

Ambient Temperature and Humidity Monitoring

Office of Origin: Perioperative Services

I. PURPOSE

- A. To provide guidance to perioperative services staff on appropriate temperature and humidity requirements for the environment, supplies, implants and Point of Care Testing (POCT) materials, how the temperature and humidity readings are monitored and recorded, and what should be done in the event that the temperature or humidity falls outside the acceptable range. This procedure applies to all areas of Perioperative Services including: Endoscopy, Cardiac Cath Lab, Operating Room, Sterile Processing Department, and Perianesthesia areas.

II. REFERENCES

- A. [UCSF Medical Center Automated Temperature Monitoring Policy](#)
- B. [UCSF Medical Center Pharmacy Temperature Monitoring of Medications Policy 110.400](#)
- C. [UCSF Medical Center Point of Care Testing Policy 6.07.02](#)
- D. ANSI/AAMI ST79: 2010 Comprehensive Guide to Steam Sterilization and Sterility Assurance in Health Care Facilities, Arlington, VA: Association for the Advancement of Medical Instrumentation

III. DEFINITIONS

Ambient temperature/humidity - refers to the temperature and humidity in the environment.

IV. POLICY

- A. All supplies and implants will be kept within the temperature range determined by the manufacture.

V. PROCEDURES

- A. Temperature/Humidity Ranges:

- 1. Sterile Processing:

AREA	TEMPERATURE	HUMIDITY
Decontamination	68 - 78 degrees F.	30% - 60%
Assembly	68 - 78 degrees F.	30% - 60%
Sterile/Supply/Scope Storage	68 - 78 degrees F.	30% - 60%

- a. If humidity is high the staff will follow the Wet Packs protocol. [Wet Pack Policy](#)
- b. If any of the areas fall outside the recommended parameters and condensation is present, departmental management, Infection Control and Facilities are notified. Facilities notification is required through the work order process.

- 2. Perianesthesia:

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AREA	TEMPERATURE	HUMIDITY
PACU/Pre-op	70-75 degrees F.	30% - 60%

3. Operating/Procedure Rooms:

AREA	TEMPERATURE	HUMIDITY
Operating/Procedure Rooms	68-75 degrees F.	20% - 60%

- a. Temperature
 - i. When setting alerts within the Automated Temperature and Humidity Monitoring System (ATHMS) there is a shoulder/buffer allowed within 59-68 F and then between 75 F and 86 F for "excursion periods of up to 6 hours" For additional information see Facilities Temperature and Humidity Monitoring Policy .If the OR temperature extends outside the buffer range of 59-86 or has been within the buffer range for greater than 6 hours , there will be an immediate hard-stop and response by Departmental "owner", combined with EMR notation explaining the excursion .
- b. Humidity
 - i. Humidity Below 20% - A Fire Safety Notification (an example is presented in Appendix A) shall be posted at a predetermined location accessible to all staff, which communicates that humidity is below the acceptable level and an interim life safety measure (ILSM) is to follow.
 - ii. Humidity Above 60% - **An Infection Control Notification** (an example is presented in Appendix B) shall be posted at a predetermined location accessible to all staff, which communicates that humidity is above the acceptable level and staff will follow the department "Standard of Care" as described in the OR's [Maintaining Sterile Field Procedure](#) and SPD's [Wet Pack Policy](#). Department management, Facilities, and Infection Control will be notified if physical signs of moisture, such as wall condensation, are present or if excursion last greater than 72 hours at which point an Infection Control Risk Assessment will be performed. Facilities notification is required through the work order process.
- c. Perioperative Services Support Staff will document the excursion in the ATMS.
- d. Operating/Procedure Room temperature may be increase or decrease beyond this range if clinically justified. The time, room temperature, and rationale for exceeding the acceptable temperature range will be documented in the Electronic Medical Record.

4. Sterile Supplies, Medications, POCT materials, and Implants:

AREA	TEMPERATURE	HUMIDITY
All Departments/Areas	68-77 degrees F.	30% - 60%

- a. All items will be stored in areas where ambient temperature and or humidity are monitored.
- b. If the manufacturer of an item specifies that this item should be stored at a temperature or humidity outside of the above mentioned range, accommodation will be made to do so.

B. Temperature/Humidity Monitoring

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1. Temperature and humidity are monitored and logged daily at all Perioperative Services departments, by Perioperative Services Support Staff.
 2. An Automated Temperature Monitoring System (ATMS) is used whenever possible. Where this system is not available, manual monitoring and logging will be performed.
- C. Troubleshooting
1. In the event that the temperature and or humidity fall outside the acceptable range, those monitoring the temperature/humidity will initiate troubleshooting, and if necessary report the issue to the appropriate asset owner e.g. Pharmacy or support department, i.e. Facilities Management. The out of range alert will be acknowledged in the ATMS or the paper log, as applicable, and any corrective actions documented.
 2. If deemed necessary items stored within the malfunctioning device will be relocated to an acceptable alternative location.
 3. The department manager will be made aware when the temperature or humidity is out of range and cannot be immediately rectified.
 4. Temperature alerts are programmed so that they will escalate to the Director of Support Services if they are not responded to within the defined timeframe.

VI. RESPONSIBILITY

- A. For Questions or comments related to this policy, please contact Perioperative Services Administration.

VII. HISTORY OF POLICY

- A. This policy replaces Facilities Policy 7.1.2 which originated on October 2010.
- B. Policy Originated on June 2016
- C. Approved by the Temperature Monitoring Subcommittee on (PENDING)

VIII. APPENDICES

- A. Appendix A: Fire Safety Notification
- B. Appendix B: Infection Control Notification

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Appendix A

Current Humidity in SPD is



LOW

<30%

- KNOW YOUR
 - Egress Pathway
 - Nearest Manual Fire Alarm Pull Station
 - Nearest Fire Extinguisher

Appendix B

Current Humidity in SPD is



HIGH

>60%

- Maintain Standard of Care as outlined in the [Wet Pack Protocol](#)
- Report moisture on or inside sterile packages to your supervisor