# Do we need to monitor the temperature and humidity of the rooms where sterile supplies are stored?

*Any examples are for illustrative purposes only.*

When developing Infection Prevention related policies and practices, it's important that you refer to the Infection Prevention Hierarchy, published in the April 2019 Perspectives.

The first level of the hierarchy is that you ensure your organization is compliant with all building code requirements. Deemed organizations must fulfill, Centers for Medicare and Medicaid (CMS) ventilation requirements which outline criteria

for new or renovated existing facilities (constructed or plans approved on or after July 5, 2016). These are provided in the 2012 edition of NFPA 99 which references the 2008 edition of ASHRAE 170 table 7.1. If your local authority has published building codes, then your organization must meet the most restrictive requirement.

ASHRAE Standard 170- 2008 Table 7.1 ventilation requirements for sterile storage in CENTRAL MEDICAL AND SURGICAL SUPPLY areas includes the following:

- Positive air pressure relationship to adjacent areas
- Minimum outdoor air exchange 2 per hour
- Minimum total air exchange 4 per hour
- Maximum relative humidity 60%
- Temperature range 72 to 78 F or 22 to 26 C

Organizations with existing facilities, constructed or plans approved prior to July 5, 2016, may comply with the 2012 ventilation requirements in NFPA 99 or the version of NFPA 99 in effect at the time of the ventilation system installation.

The next level of the hierarchy is the CMS Infection Control Worksheet for the Hospital (HAP) and Ambulatory Surgical Center (ASC). Depending on the type of facility surveyed, these organizations must meet Conditions of Participation (CoP) or

Conditions for Coverage (CfC). The worksheet provides the following guidance for surveyors for reusable items sterilized on site:

- (HAP) After sterilization, medical devices and instruments are stored so that sterility is not compromised.
- (ASC) After sterilization, medical devices and instruments are stored in a designated clean area so that sterility is not compromised
- (ASC and HAP) Sterile packages are inspected for integrity and compromised packages are repackaged and reprocessed prior to use.

Next, organizations must be compliant the manufacturer's instructions for storage. If, for example, the manufacturer of the sterile supply requires a specific temperature and humidity requirement for storage, your organization would need to demonstrate at the time of survey that these requirements are being met. The Joint Commission does not specifically require that these parameters be documented, however your staff should be able to identify if any sterilized supply, whether single use or reprocessed, has been potentially compromised (as may occur if the integrity of the package is in question or has evidence of damage from humidity) and can speak to whether that item would be appropriate for use.

Finally, your organization may refer to evidence-based guidelines

and national standards (EBGs) for guidance as to how sterile supplies should be stored. Most EBGs agree that sterile supply areas must be clean, well ventilated and protect supplies from contamination, moisture, dust, temperature extremes, and humidity extremes. Your organization must show evidence that, whether in a designated Central Surgical Supply area or in a storage room with mixed clean and sterile supplies, you are storing those supplies in a manner to protect from contamination and maintain the integrity of the packaging from damage. Failure to store medical and sterile supplies in a manner to protect from contamination will be scored at IC.06.01.01 EP 3.

**References and applicable standards:**
NFPA 99-2012: 9.3.1
ASHRAE 170-2008
2018 FGI Guidelines

**Additional Resources:**
A read only copy of the ASHRAE standard can be accessed from this hyperlink: ASHRAE then scroll down the list to Standard 170-2008 Ventilation of Health Care Facilities.
CMS Hospital Infection Control Worksheets
CMS - Ambulatory Surgical Center (ASC) Infection Control Worksheet
Guidelines for Design and Construction of Health Care Facilities 2018 edition

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