Known allergy
- Children with a head injury / decreased GCS
- Epistaxis
- Airway / respiratory problem

### 5.0 Procedure for administration

1. Weigh the child and obtain and document verbal consent from parent/carer.
2. Take baseline pulse, SaO<sub>2</sub>, respiratory rate; document visual analogue pain score.
3. **Dose used 1.5 micrograms/kg (maximum 75 micrograms per dose)** - this equates to a 1 microgram/kg intravenous dose.
4. **Fentanyl solution of 50 micrograms/ml should be used.**
5. Use a 1ml syringe attached to a mucosal atomizer.

## Paediatric Clinical Practice Guideline

6. Ask the child to gently tip his/her head back, occluding one nostril, gently place the atomizer into the nostril.
7. Push the contents of the syringe into the nostril at the same time ask the child to sniff. Once inserted, remove the syringe but not the atomizer, draw air into the syringe and then flush through the atomizer with the air.

Not all children will co-operate, but this is a painless quick method of pain relief. Children may sneeze after administration and or have a funny taste in their mouth. Younger children will require their parent/carer to position them correctly, and drug administration is synchronized to breathing pattern.

Visual analogue pain scores should be documented at 5 and 30 minutes.

### 6.0 Absorption

Absorption can be as fast as the intravenous route with therapeutic serum levels obtained within 2 minutes, therefore the same side effects can occur.

Optimum effects last for 30 minutes but pain relief is often experienced for much longer. No cases of respiratory depression have been documented using this method at these doses, **but that does not mean it cannot occur.**

### 7.0 Consultation

This Guideline document has been circulated for review by Consultants in the Departments of Anaesthetics (Dr Kate Solan), Paediatrics (Dr Oli Rahman) and Emergency Medicine (Dr Finn, Dr Coughlan), as well as senior nursing staff in the Paediatric Emergency Department (Jason Gray).