

UPDATED Critical disruption to the supply of multiple intravenous fluid bags

SAFETY ALERT 015/24

Issue date:	17 October 2024
Replaces:	SA:014/24
Content reviewed by:	System Sustainability and Performance, Medication Shortage Assessment and Management Team, Infection Prevention and Control, Emergency Care Institute and other relevant clinical experts.
Distributed to:	Chief Executives; Directors of Clinical Governance; Director, Regulation and Compliance Unit
KEY MESSAGE:	NSW Health facilities and clinicians are aware of the ongoing critical disruption to supply of multiple intravenous fluid bags, recommendations to conserve supply, mandatory audit requirements and information regarding the establishment of a local Intravenous Fluid Stewardship (IVFS) group.
ACTION REQUIRED BY:	Chief Executives, Directors of Clinical Governance
REQUIRED ACTION:	<ol style="list-style-type: none"> 1. Distribute this Safety Alert (and/or related factsheets) to all relevant clinicians and clinical departments where intravenous fluids are held, prescribed, and/or administered, and include this information in relevant handovers and safety huddles. 2. Undertake a local risk assessment and incorporate the below recommendations to manage the disruption of supply of intravenous fluids. 3. Ensure a system is in place to document actions taken in response to this Safety Alert. 4. Escalate any concerns regarding supply to HealthShare NSW via email HSNSW-EmergencyManagementUnit@health.nsw.gov.au or phone 02 8644 2288. 5. Escalate any clinical concerns to CEC-MedicationSafety@health.nsw.gov.au. 6. Confirm receipt of this updated Safety Alert within 24 hours to: CEC-MedicationSafety@health.nsw.gov.au.
DEADLINE:	COB 18 October 2024
We recommend you also inform:	<p>Directors, Managers and Staff of:</p> <ul style="list-style-type: none"> • All clinical areas • Pharmacy • Nursing/Midwifery • Medical Services • Drug and Therapeutics Committees <p>Clinical Product Managers Infection Prevention and Control Other relevant clinicians, departments and committees.</p>
Website:	https://www.health.nsw.gov.au/sabs/Pages/default.aspx http://internal.health.nsw.gov.au/quality/sabs/index.html
Review date:	January 2025

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What is updated in the Safety Alert from SA:014/24?

This Safety Alert replaces SA:014/24 – *UPDATED Critical disruption to the supply of multiple intravenous fluid bags*, which has now been rescinded. This Safety Alert has been updated and changes include:

- Reduction in mandatory QARS audit frequency, with audit dates outlined in ‘Recommendations’ section.
- Changes to allocation model (to commence **week of 28 October 2024**) and expectations surrounding escalations and stock holdings outlined in ‘Stock ordering/distribution’ section.

Continued compliance with the recommendations within this Safety Alert and the associated factsheets is essential to minimise impact on clinical activities despite supply chain constraints. IV Fluid Stewardship Groups are to continue to meet on a regular basis (at least monthly) according to the needs of each organisation.

Situation

There is an ongoing global disruption to supply (with intermittent stock available) of IV fluid bags due to manufacturing issues and increases in demand. The date of return to normal supply is being closely monitored by HealthShare NSW, the Clinical Excellence Commission (CEC) and the Ministry of Health.

The primary products affected include:

- Hartmann’s solution bags (Baxter, B. Braun and Fresenius Kabi) – all volumes.
- Sodium chloride 0.9% bags (Baxter, B. Braun and Fresenius Kabi) – all volumes.

Supply of alternative crystalloid solutions (such as Plasma-Lyte 148 and Ionolyte) are **not** expected to fulfill the shortfall in supply of Hartmann’s solution.

The Therapeutic Goods Administration (TGA) continues to review applications and approve the use of international alternatives under Section 19A (S19A) of the *Therapeutic Goods Act 1989*, however supply is limited. Refer to the [TGA shortage information page](#) and CEC factsheet [Information for NSW Health clinicians – Clinical recommendations for managing intravenous \(IV\) fluids shortage](#) for further information. HealthShare NSW is negotiating with suppliers for a bulk order of these products for use across all NSW Health Facilities. Individual facilities are **not** to place separate orders for S19A products.

Background

IV fluid bags are used to manage or correct deficiencies in hydration and electrolyte imbalance. They are also used as diluents for compatible IV medicines.

Assessment

If the preferred IV fluid bag (diluent and/or volume) is not available, alternative products or methods of administration will need to be used considering clinical safety, appropriateness and compatibility.

To assist with the management of the disruption to supply, clinicians must continue to review and comply with the information provided in the following factsheets:

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- Factsheet: [Information for NSW Health clinicians – Clinical recommendations for managing intravenous \(IV\) fluids shortage.](#)
 - Provides clinical conservation strategies that must be implemented in all NSW Health facilities where clinically safe to do so.
- Factsheet: [Information for NSW Health Services – Intravenous Fluids Stewardship.](#)
 - Provides information regarding establishment of an Intravenous Fluids Stewardship (IVFS) group (mandatory for each facility or group of facilities) to ensure conservation strategies are in place and there is clinically appropriate distribution of IV fluids across all NSW Health facilities.
 - IV Fluid Stewardship Groups are to continue to meet on a regular basis (at least monthly) according to the needs of each organisation.
- Factsheet: [Information for NSW Health clinicians – Intravenous \(IV\) fluid bags – International alternatives and associated safety considerations.](#)
 - Provides information regarding S19A alternatives which are **not registered** for use in Australia and the important safety issues that must be reviewed prior to use.
 - **Note:** a number of posters are also available for display in clinical areas, outlining important considerations associated with the use of the Section 19 alternatives. They can be accessed [here](#).
- Factsheet: [Information for NSW Health clinicians – Risk of air embolism when administering intravenous fluids without in-line air detection.](#)
 - Provides information regarding the risk of air embolism due to the flexible container presentation for many of the S19A alternatives.
- Factsheet: [Information for clinicians caring for maternity patients – Intravenous fluids and oxytocin infusion.](#)
 - Provides additional information for NSW maternity services to support conservation strategies and ensure the continuation of essential care.

The content within the above factsheets is subject to change as further information becomes available and the supply situation evolves. Clinicians are to refer to the **electronic** versions of these factsheets using the above hyperlinks (also accessible via the [CEC Medication Safety Updates webpage](#)), as printed versions are uncontrolled.

Recommendations

Mandatory QARS audit:

- Facilities **must** complete QARS audits according to the below schedule to determine current stock levels and usage of IV fluids.
 - LHDs/SHNs must determine how the audit is completed – either at a facility **or** ward/unit level (not LHD/SHN level). **Please ensure duplication of data entry does not occur.**
 - The audit is to be completed by **11:59pm** on the closing day.

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- A link to the audit will be provided by the CEC to CEs, DCGs and the QARS Advisory Group via email prior to each audit. Facilities will be able to review their own data within the QARS portal.

QARS audit schedule until January 2025:

- Monday 28 to Tuesday 29 October 2024
- Monday 18 to Tuesday 19 November 2024
- Monday 16 to Tuesday 17 December 2024
- Monday 13 to Tuesday 14 January 2025.

Inventory control strategies:

- When assessing IV fluid bag stock holdings, consider the following:
 - Identify all locations where IV fluids are stored and ensure mechanisms are in place to share stock both within and between facilities in your district/network.
 - Prioritise supply of Australian registered IV fluids for use with pressure devices and supply of the S19A alternatives in clinical areas where infusion via pressure is not required.
 - Reduce quantities held in imprest areas throughout the disruption to supply.
 - Prioritise supply of IV fluids to clinical areas with clinically appropriate high usage requirements and critical needs. For example, conserve sodium chloride 0.9% 100 mL for the administration of vasopressors/inotropes in critical care settings.
 - Be aware of locations where specific volumes of fluid are required (e.g. sodium chloride 0.9% 500 mL required to prime and flush transducers).
 - Ensure supply of IV fluid is appropriately rotated to minimise potential wastage of stock due to expiry. Any facility with supply of expiring IV fluids (expiring within 28 days) must escalate to CEC-MedicationSafety@health.nsw.gov.au.

Stock ordering/distribution:

- Facilities are directed **not** to place orders for sodium chloride 0.9% IV bags and Hartmann's solutions with suppliers/wholesalers (this applies to both Australian registered and S19A supply).
- All facilities are required to hold **2 weeks** of stock on hand across the centralised product lines:
 - Sodium chloride 0.9% 50 mL, 100 mL, 250 mL, 500 mL and 1000 mL bags
 - Hartmann's 500 mL and 1000 mL bags.
- HealthShare NSW have centralised IV fluid supply for sodium chloride 0.9% and Hartmann's solution bags and will continue to distribute stock from the OneLink Warehouse (OLW).

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- During the week of Monday 21 October 2024, Chief Executives will receive correspondence and be asked to endorse a consistent, routine allocation of the 7 centrally managed product lines for each of the facilities in their LHD/SHN.
- Deliveries based on these agreed allocations will commence the week of **Monday 28 October 2024**. Deliveries will continue as normal for the week of 21 October 2024.
- Any requests to changes to the agreed allocations will only be made by exception and must be received by HealthShare NSW no later than **midday on Wednesday** (the week before). Requests should be made in writing to HSNSW-EmergencyManagementUnit@health.nsw.gov.au by the IV Fluid Stewardship Chair (or delegate).
- Changes may need to occur to agreed allocations based on stock availability at OneLink warehouse. Changes **over 10%** will be communicated with local Clinical Product Managers.