MONTHLY MEDICATION SAFETY UPDATE

Information for health professionals in NSW public health organisations

This is a summary of medication safety and supply related issues affecting NSW public health facilities in **March 2024**. Updates regarding current medication-specific safety and supply related issues are available on the CEC website.

Medication safety issues under investigation

- Disruption to the supply of heparin (Pfizer®) 5000 units/5 mL injection – Safety Notice: 004/24 released 4 April 2024.
- Disruption to the supply of benzathine benzylpenicillin (Bicillin L-A) – Safety Notice: 001/24 currently being updated to include an additional S19A alternative available.

Relevant clinician information to note

- Please see the following page for the CEC's new **Monthly Medication Safety Focus.** This first volume focuses on the safe use of long-acting injectable (LAI) antipsychotic medications.
- TGA updates:
  - Metalyse (tenecteplase) 40 mg powder for injection – discontinuation
  - Estradot (estradiol) transdermal patches – shortage continuation
  - Vyvanse (lisdexamphetamine dimesilate) capsules – shortage update
  - Vabysmo (faricimab) – updated warnings of retinal vasculitis risk
  - Sun Herbal Pty Ltd Clear the Skin Formula a.k.a. Liang Xue Xiao Feng San CM116 - recall
  - Prescribing medicines in pregnancy database – updates
  - Product Information safety updates – March 2024

Current projects with eHealthNSW

- The VTE Prevention eMR solution pilot continues in WS/NMBLHD. The final report will be written at the conclusion of the pilot in April 2024.

Contact us

If you need support or assistance with medication safety matters in your facility, please email us: CEC-MedicationSafety@health.nsw. gov.au.

Medication Safety and Supply Summary

55	SAFETY/SUPPLY ISSUES REQUIRING INVESTIGATION BY THE MEDICATION SAFETY TEAM
30	WERE REPORTED TO THE FRONTLINE DUE TO SAFETY RISK REQUIRING LOCAL MITIGATION
4	RESULTED IN FORMAL SAFETY COMMUNICATION
7	PREVIOUS ISSUES RESOLVED ON CEC ONLINE PORTAL

Safety Alerts/Notices/Information released

SA:004/24 Updated: Critical disruption to supply – Intravenous (IV) paracetamol solution for injection/ infusion
- 1 March 2024

SN:001/24 Updated: Disruption to supply – Benzathine benzylpenicillin (Bicillin L-A) suspension for injection pre-filled syringe
- 5 March 2024

SA: 005/24 Clinician Alert – Rabies Risk for Timor-Leste
- 28 March 2024

Medication Safety Communications released

Updated: Barium sulfate oral suspension products – 4 March 2024

Medications reported on online portal this month

Acetazolamide 500 mg injection, aciclovir injections, amoxicillin, barium sulfate oral suspension products, benzathine benzylpenicillin, cefaclor oral liquid, ciprofloxacin 400 mg/200 mL intravenous infusion bags, desmopressin acetate, diltiazem, disulfiram, dobutamine hydrochloride 250 mg/20 mL, dulaglutide, fludarabine phosphate, fluoxetine dispersible tablets, gliclazide 30 mg MR tablets, heparin 5000 units/5 mL, hydralazine, lisdexamfetamine, mycophenolate mofetil, naloxone nasal spray and PFS, octreotide, paracetamol solution for injection, permethrin cream, plerixafor, quinapril, rifampicin, salbutamol solution for inhalation, suxamethonium chloride 100 mg/2 mL, valganciclovir.

MONTHLY MEDICATION SAFETY FOCUS

Volume 1: Safe use of long-acting injectable antipsychotic medications

Long-acting injectable (LAI) antipsychotic medications are approved for use in Australia in the treatment of schizophrenia and other psychotic disorders. While LAI antipsychotic medications have demonstrated benefits in improving adherence and enhancing clinical outcomes for patients, there are challenges in effectively managing their safe use and ensuring continuity of care. These challenges arise from the distinct features of these medications, including differences in formulation types, administration sites, injection intervals, and titration regimens. For a detailed comparison, please refer to **Table 1**.

Documentation of LAI antipsychotic doses may also vary as patients transition between home/outpatient care and acute or chronic residential care settings. Clinicians may record the prescribing, dispensing, and administration of these medications using various clinical information systems, including electronic and paper-based records. This poses a significant safety challenge in sourcing and maintaining accurate records.

Clinical incidents involving LAI antipsychotic medications include:

- **incorrect timing** where LAI antipsychotic medications are administered either earlier or later than the prescribed date due to inadequate documentation of the next due date or a lack of appointment bookings in the Patient Administration System (PAS)
- **poor administration techniques resulting in under- or over-dosing** due to issues such as using an inappropriately sized needle, detachment of the needle during administration, administering the medication at the wrong muscle site or inadvertent intravascular administration.

Safe practice recommendations for clinicians

- ***Medication reconciliation*** – Include specific questions about any periodic injections when conducting medication reconciliation as these can often be omitted from patient medication lists. Additionally, make sure to document the date of the last administered LAI antipsychotic dose before prescribing subsequent doses (ensuring that doses and administration intervals are accurate and appropriate). Avoid prescribing LAI antipsychotic medications as 'stat' orders where appropriate to prevent inadvertent omission of subsequent doses.
- ***Monitoring*** – Clinicians, patients and caregivers should be aware and monitor for signs of Post Injection Syndrome (PIS), a rare adverse event related to the use of LAI olanzapine, which may occur up to 3 hours after injection. See SN:016/21 for further information.
- ***Documentation*** – Ensure completeness and accuracy of discharge documentation (particularly ensuring that dates/sites of administration are clearly recorded) and provide clinical handover to ensure continuity of care for patients receiving LAI antipsychotic medications. If an ordered LAI antipsychotic medication cannot be administered before transfer or discharge, ensure this is clearly communicated during handover and documented in the discharge paperwork. Avoid signing off the medicine as 'not given' in the patient's electronic medication chart to prevent the dose being inadvertently omitted entirely.
- ***Educate patients*** – Patients and caregivers should be provided with appropriate education, including written information, to ensure a comprehensive understanding of LAI antipsychotic medications. They should also be educated to proactively record all dates of administration (and injection sites) and be asked to share this critical information during transitions of care.
- ***Learn from errors*** – Report and review incidents related to LAI antipsychotic medications through the local incident management system (e.g., ims+), including both near misses and actual errors.

Table 1. Comparison of long-acting injectable (LAI) antipsychotic medications available for use in Australia.

Generic name	Brand name	Dosing interval	Injection site and route*
Aripiprazole	ABILIFY MAINTENA	Monthly (separate doses by at least 26 days)	Deltoid IM or gluteal IM
Flupentixol	FLUANXOL DEPOT	Every 2 to 4 weeks	Gluteal IM
	FLUANXOL CONCENTRATED DEPOT	Every 2 weeks (maintenance)	Gluteal IM
Haloperidol	HALDOL	Every 4 weeks	Gluteal IM
Olanzapine	ZYPREXA RELPREVV	Every 2 or 4 weeks	Gluteal IM
Paliperidone	INVEGA SUSTENNA	Initially, 2 injections separated by ONE week	Deltoid IM (initial two injections)
		Monthly, begin FOUR weeks after second injection (maintenance)	Deltoid IM or gluteal IM (maintenance)
	INVEGA TRINZA	Every 3 months	Deltoid IM or gluteal IM
	INVEGA HAFYERA	Every 6 months	Gluteal IM
Risperidone	RISPERDAL CONSTA	Every 2 weeks	Deltoid IM or gluteal IM
Zuclopenthixol	CLOPIXOL DEPOT	Every 2 to 4 weeks	Large muscle (e.g., gluteal) IM

*__Note:__ Prescriptions in the electronic medication chart may not indicate the specific injection site - additional pharmacy labels containing this information may be applied to reduce the risk of errors related to administration via incorrect injection site.

Content adapted from Australian Medicines Handbook, Australian Injectable Drugs Handbook, and Institute for Safe Medication Practices (ISMP) Medication Safety Alert – August 10, 2023 (Vol. 28, Iss. 16).