



## **AORN POSITION ON THE MANAGEMENT OF USED ALCOHOL BASED APPLICATORS**

February 12, 2019

AORN has heard from our members via the Consult Line and social media posts that there is confusion regarding whether to remove the used alcohol based prep applicators from the room. In response, AORN has developed information outlining the issue and recommended next steps.

The removal of prep sponges or applicators soaked with flammable antiseptics from the OR is an unresolved issue.

The Joint Commission standard EC.02.03.01; EP12 states

“When flammable germicides or antiseptics are used during surgeries utilizing electrosurgery, cautery, or lasers the following are required:

- Packaging is nonflammable
- Applicators are in unit doses
- Preoperative "time-out" is conducted prior the initiation of any surgical procedure to verify the following:
  - o Application site is dry prior to draping and use of surgical equipment - Pooling of solution has not occurred or has been corrected
- Solution-soaked materials have been removed from the operating room prior to draping and use of surgical devices *(For full text, refer to NFPA 99-2012: 15.13)*”

However, removing prep sponges or applicators from the OR prior to draping takes the RN Circulator out of the room during an important phase of the surgical procedure, which is a distraction from patient care. This is also not in alignment with the AORN Guideline for Prevention of Retained Surgical Items, which states *“I.f. All counted items should remain within the OR or procedure room until the counts are completed and reconciled. Linen and waste containers should not be removed from the OR or procedure room until all counts are completed and reconciled and the patient has been transferred out of the room.”*

Furthermore, evidence has shown that opening the OR door could disrupt the airflow in the OR and increase the patient’s risk for surgical site infection, which is the rationale for a recommendation to limit door openings in the AORN Guideline for Sterile Technique: *“VII.d. Doors to the operative or invasive procedure room should be kept closed as much as possible except during the entry and exit of patients, required personnel, and necessary equipment.”*

AORN has communicated its interpretation to both NFPA and the Joint Commission regarding this issue with a recommendation that “solution-soaked materials have been contained within the room away from any ignition source.” AORN has not yet received a response from either organization.

Until this requirement is changed, AORN suggests that facilities request a conventional waiver or prepare a response to this issue in advance of a Joint Commission inspection. In addition, facilities may contact the local fire marshal to explain the situation and request a letter that supports leaving the prep-soaked materials in the room away from any ignition source, which should include the following supportive material:

1. The typical OR is 20 feet wide (change to the sizes of your ORs, especially if larger) and the ignition source (eg, electrosurgical unit, laser) is typically in the middle of the room by the patient.
2. The waste receptacle, which contains the prep-soaked materials, is at least 3 feet away from the ignition source.
3. The air flow in the room is continuous and the room is at positive pressure, which prevent the accumulation of alcohol fumes in the room.
4. Alcohol dries very rapidly, and there is typically at least a 5-10 minutes from the end of use of the prep applicator to the beginning of the use of an ignition source.
5. NFPA does not provide a definition of solution-soaked materials. If the solution is not dripping from the sponge or applicator, it may not need to be removed under NFPA.
6. Alcohol based hand rub agents are allowed to be used, dispensed, and stored in an OR. These agents contain a very similar amount of alcohol as the prep agents do and pose a similar very low risk.
7. Additional door openings may increase the risk of infection for the patient and lead to cross-contamination from handling patient waste outside the operating room.
8. Removing trash from the room may increase the risk for a count discrepancy and potential unnecessary time cost, and x-ray exposure to the patient.

Here are some additional considerations for developing a policy on this topic:

1. If counted materials are not used during the prep with an alcohol-based antiseptic, no counted materials would be removed from the room.
2. If you are using an alcohol-based antiseptic, the applicator and any absorbent material used to prevent pooling would be removed from the room. The absorbent material would only have to be removed if it is “solution-soaked”.
3. Contain the applicator and the absorbent material in a bag and label it with the OR room number and case number (eg, 1 for first case, 2 for second case) for traceability in the event of a count discrepancy. Take the bag to a predetermined location and perform hand hygiene.