Safety Alert 001/17

HYDROmorphone: High-risk medicine

10 January 2017

Distributed to:

- Chief Executives
- Directors of Clinical Governance
- Director Regulations and Compliance Unit

Action required by:

- Directors of Clinical Governance
- Drug and Therapeutics Committees

We recommend you also inform:

- Directors of Pharmacy
- Directors of Anaesthetics
- Directors of Surgery
- Directors of Intensive/Critical Care
- Directors of Oncology / Cancer Care
- Directors of Palliative Care
- Directors of Medical/Clinical Services
- Medical Staff
- LHD/SHN Directors of Nursing and Midwifery
- Nursing Unit Managers
- Oncology / Cancer Care Nurses
- Palliative Care Nurses
- Intensive Care Nurses

Deadline for completion of action

3 February 2017

Expert Reference Group

Content reviewed by:

- **Medication Safety Expert Advisory Committee**
- **CEC**

Clinical Excellence Commission

Tel. 02 9269 5500
Fax. 02 9269 5599
Email: cec-medicationsafety@health.nsw.gov.au
Internet Website: http://www.health.nsw.gov.au/quality/sabs
Intranet Website http://internal.health.nsw.gov.au/quality/sabs/

Review date

January 2019

Background

HYDROmorphone is a potent opioid analgesic frequently used to treat moderate to severe, acute or chronic pain. HYDROmorphone is **5 to 7 times more potent** than morphine. Due to its high potency, errors with this medicine may result in serious adverse patient outcomes.

This Safety Alert is the third of a series of alerts issued in relation to HYDROmorphone, as serious incidents (including death) continue to occur in NSW hospitals with the use of this medicine (alerts SN011/10 and SA004/011 were released in 2010 and 2011).

Errors can arise from:

- confusion between HYDROmorphone and morphine
- selecting the wrong strength; HYDROmorphone is available in a variety of strengths and forms
- dose calculation errors
- incorrect placing of the decimal place for a fractional dose
  e.g. **2.5 mg** prescribed or administered instead of **0.25 mg**
- confusion between mg and mL
  e.g. **0.5 mL** (equivalent to 5 mg dose) administered instead of prescribed **0.5 mg**
- administering via the wrong route e.g. subcutaneously instead of orally.

Immediate Actions required by Local Health Districts/Networks

1. Distribute this Safety Alert to all relevant clinical staff.
2. Drug and Therapeutic Committees must risk assess the use of HYDROmorphone in each clinical unit, and restrict prescribing where appropriate.
3. Ensure LHD/SHN Drug and Therapeutic Committee approved HYDROmorphone local protocol complies with the NSW Health High-Risk Medicines Management Policy PD2015_029 available at www0.health.nsw.gov.au/policies/pd/2015/pdf/PD2015_029.pdf
4. Audit local processes for the supply, storage, prescribing and administration of HYDROmorphone using the High Risk Medicines Management – Hydromorphone Policy Standard Checklist available at: www.cec.health.nsw.gov.au/__data/assets/pdf_file/0009/296523/hydromorphone_standard_implementation-checklist.pdf.PDF
5. Ensure all relevant staff are provided with education on strategies for safe handling of HYDROmorphone, available at: www.cec.health.nsw.gov.au/patient-safety-programs/medication-safety/high-risk-medicines/hydromorphone
6. Consider the following additional measures:
   a. limit prescription and storage of HYDROmorphone to areas in specialist pain management or palliative care services
   b. restrict initial prescribing of HYDROmorphone to senior medical officers/consultants
   c. on altering or re-charting the order the dose is checked and medication order countersigned by a registrar or more senior medical officer (e.g. CMO/Consultant/GP VMO)
   d. restrict the administration of HYDROmorphone to registered nurses with appropriate education and who are aware of, or experienced with, the dosing of HYDROmorphone.
   e. prioritise pharmaceutical review and medication reconciliation for patients on HYDROmorphone
   f. in the event of a nurse querying a dose of HYDROmorphone the medical officer must review the patient and sight the medication chart prior to confirming the dose
   g. re-enforce escalation pathway if concerns by nursing/pharmacy staff are not adequately addressed by the medical team/after-hours medical staff.
7. Provide LHD/SHN responses to the audit (item 4) and other actions in this Safety Alert to: cec-medicationsafety@health.nsw.gov.au by **cob Friday 3 February 2017**.
8. Acknowledge the receipt of this Safety Alert within 48 hours.