

NURSE INITIATED ANALGESIA: CLINICAL INITIATIVES NURSE – ED - SCH

PRACTICE GUIDELINE®

DOCUMENT SUMMARY/KEY POINTS

- This guideline covers the ordering of one initial stat dose of analgesia in the Emergency Department by an accredited ED Registered Nurse and does not cover the use of paracetamol or ibuprofen as an antipyretic agent for fever.
- Paracetamol is a widely used analgesic and antipyretic agent which has a well-documented safety record when used in optimum dosage. It is commonly used for safe and effective pain relief of mild to moderate pain
- Ibuprofen is a non-steroidal anti-inflammatory drug which can be effectively utilised for pain associated with inflammation. Ibuprofen has analgesic properties which can provide pain relief in mild to moderate pain.

CHANGE SUMMARY

- Document due for mandatory review. Changes made throughout. Recommend reading the entire document.

This document reflects what is currently regarded as safe practice. However, as in any clinical situation, there may be factors which cannot be covered by a single set of guidelines. This document does not replace the need for the application of clinical judgement to each individual presentation.

Approved by:	SCHN Policy, Procedure and Guideline Committee	
Date Effective:	1 st July 2023	Review Period: 3 years
Team Leader:	Nurse Educator	Area/Dept: SCH Emergency Department

READ ACKNOWLEDGEMENT

- All Emergency Department clinical nurses and medical officers need to read and acknowledge they understand the contents of this document.
- **Discretionary Acknowledgement:**
 - Emergency Department manager to determine if any other staff are to read and acknowledge they understand the contents of this document
- Line managers are to maintain records of staff acknowledgements for quality review and compliance audit processes.

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1 Introduction

Paracetamol and Ibuprofen are commonly used analgesic agents which have a well-documented safety record when used in optimum dosage in appropriate patients. They are commonly used within paediatric emergency departments for safe and effective relief of mild to moderate pain.

This guideline covers the ordering of analgesia in the Emergency Department by accredited ED Registered Nurse and does not cover the use of paracetamol or ibuprofen as an antipyretic agent for fever.

1.1 Purpose/Scope

The purpose of this guideline is to ensure that the Nurse Initiated use of paracetamol and/or ibuprofen promotes timely, safe and appropriate pain management of children presenting to the SCH Emergency Department. Only registered nurses who have undertaken the Emergency Department Education Programme in Triage, Clinical Initiatives Nursing and Nurse Initiated Analgesia are deemed competent will undertake this practice.

1.2 Responsibilities

Department Heads are responsible for ensuring that registered nurses who undertake this practice are provided with the appropriate knowledge and training.

Registered Nurses are responsible for ensuring they are professionally accountable and work within their own scope of practice.

1.3 Abbreviations and definitions

- **Mild Pain:** pain assessed and scored as between 1/10 and 4/10 utilising a Pain Assessment tool.
- **Moderate Pain:** pain assessed and scored as between 5/10 and 7/10 utilising a Pain Assessment tool.
- **CIN:** Clinical Initiatives Nurse

2 Indications

Paracetamol and Ibuprofen can be used as a standalone analgesic agents for patients who present with painful conditions or injuries where they have been assessed as having mild to moderate pain (1-7/10), using a Pain Assessment tool and no exclusion criteria are present.

If the patient's pain score is 7 or above, they should be triaged accordingly and be reviewed by a medical officer. The medical officer is responsible for prescribing appropriate analgesia such as Intranasal fentanyl. Ibuprofen and paracetamol can be used as an adjunct analgesic agents.

3 Exclusions

3.1 Paracetamol

- Allergy to paracetamol
- Pain score above 7/10
- Fever alone
- Administration of paracetamol within the previous 4 hours
- Administration of 4 or more doses in the last 24 hours.
- Received maximum daily dose of 60 mg/kg or more in the last 24 hours (not to exceed 4 g). ([see Paracetamol Overdose- Assessment and Management](#))
- Patients at risk of hepatotoxicity ([see Paracetamol - SCH](#)).

3.2 Ibuprofen

- Allergy to ibuprofen/ other non-steroidal anti-inflammatory medications
- Hypersensitivity to non-steroidal anti-inflammatory medication (e.g. asthma, rhinitis, urticaria)
- Not eating and drinking
- Administration of ibuprofen or any other non-steroidal anti-inflammatory medication within the last 8 hours
- Administration of 3 or more doses in last 24 hours.
- Received maximum daily dose of 30 mg/kg or more in last 24 hours (not to exceed 1200 mg)
- Age < 6 months
- Symptoms indicating moderate to severe dehydration
- Children with history of renal impairment, cardiac or liver disease or gastrointestinal bleeding.
- Haematology/oncology patient (current or previous)
- Patients who present with a direct result/complication of their recent surgery or who are likely to need neurosurgical or ENT referral
- Patients taking any other medications, excluding paracetamol
- Suspected or confirmed pregnancy
- Pain score above 7/10

4 Patient Assessment

Prior to administration of paracetamol or ibuprofen, the registered nurse must undertake and **clearly** document a full assessment to include the following:

- Primary assessment of airway, breathing and circulation, inclusive of neurological assessment if indicated.
- Time and mechanism of any injury
- Location of pain and description of sort of pain, if appropriate (i.e., sharp, stabbing, constant, dull, radiating)
- Adverse drug reactions
- Previous Medical History (including obstructive sleep apnoea, respiratory illness, recent surgery, chronic conditions, bleeding- see 3, exclusions)
- Medication History including:
 - Number and dosage of ibuprofen/paracetamol doses in previous 24 hours
 - Current/regular medications (NB: if the RN is unsure of potential drug interactions, clarification should be obtained from a medical officer and/or a pharmacist prior to the Nurse Initiating any medication.)
- Pain score
- Immunisation status

5 Dose Calculations

Ideal weight should be used to calculate dose for obese children (refer [to Drug Dosing for Overweight and Obese Patients-SCH Practice Guideline](#))

5.1 Paracetamol

Usual dose

- **ORAL:** 15 mg/kg/dose every 4 to 6 hours. Maximum 60 mg/kg/day
(Maximum single dose 1g and maximum 4 g in any 24-hour period)

**For more severe pain, this may be increased to 90 mg/kg/day (not to exceed 4g) daily for a maximum of 24 hours. Paracetamol >60mg/kg/24 hours and/or 4-hourly cannot be initiated by the CIN. See 3 exclusions.*

5.2 Ibuprofen

- Usual dose
- **ORAL:** 10 mg/kg dose every 8 hours, maximum 3 doses in any 24-hour period
(Maximum single dose 400 mg, maximum 1200 mg in any 24-hour period)

6 RN Accountabilities

The RN must prescribe the dose as per [NSW Health PD2022_032 Medication Handling](#) on the Paediatric National Inpatient Medication Chart (PINMC) or the patient's electronic medication administration record (MAR)

The patient's current weight must be recorded in the patient's electronic medical record (eMR). If using the Paediatric National Inpatient Medication Chart (PINMC) the patient's weight must be recorded on it.

The Registered Nurse must **Clearly** document and sign on the MAR or PINMC the date/time and dose given and endorse the order with the words: "Nurse Initiated Medication"

The registered nurse must clearly document an assessment of the patient's eligibility for nurse initiated paracetamol, and/or ibuprofen as set out in the assessment guidelines. If this assessment is completed at triage with the CIN, then triage documentation of patient assessment is sufficient.

If the patient has left triage and returns to ask for pain relief or is identified as requiring pain relief, then it is the responsibility of the RN to reassess the patient and document findings before prescribing the nurse initiated analgesia.

Post administration, re-evaluation of pain and analgesic effectiveness should occur hourly and be clearly documented in the patient's notes. If an adverse event occurs an IIMS should be completed, and the event and management clearly documented in the patient record.

6.1 Time/Dose Limits

Subsequent doses of paracetamol and/or ibuprofen cannot be initiated by the Registered Nurse. A Medical Officer must review the patient and prescribe all further medications.

6.2 Outcomes

Children identified as experiencing mild and moderate pain with no exclusion criteria present, will receive effective and timely pain management, reducing patient discomfort and distress, prior to seeing a Medical Officer or Nurse Practitioner.

7 Related Documents

This document is to be read in conjunction with the following:

- [Medication Handling](#) PD2022_032, NSW Health
- [CIN Position Description NSW Health - The Clinical Initiatives Nurse Role in Emergency Departments](#)
- [Paracetamol -SCH Practice Guideline](#)
- [Ibuprofen Nurse Initiated Medication – ED – SCH](#)
- [Paracetamol Nurse Initiated Medication \(NIM\) – ED – SCH](#)

8 References

1. Medication Handling (nsw.gov.au) {Accessed from: https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2022_032.pdf on 20/04/2023}
2. American Academy of Pediatrics: Clinical Report – Fever and antipyretic use in children Pediatrics 2011;127(3):581-587
3. Australian Medicines Handbook Children's Dosing Companion: Paracetamol 2023 [Accessed from : <https://childrens.amh.net.au.acs.hcn.com.au/monographs/paracetamol> on 020/04/2023]
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5. Saviano F et al. Fulminant hepatitis after 10 days of acetaminophen treatment at recommended dosage in an infant. Pediatrics; 2011, February; 127(2) 489-492
6. Leonis MA, Alonso KI et al. Chronic acetaminophen exposure in pediatric acute liver failure. Pediatrics, 2013 March; 131(3) 740-746
7. Ferner R, Dear J et al. Management of paracetamol poisoning, British Medical Journal, 2011; 342, 2218
8. Freo, U et al, Paracetamol: A Review of Guideline Recommendations, Journal of Clinical Medicine, 2021, August, 10 (15) 3420

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