

# Medication Safety Alert

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Issued by Office of the Chief Pharmacist, SA Health  
www.safetyandquality.sa.gov.au



A patient **Safety Alert** advises of safety matters needing **immediate attention and mandatory action** to address high risk safety problems.

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this notice  
ASAP:

- Chief Executive Officers
- General Managers
- Medical Directors
- Nursing Directors
- Pharmacy Directors
- Directors of Clinical Governance
- Drug and Therapeutics Committees
- Medication Safety Committees
- Clinical Departmental Managers

## Contact details :

T: (08) 8204 1944

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[HealthMedicationSafety@sa.gov.au](mailto:HealthMedicationSafety@sa.gov.au)

## Update – Ongoing critical disruption to supply of intravenous fluid bags

### Purpose

This Safety Alert provides an update on the ongoing critical shortages of multiple IV fluids and the need for continued judicious use and conservation strategies.

### Situation

**Supply of all intravenous (IV) fluid bags, continues to be constrained on a national basis** due to manufacturing issues and high demand.

Supply disruption is expected to be critical throughout October 2024 and constraints are likely to continue for the rest of 2024 and potentially longer.

All efforts are being made to maintain supplies, including accessing alternative products from overseas manufacturers, working directly with the supplier on a daily basis in regard to supplies for SA and working nationally to coordinate strategies to address the current supply constraints.

### All IV fluid supplies are now being monitored

In addition to all volumes of sodium chloride 0.9% and Hartmann's, other IV fluids including glucose and Plasma-Lyte® are being monitored to ensure supplies. Stock availability is provided on a daily dashboard to LHNs and statewide services.

### Conservation strategies

Whilst stock is coming through slowly, there remains a need to ensure judicious use and for the continuation of strategies that conserve stock to ensure ongoing access for critical indications where no suitable alternative exists.

Strategies have been outlined in previous alerts ([Medication Safety Notice No. SA 08/24](#) and [Medication Safety Alert No. 01/24](#)). In addition, the Australian Commission on Safety and Quality in Health Care have published two fact sheets addressing the IV fluid shortage and are a useful reference for strategies for optimising judicious use (refer below for links).

The work of the LHNs and statewide services in implementing strategies to ensure judicious use are acknowledged and are positively contributing to support the management of supplies.

### Administration of medicines via alternative routes including IV bolus injection

Where clinically appropriate, administration via alternative routes including oral or injection (Subcutaneous, intra-muscular or IV bolus) may be considered. A review of medicine administration via infusion documented in Sunrise has shown that cefaZOLIN, ceftriaxone and pantoprazole are the top three agents used across SA Health (marked with \* in table 1), accounting for 60% of drug infusions. Where appropriate, these **may be** considered for IV bolus injection.

Supporting information for medicines that may be considered for IV bolus administration in adult patients are shown in Table 1 below.

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**Table 1:** Medicines suitable for peripheral IV injection in adult patients.

**Administration of medicines as IV bolus injections may not be suitable for all patients; clinical judgement should be exercised to ensure safe and appropriate use.**

Medicine (Hyperlinked to AIDH monograph)	Administration Advice
<a href="#">amoxicillin</a>	Inject over at least 3 – 4 minutes, preferably over 10 – 15 minutes. Faster administration may cause seizures.
<a href="#">amoxicillin-clavulanate</a>	Inject over 3 – 4 minutes.
<a href="#">benzylpenicillin</a>	Inject over 5 – 10 minutes for doses up to 1.2 g. Faster administration of large doses may cause seizures.
<a href="#">cefaZOLIN*</a>	Inject over 3 – 5 minutes. Give doses of 2 g over at least 5 minutes.
<a href="#">cefEPIME</a>	Inject over 3 – 5 minutes.
<a href="#">cefOTAXIME</a>	Inject over 3 – 5 minutes. Faster administration may cause cardiac arrhythmias.
<a href="#">cefTAZIDIME</a>	Inject over 3 – 5 minutes.
<a href="#">cefTRIAXONE *</a>	Inject doses up to 1 g over 2 – 4 minutes.  Inject 2 g doses over 5 minutes for urgent treatment of critically unwell patients.
<a href="#">daPTomycin</a>	Inject over 2 minutes.
<a href="#">ferric carboxymaltose</a>	Inject doses up to 500 mg undiluted at a rate of 100 mg/minute.  Inject doses of 500 mg – 1000 mg undiluted over 15 minutes.
<a href="#">flucloxacillin</a>	For doses up to 1 g, inject over 3 – 4 minutes.  For 2g doses, infusion via a central line is preferred, however, can be injected over 6 – 8 minutes.
<a href="#">gentamicin</a>	Generally given as an IV infusion (refer to local guidelines). However, can be given as an IV injection over 3 – 5 minutes.
<a href="#">meropenem</a>	Inject over 5 minutes.
<a href="#">pantoprazole *</a>	Inject over at least 2 minutes.
<a href="#">piperacillin – tazobactam</a>	Inject over 5 minutes for urgent treatment of critically unwell patients.

**Note 1:** Beta-lactam antibiotics, which exhibit time-dependent killing, may not be suitable for IV injection (over 5 mins) in critically unwell patients.

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Refer to further instructions for each medicine, noting that central lines may have different recommendations from peripheral lines.

- In adults – refer to the [Australian Injectable Drugs Handbook \(AIDH\)](#)
- In children (> 1 month – 16 years) refer to the [Paediatric Guidelines for the Administration of Intravenous Medications](#). Note: subcutaneous and IM administration in infants (<12 months) is traumatic and should **not** be used unless clinically required or standard procedure.
- In neonates (up to 28 days corrected age) standard practice should not change when administering IV fluids and medications. Refer to the [Neonatal Medication Guidelines](#) for guidance. Note that the IV push route is **not** recommended for administration of antibiotics in neonates.

**Standard practice should not change for any existing oxytocin regimes for maternity patients in any care setting.** Further advice will be provided in the future if required.

## Ongoing action required by all LHNs and health services

1. Ensure that all clinicians, relevant committees, hospital and clinical services staff are aware of this notice.
2. Continue to promote safe and judicious use and conservation strategies for IV Fluid bags.
3. Be aware that alternative brands of IV fluids may be in use and refer to relevant product information and administration advice.

## Further enquiries

For any other enquiries or concerns, please contact your procurement team. Your local service pharmacist or pharmacy department may also be contacted for advice.

For details about the shortage of IV fluids - refer to the [TGA website](#).

Fact sheets published by The Australian Commission on Safety and Quality in Health Care addressing the IV fluid shortage:

- [Fact sheet - Conservation strategies and safety considerations during intravenous \(IV\) fluids supply disruption](#) – for health service organisations (HSOs) and clinicians
- [Fact sheet - Intravenous \(IV\) fluids shortage](#) – for consumers

For further information you may also email [HealthMedicationSafety@sa.gov.au](mailto:HealthMedicationSafety@sa.gov.au) within the Office of the Chief Pharmacist

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