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KEY TERMS: Refrigerator, refrigerated storage, temperature monitoring, thermometer, medicines, vaccines

SUMMARY: This procedure provides clear processes for monitoring and managing refrigerated medication storage in clinical areas.
1. **POLICY STATEMENT**

   **NSW Ministry of Health ‘Medication Handling in NSW Public Health Facilities’ PD2013_043**, Section 6.1 outlines medication storage requirements in patient care areas. The nurse in charge of a ward must ensure medicines are stored within the correct temperature conditions.

   **National Vaccine Storage Guidelines – Strive for 5** and **Immunisation Provider Kit** provide information and advice specifically for vaccine storage management and must be followed for all vaccine storage. These principles are relevant for other medicines requiring refrigerated storage.

2. **BACKGROUND**

   To maintain the integrity and efficacy of medicines requiring refrigerated storage, they must be stored at all times between 2 and 8 degrees Celsius (2°C - 8°C). Any deviation beyond this temperature range requires investigation and remedial action. Further advice on storage conditions for each particular medicine can be obtained via the facility Pharmacy Department.

   To ensure appropriate temperature conditions for such medicines, each ward or clinical area must have a medicine dedicated*, appropriately sized, monitored and maintained refrigerator, preferably purpose built for medicine storage. It is preferable the monitoring triggers an alarm in the event of temperature excursions, records minimum, maximum and current temperature.

2.1 **Definitions:**

   **Medicines** include all drugs, medications, diagnostics agents, vaccinations and complementary medicines.

   **Refrigerated storage** requires temperatures within the range 2.0 and 8.0 degrees Celsius (2°C to 8°C).

   **Medicines requiring refrigerated storage** are those that are labelled “Refrigerate” or “Store 2°C to 8°C”.

   **Temperature deviations** for refrigerated storage are either less than 2.0 degrees Celsius or greater than 8.0 degrees Celsius.

   **Medicine dedicated** means used only for medicines – no food or pathology permitted.
3. RESPONSIBILITIES

3.1 The Registered Nurse or Midwife in Charge of the Ward will
- Undertake responsibility for storage requirements of all medicines within the ward, including ensuring suitable refrigeration is available, monitored and functioning to maintain temperature requirements of medicines and vaccines
- Undertake, escalate and document appropriate remedial action when temperature deviations occur.

3.2 The Nurse Unit Manager (or delegate) will
- Monitor and record compliance with refrigerated medicine storage requirements daily
- Ensure staff undertaking this procedure have read and are familiar with the procedure
- Ensure that the record is located within proximity of the refrigerator, readily visible and accessible
- Maintain a record of maintenance of refrigerators used for storage of medicines
- Report refrigerated medicine storage records and any remedial actions to the facility Director of Nursing every 2 months

3.3 The Director of Nursing (or delegate) will
- Receive and review records of compliance with refrigerated medicine storage from all ward areas within the facility
- Monitor and ensure compliance with this procedure throughout the facility

3.4 The Director of Pharmacy (or delegate) will
- Ensure medicines supplied to clinical areas requiring refrigerated storage are clearly and appropriately labelled “Refrigerate” and/or “Store 2°C to 8°C”
- Provide advice on the usability of medicines affected by temperature deviation
4. PROCEDURE

4.1 Step 1  Check Temperature
Conduct temperature readings within the refrigerator on at least a daily basis at approximately the same time.

4.2 Step 2  Record Temperature.
Record the temperature readings (current, maximum and minimum) and identity of the recorder on the Temperature Monitoring Form.

4.3 Step 3  Assess Temperature.
Assess and record whether temperature range is acceptable for refrigerated storage (2°C to 8°C).

4.4 Step 4  Action Required.
- Any temperature deviation requires alternate refrigerated storage arrangements occur until the refrigerator is functioning and stabilised within the required temperature range. This alternate storage must also be medicine dedicated.
- Consult pharmacy for assistance and advice regarding the affected medicines. Contact maintenance/ engineering department regarding refrigerator function.
- Action must be recorded on the Temperature Monitoring Form.

4.5 Step 5  Inspect and Reset.
- Undertake a visual and physical inspection to ensure refrigerator is clean, function is unhindered, with medicine safely stored.
- Ensure medicine is stored safely without contact with freezer compartment/element.
- Any required action should be documented on the Temperature Monitoring Form.
- Reset thermometer

5. DOCUMENTATION

Refrigerated Medicine Storage - Temperature Monitoring Form (SESLHD District Form F209)
Maintain documentation records for 2 years.
Submit a copy to Director of Nursing every 2 months.
6. AUDIT

Temperature Monitoring Form submitted to Director of Nursing every 2 months. A collated facility report should be provided to the governing medication safety committee.

Periodic review within SESLHD Medication Safety Walk Round.

7. REFERENCES

1. NSW Ministry of Health ‘Medication Handling in NSW Public Health Facilities’ PD2013_043

2. National Safety and Quality Health Service Standard (4.10.3)


4. Immunisation Provider Kit Version 1, NSW Ministry of Health 2013

8. REVISION AND APPROVAL HISTORY

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<tr>
<th>Date</th>
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<tbody>
<tr>
<td>Aug 2013</td>
<td>Draft 0.1</td>
<td>Julie Thompson. D&amp;QUMC Coordinator.</td>
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<td>Draft 0.2</td>
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<td>Hyperlink to NSW Ministry of Health ‘Medication Handling in Public Health Facilities’ PD2013_043 has been updated.</td>
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