



Warming Parenteral Fluids Clinical Practice Standard

1. Purpose

The purpose of this policy is to establish minimum practice standards for the care and management of warming parenteral irrigation and intravenous fluids throughout the WA Country Health Service (WACHS).

Removing unwanted variation in clinical practice and following best practice guidelines has been found to reduce inappropriate care (overuse, misuse and underuse) thus improving health outcomes, reducing preventable harm and decreasing wastage.

Further information relating to specialty areas including Child and Adolescent Health Service (CAHS), Women and Newborn Health Services (WHNS) can be found via [HealthPoint](#) if not covered in this policy.

2. Scope

All medical, nursing, midwifery and allied health staff employed within WACHS.

All health care professionals are to work within their scope of practice appropriate to their level of training and responsibility.

Further information may be found via [HealthPoint](#) or the [Australian Health Practitioner Regulation Agency](#).

3. Considerations

Equipment must be serviced, tested and calibrated in accordance with manufacturer's recommendations to ensure reliability and accuracy.

Sites within WACHS have different fluid warming devices so refer to manufacturer guidelines.

Microwave ovens, water baths, autoclave units, boiling water or any other warming process where the temperature cannot be controlled must not be used for the warming of intravenous fluids or irrigation solutions.

4. General Information

Inadvertent perioperative hypothermia (IPH) occurs when an individual's body temperature falls below 36°. The main risk factor for this condition is during the perioperative period within theatre, with other risk factors being trauma, burns and extremes of age (infants, neonates and elderly).

A number of different methods are utilised in maintaining or returning an individual to normal temperature, one of which is the warming of parenteral irrigation solutions and intravenous fluids, where such solutions/fluids are warmed and administered as near to body temperature as possible. The need to warm parenteral irrigation solutions and/or intravenous fluids may be required in a number of health care areas including Theatres, Emergency Departments and Intensive Care.

Where it is necessary to warm irrigation solutions or intravenous fluids, a serviced, tested and calibrated commercial fluid warming device (fluid warmer or warming cabinet) with the ability to facilitate temperature control that complies with all legislative and site specific requirements should be used in accordance with manufacturer's recommendations.

Microwave ovens, water baths, autoclave units, boiling water or any other warming process where the temperature cannot be controlled must not be used for the warming of irrigation solutions and/or intravenous fluids.

The temperatures and times detailed in this CPS are general guidance only, each area must follow the manufacturer's recommendations for the product(s) in use when warming irrigations solutions and/or intravenous fluids.

5. Warming Cabinet Use

Various commercial warming cabinets are in use within WACHS and should be used and regularly monitored for temperature consistency in accordance with manufacturer's guidelines.

Where cabinets can be used for the warming of solutions/fluids and blankets, solutions/fluids should not be put in the blanket compartment due to the higher operating temperature within the blanket compartment.

Warming of Intravenous Fluids

Intravenous fluids for normal therapeutic use should:

- remain in overwrap/pouch (where in place) during warming process
- be warmed to temperatures between 34 - 40°C for up to 14 days
- be labelled with a remove by date on insertion into warming cabinet
- be removed from the warming cabinet if not used within 14 days (refer to manufacturers recommendations regarding further usage)
- on removal from the warming cabinet, the date of actual removal should be legibly marked on the solution
- not be rewarmed after removal from warming cabinet.

Warming of Irrigation Solutions (Plastic pour bottles and plastic bags)

Irrigation solutions should:

- remain in overwrap/pouch (where in place) until use or as per manufacturers guidelines
- be warmed to temperatures within manufacturers guidelines
- be stored in warming cabinet for up to 60 days – Plastic Pour Bottles
- be stored in warming cabinet for no longer than 14 days – Plastic Bags
- be labelled with a remove by date prior to insertion into warming cabinet
- be used up until the manufacturer's expiration date if removed from the warming cabinet before 60 days - Plastic Bottles
- be removed from the warming cabinet if not used within 60 days and discarded – Plastic Pour Bottles
- have the date of actual removal legibly marked on the bottle/bag when removed from the warming cabinet
- not be rewarmed after removal from the warming cabinet.

6. Fluid Warmer Use

Various commercial fluid warming devices for the warming of intravenous fluids are in use within the WACHS and should be used in accordance with manufacturer's guideline.

Dispose of all items correctly and safely (clinical waste/sharps container). Refer to OD 0651/16 [Clinical and Related Waste Management Policy](#)

7. Clinical Communication

Clinical Handover

Information exchange is to adhere to the OD 0484/14 [Clinical Handover Policy](#) using the iSoBAR framework.

Critical Information

Critical information, concerns or risks about a consumer are communicated in a timely manner to clinicians who can make decisions about the care.

Documentation

An individualised management plan is to be documented in the patient's health records as soon as practicable, in regard to this CPS.

Refer to the WACHS [Documentation](#) CPS.

Infection Control Considerations

Staff are to comply with the specific requirements for hand hygiene, aseptic non-touch technique and personal protective equipment, in alignment with the WACHS [Infection Prevention and Control Policy](#).

8. Equipment Required

Sites within WACHS have different fluid warming devices so refer to site specific and manufacturer's guidelines.

Equipment must be appropriate for the age/size of the patient.

Equipment must be checked, serviced and calibrated in accordance with manufacturer's recommendations to ensure reliability and accuracy.

Staff must follow the manufacturer's operating instructions. Refer to WACHS [BioClinical Services Clinical Equipment User Manual Library - Endorsed for use in clinical practice](#).

9. Compliance Monitoring

Evaluation, audit and feedback processes are to be in place to monitor compliance.

- **After** 60 days – **Discard** Plastic Pour Bottles
- **After** 14 days – **Discard** Plastic Bags
- Clinical Incidents recorded via DATIX CIMS.

Failure to comply with this policy may constitute a breach of the WA Health Code of Conduct (Code). The Code is part of the [Employment Policy Framework](#) issued pursuant to section 26 of the [Health Services Act 2016](#) (HSA) and is binding on all WACHS staff which for this purpose includes trainees, students, volunteers, researchers, contractors for service (including all visiting health professionals and agency staff) and persons delivering training or education within WACHS.

WACHS staff are reminded that compliance with all policies is mandatory.

10. Relevant Legislation

(Accessible via: Government of Western Australia ([State Law Publisher](#) or [ComLaw](#)))

Acts Amendment (Consent to Medical Treatment) Act 2008 (WA)

Health Practitioner Regulation National Law (WA) Act 2010

Mental Health Act 1996 (WA)

Occupational Safety and Health Act 1984 (WA)

Occupational Safety and Health Regulations 1996 (WA)

State Records Act 2000 (WA)

11. Relevant Standards

[National Safety and Quality Healthcare Standards](#) (First edition 2012): 4.10.3, 4.10.4, 4.10.5

[National Safety and Quality Healthcare Standards](#) (Second edition 2017) : 4.14

12. Related WA Health System Policies

- MP 0053/17 [WA Clinical Alert \(Med Alert\) Policy](#)
- OD 0651/16 [Clinical and Related Waste Management Policy](#)
- OD 0484/14 [Clinical Handover Policy](#)
- OD 0611/15 [Clinical Incident Management Policy](#)
- OD 0657/16 [WA Health Consent to Treatment Policy](#)
- OD 0004/06 [Correct Patient, Correct Site and Correct Procedure Policy and Guideline for WA Health Services \(2nd Edition\)](#)
- OD 0429/13 [National Hand Hygiene Initiative in Western Australian Healthcare Facilities](#)
- OD 0486/14 [Western Australian Patient Identification Policy 2014](#)

13. Relevant WACHS Documents

- WACHS [Clinical Observations and Assessments CPS \(physiological, neurovascular, neurological and fluid balance\)](#)
- WACHS [Documentation Clinical Practice Standard](#)
- WACHS [Medication Administration Policy](#)
- WACHS [BioClinical Services Clinical Equipment User Manual Library - Endorsed for use in clinical practice](#)

14. Policy Framework

[Clinical Services Planning and Programs Policy Framework.](#)

15. Acknowledgement

Acknowledgment is made of the previous SMHS / WACHS site endorsed work used to compile this Warming Parenteral Fluids Clinical Practice Standard.

**This document can be made available in alternative formats
on request for a person with a disability**

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