Humidity Sample Policy

PURPOSE: To provide appropriate methods of monitoring and adjusting Surgical Suite temperature and relative humidity levels.

BACKGROUND INFORMATION:

1. Although there are design criteria for operating room heating, ventilation and air conditioning ("HVAC") systems related to temperature and humidity, the actual temperature and humidity within each operating room is mostly affected by the clinical requirements of the procedure and the heat and humidity load added by the operating team and equipment.

2. A relative humidity that is too high can result in damp or moist supplies with added opportunity for mold growth. It can also contribute to excess perspiration and occasional "sweat through" when combined with high temperatures. A relative humidity that is too low can result in excessive bacteria-carrying dust within the surgical environment. Low humidity also contributes to static electricity charges.

3. Although humidity and temperature during operations are important, frequent logging does not contribute to patient safety or staff comfort.

POLICY:

Preventive Maintenance of the Operating Room HVAC System: The Engineering Department shall implement appropriate preventive maintenance and monitoring practices to assure the HVAC system is working as designed. Because NFPA 99 requires operating room humidity to be greater than 35%, the Engineering Department shall routinely monitor humidity (at least weekly checks) to assure appropriate functioning of the equipment. Other routine monitoring of HVAC functioning will be prescribed by the Utilities Management plan approved by the Environment of Care Committee.

Operational Monitoring: Because the temperature and humidity fluctuate significantly throughout the day and because adjustments to temperature and humidity must be made in real time, no routine logging within the OR is
indicated. However, staff shall consider the following guidelines to adjust temperature and humidity as the day progresses.

a. Considerations for adjustments to temperature:
   1. Comfort of the surgery team.
   2. Excessive perspiration.
   3. Clinical needs of the patient or the procedure.

b. Considerations for adjustments to humidity:
   1. Excessive perspiration.

c. Process: The circulating nurse shall be responsible for making in-room adjustments to temperature. Engineering shall be contacted and shall respond promptly should these in-room adjustments prove ineffective or if adjustments to the humidity load provided by the HVAC system be indicated.

REFERENCES:

NOTE:
1. Perioperative Nurse Specialists in the AORN Center for Nursing Practice, Research, and Health Policy are available for clinical practice consultation at (303) 755-6300, ext. 265, or on the web site at www.aorn.org.