

**DRAFT**

**POLICY AND PROCEDURE**

**PROCEDURE FOR RESPONSE TO A TEMPERATURE / HUMIDITY ISSUE IN THE [SURGICAL] [PROCEDURAL] [STERILE STORAGE] SETTING**

USING THIS TOOL: This draft policy is offered as a tool to foster communication between key stakeholders effected by temperature and humidity, and their effects on patient care. It represents one approach, and can be added to, edited and changed to meet the needs of a specific institution.

This tool is based on the ASHRAE white paper noted in the reference section. Recommended to leave this reference in the policy, as it adds strength when reviewing with and AHJ or AO. Ranges and timeframes are based on the white paper.

Items in [blue parenthesis] represent decision points be discussed with the overall team, and can vary. Bottom-range of the humidity scale is one to be determined by the team as to the appropriate range to monitor, and department names may vary between hospitals or health care organizations.

Variances of upper and lower limits noted in the NOTIFICATION & RESPONSE PROCEDURES section are those that read out on automated reports that would be subject to review by an AHJ or AO. For relative humidity, it refers to the actual percentage points tracked. More information is provided in the white paper, on which the range recommendations are based.

[Engineering Services] monitors temperature and humidity through the Building Automation System (BAS) to ranges as described by regulatory requirements. It is useful information for Perioperative Services to understand when the operating rooms are out of the required ranges, for planning use of the operating rooms on a case by case basis.

PURPOSE: Communication protocols are necessary to support the [Surgical] [Procedural] [Sterile Storage] staff during instances of when temperature or humidity is out of the range. The following contact points are to be initiated when these ranges are out of compliance as established by regulatory requirements. Those ranges for procedural areas are:

* For Relative Humidity (RH): between [20%] or [30%] RH and 60% RH
* For Temperature: 68 degrees F and 72 degrees F

PERIOPERATIVE DECISION (PD) TEAM:

On the occasion of an event of when temperature or humidity go out of range, The Perioperative Decision (PD) team is to convene. This is a multidisciplinary team that will evaluate risk to case, and the effects of temperature and humidity on the risk of the procedure. This team is to have one representative from each of the following departments: Perioperative Services, Engineering Services, and Infection prevention. The PD Team will consider the following:

* Severity and consistency of the RH or temperature deviation
* Infection risk to patients of the scheduled procedures
* Level of clinical staff, patient and support family members’ comfort
* Confidence of Engineering in a timely solution to bring conditions back in range.
* Occupied or unoccupied status of the perioperative space

NORMAL CONDITION PROCEDDURES

* The [Engineering] Team is to take temperature and humidity readings each morning of the operating rooms, and provide to the [Surgical] [Procedural] [Sterile Storage] Team for evaluation and status.
* When a significant urgent clinical need arises that requires the use of an impacted specialty operating room. Engineering will prioritize the response for engineering controls.

NOTIFICATION & RESPONSE PROCEDURES:

**Upper Humidity Limit – Less Than 5%**: If the procedural area is out of range of the upper limit of less than 5%, the following actions are to be taken:

* At 6 Hours: monitor the active case in the effected procedural room, monitor future performance of the room, and [Engineering] to take corrective action to resolve.
* At 12 Hours: convene the PD Team to evaluate risk of any cases scheduled for the room and establish corrective action.
* At 24 Hours: if corrective action is unsuccessful, the PD Team shall evaluate closure of the room until effective corrective action can be taken.

**Upper Humidity Limit – More Than 5%:** If the procedural area is out of range of the upper limit by more than 5%, the following actions are to be taken.

* At 2 Hours, monitor the active case in the effected procedural room, monitor future performance of the room, and [Engineering] to take corrective action to resolve.
* At 8 hours, The PD Team should convene and consider halting operations in that room until the issue is resolved.

**Lower Humidity Limit – Less Than 5%:** If the procedural area is out of the lower limit by less than 5%, the following actions are to be taken:

* At 6 hours, [Engineering] is to take corrective action to bring the RH level up.
* At 12 hours: the PD team should convene
* At 24 hours: the PD Team should consider halting operations in that room until the issue is resolved.

**Lower Humidity Limit – More Than 5%**: If the procedural area is out of the lower limit by more than 5%, the following actions are to be taken:

* At 2 hours, [Engineering] is to take corrective action to bring the RH level up.
* At 8 hours: the PD team should convene and consider halting operations in that room until the issue is resolved.

**Temperature for Clinical Need** The PD team will assess staff comfort and for low temperature, including the potential impact of patient thermoregulation under general anesthesia, and determine if patient warming interventions should be implemented.

REFERENCE:

“Humidity Control Events in Perioperative Care Areas,” 2019, Developed by ASHRAE Technical Committee 9.6, Healthcare Facilities

<<Signature>>\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Director, [Engineering]

In collaboration with (initials)

[Surgical] [Procedural] [Sterile Storage] Services \_\_\_\_\_\_

Infection Prevention \_\_\_\_\_\_

New: x/xx/20xx

Reviewed: x/xx/20xx

 ©2022 The American Society for Health Care Engineering of the American Hospital Association

Disclaimer: This document is provided by ASHE as a service to its members. The information provided may not apply to a reader’s specific situation and is not a substitute for application of the reader’s own independent judgment or the advice of a competent professional. ASHE does not make any guaranty or warranty as to the accuracy or completeness of any information contained in this document. ASHE and the authors disclaim liability for personal injury, property damage, or other damages of any kind, whether special, indirect, consequential, or compensatory, that may result directly or indirectly from use of or reliance on this document.