



INFECTION PREVENTION STRATEGIES
FOR
AMBULATORY SURGERY CENTERS

HOW DOES TURNOVER TIME, DRESS CODE AND OTHER CLINICAL ISSUES EFFECT INFECTION CONTROL IN THE OPHTHALMIC OPERATING ROOM

OPERATING ROOM

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American Surgisite Centers



- ❖ Oversee 8 Ophthalmic ASCs
- ❖ All Clinical Directors
- ❖ All aspects of clinical care
- ❖ Responsible for regulatory
- ❖ Policy and Procedure Manuals, updates
- ❖ AAAHC and DOH surveys
- ❖ QAPI and Governing Body
- ❖ Development and oversight of EMR program



2009 CMS Conditions for Coverage mandates

that all participating ASCs are to have an

Infection Control Program

416.51



The ASC must maintain an infection control program that seeks to minimize infections and communicable diseases.

CMS cfc 2009



The ASC's infection control program must:

- ◆ Provide a functional and sanitary environment for surgical services, to avoid sources and transmission of infections and communicable diseases;
- ◆ Be based on nationally recognized infection control guidelines;
- ◆ Be directed by a designated health care professional with training in infection control;
- ◆ Be integrated into the ASC's QAPI program;
- ◆ Be ongoing;
- ◆ Include actions to prevent, identify and manage infections and communicable diseases; and
- ◆ Include a mechanism to immediately implement corrective actions and preventive measures that improve the control of infection within the ASC.

2009 CMS cfc

Recognized Authorities in the field of Infection Control

- ◆ AORN
- ◆ APIC
- ◆ AAMI
- ◆ ASORN
- ◆ WHO
- ◆ SHEA
- ◆ CDC

AORN

RECOMMENDED PRACTICE V

A sterile field should be maintained and monitored constantly.

1. The sterile field should be prepared in the location in which it will be used. Moving tables stirs air currents that can contaminate the sterile field.
2. Open sterile supplies should only be exposed to one patient at a time. Opening several cases in a room at one time exposes the sterile field to more than one patient. The first patient receives sterile items that have not been exposed to any other patient. Future patients receive items exposed to a variety of infected and noninfected patients, as well as to increased movement and traffic in the OR.

3. Sterile fields should be prepared as close as possible to the time of use. The potential for contamination increases with time because dust and other particles present in the ambient environment settle on horizontal surfaces over time. Particulate matter can be stirred up by movement of personnel when opening the room and also can settle on opened sterile supplies. 3, 20, 21, 34, 36, 37

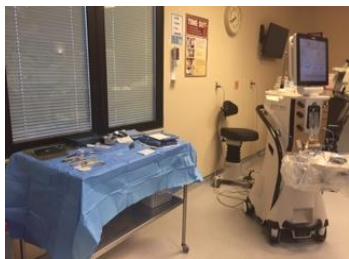
There is no specified amount of time designated that a room can remain open and not used and still be considered sterile. The sterility of an open sterile field is event-related. An open sterile field requires continuous visual observation. Direct observation increases the likelihood of detecting a breach in sterility. 37, 38

4. Sterile fields should not be covered. Although there are no research studies to support or discount the practice, removing a table cover may result in a part of the cover that was below the table level being drawn above the table level or air currents drawing microorganisms from a nonsterile area to the sterile field. It is important to continuously monitor all sterile areas for possible contamination. 20

5. Conversations in the presence of a sterile field should be kept to a minimum to reduce the spread of droplets. Air contains microorganisms on airborne particles, such as respiratory droplets. The primary source of airborne bacteria is health care personnel. 6, 11, 28, 39



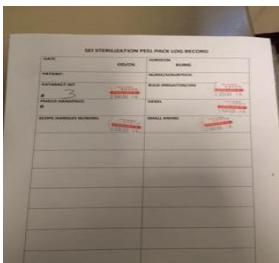
- Surgical technique and new technology have drastically changed the face of cataract surgery.
- Procedures are fast, efficient with extremely successful outcomes.
- ASCs are always looking to handle the high volume and speed of the surgeons.



Nurse Managers are faced with many challenges when they attempt to please the surgeons and in keeping up with the speed of surgery but always trying to adhere to the regulations, guidelines and recommendations of recognized authorities. Reimbursements continue to be cut, medical supply costs and medication costs are rising. There are several formulas that can be used to determine if the ASCs costs are high.

Case Bins

- ◆ To help improve turnover time, use case bins
- ◆ Pull surgeon preference items for the day
- ◆ Everything is in one place
- ◆ Once room is cleaned bring in one bin, not armfuls of items
- ◆ Items are contained and less of a chance falling on the floor



Sterilization logs

- ◆ Create a log that contains the items sterilized for each case
- ◆ For example, cataract set, microscope handles, phaco h/p
- ◆ Using a sticker gun that has the sterilization info for each item
- ◆ Double sided glue, peels off of sterile product and sticks to log

- ◆ Sterilization logs can be scanned into the patient EMR or patient paper chart
- ◆ Easily traceable if there is an autoclave failure
- ◆ Validation of sterility in the event of an infection

Advantages of using an autoclave

- ◆ Sterilization logs can be scanned into the patient EMR or patient paper chart
- ◆ Easily traceable if there is an autoclave failure
- ◆ Validation of sterility in the event of an infection

Custom Packs

- ◆ Packs are made to order
- ◆ Can contain the routinely used items for surgery
- ◆ When opened the outer wrap becomes the sterile table cover
- ◆ Other items: Mayo cover, syringes, needles, weck cells, instrument wipe, Tegaderm, steri-strips, blades, gowns, gloves prep set, Betadine swabs etc.

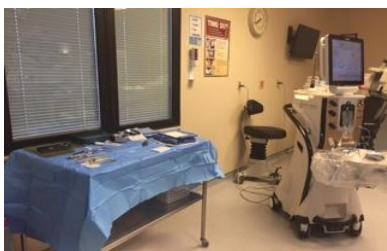


Suggestions to improve turnover time using good Infection Control Practices

- ◆ At the completion of the surgery the equipment in the room is to be sanitized.
- ◆ Use products with a quicker kill time, 1 or 2 minutes.
- ◆ Following manufacturer' instructions
- ◆ The equipment is to stay wet for the entire kill time of the product
- ◆ Clean all surfaces that have come in contact with the patient



- ◆ Tables are not to be set-up in a different area and rolled into the operating room for use
- ◆ Custom packs can contain much of the disposable products used for the procedure
- ◆ Have a bin with extra items pulled ahead of time ready to be flipped onto the sterile field
- ◆ Do not open the sterile field for the next patient until the room and all equipment is sanitized
- ◆ Do not open supplies for next case until patient leaves the room
- ◆ Instrumentation is to be placed in a container with a lid to be transported to decontamination
- ◆ Room readied for next patient





Adequate staffing

- ◆ Orderlies are very useful when moving the patient throughout the ASC
- ◆ Non nursing duties can be performed
- ◆ With the guidance of a nurse, the orderly can transport patient to the OR
- ◆ Sanitizing all equipment
- ◆ Removing trash
- ◆ Clearing furniture from the path of patient transport
- ◆ A great entry level job with room to grow

- ◆ Eye stretchers have monitors attached

- ◆ ECG stretchers have monitors attached
- ◆ O2 tanks below
- ◆ IV pole
- ◆ The patient is placed on the stretcher in pre-op
- ◆ Assessed, readied for surgery and transported to the OR
- ◆ When surgery has ended the stretcher is unlocked and the patient is brought to PACU



Time savings:

- ◆ Patient transported without removing the monitors
- ◆ Patient is not moved from stretcher to WC or other transport
- ◆ Less furniture to sanitize in the OR
- ◆ Once room is readied the next patient is brought in ready for surgical preparations

Efficiency

- ◆ For multi room ASCs color code each OR
- ◆ Room 1 Red, Room 2 Green
- ◆ Color code the patient stretcher to correspond with the OR
- ◆ Assign an orderly to certain rooms. They are responsible for transporting patients, room break down and equipment
- ◆ If possible, when using 2 ORs for one surgeon, assign right eyes in one room and left eyes in another
- ◆ If working in a one room ASC assign right eyes first followed by left eyes

Surgical Site Marking

- ◆ When the patient is admitted the wrist band is placed on the same side as the operative eye
- ◆ If the right eye is scheduled the wrist band is placed on the right wrist, etc.
- ◆ It serves as an “at a glance” tool for verification
- ◆ Applies to unilateral surgery
- ◆ Another tool to avoid errors
- ◆ For patients NOT receiving dilating drops, a green dot is placed on the wrist band

Surgical Site Marking

- ◆ Surgeon marks the site in pre-op after assessment
- ◆ Patients with Premium IOLs will have a bright colored sticker placed on hat stating Premium IOL
- ◆ Single use marking pens are kept throughout pre-op
- ◆ Pens are disposed of after use
- ◆ Purchased in bulk for cost savings



APIC

- ◆ APIC Position Paper
- ◆ Single Dose vials in an Immediate Patient Care Area
- ◆ Operating Rooms
- ◆ Patient Bays
- ◆ Carts on wheels



- ◆ Whenever possible use disposable products
- ◆ Saves time on cleaning
- ◆ Lessens the risk of cross contamination
- ◆ Buying products in bulk will allow for lower costs
- ◆ Single use tourniquets

- ◆ Syringes are to be labeled if drawn up and not immediately used
- ◆ Syringes are to be labeled if drawn up and put down for future use
- ◆ Labeled if carried from one area to another
- ◆ Syringes are not to be placed in clothing pockets
- ◆ Drawn medications are to be used within one hour of preparation



Syringe in scrub pocket

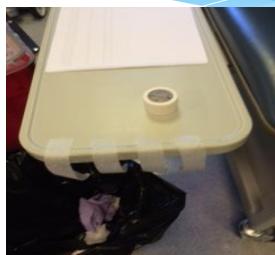
American Society of Ophthalmic Registered Nurses

ASORN Recommended Practice: Use of Multi-dose Medications

www.asorn.org/client_data/files2014/303_asornmultidosedmedication.pdf

Are Eye Drops Multidose?

- ◆ Policy must reflect practice
- ◆ Use aseptic technique
- ◆ Once opened, Eye Drops can be labeled following 28 day BUD
- ◆ After 28 days opened eye drop bottles are to be discarded or if the manufacturer's expiration date is reached
- ◆ The bottle becomes contaminated, i.e. eye lashes



Immediate Patient Care Area

- ◆ The multi dose bottles of eye drops are kept on the patient bedside tray.
- ◆ Two blood pressure cuffs are kept on the patient bedside tray
- ◆ Anything that is kept in the patient area is to be used on that patient and disposed of when the patient is gone from that area.
- ◆ Equipment is to be sanitized before used on another patient





APIC position paper: Safe injection, infusion, and medication vial practices in health care

- ◆ 1-hour limit from completing preparation (eg, spiking an IV bag) until beginning administration of the immediate-use CSPs to patients.
- ◆ This includes BSS bottles, syringes, injections or IV bags
- ◆ USP ,797. requires a beyond-use date of 28 days after initial stopper penetration (USP chapter ,51.14 unless the manufacturer's expiration date will be reached before 28 days or the product labeling (package insert) states otherwise.

◆ www.apic.org/Resource_1.../Position_Statements/2016APICSIPPositionPaper.pdf



One and Only Campaign



- ◆ One Syringe
- ◆ One Time
- ◆ One Patient
- ◆ One Hour
- ◆ www.oneandonlycampaign.org/ (video)



World Health Organization

- ◆ 5 Moments of Hand Hygiene
- ◆ Policies must reflect practice
- ◆ Posters should be visible throughout the center
- ◆ Hand sanitizers, accessible and placed in all patient care areas
- ◆ Health Care Inspirations for posters
- ◆ <https://healthcareinspirations.com/>



Sanitizers

- ◆ Have sanitizers available throughout the center
- ◆ Sanitizers that can be attached to clothing
- ◆ Many different choices and brands
- ◆ Can be harsh on the skin





<https://www.cdc.gov/handhygiene/training/interactiveEducation>



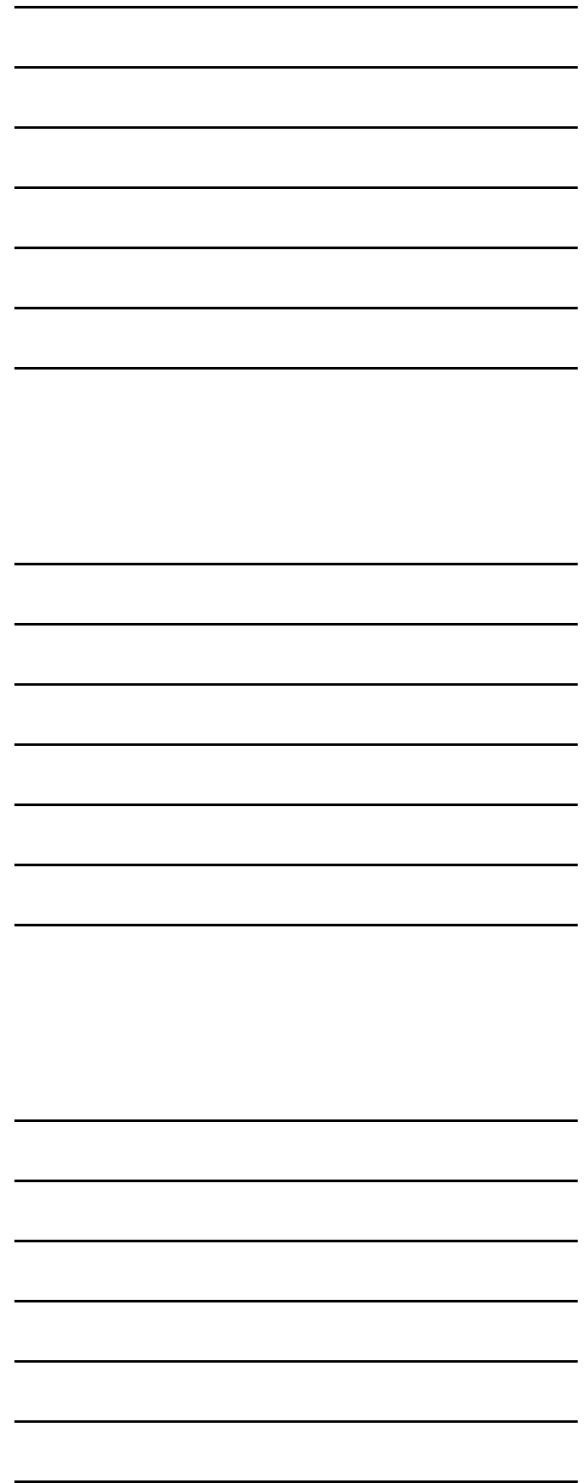
Dress Code

- ◆ AORN recommends that surgical attire for the OR not be laundered at home
- ◆ Surgical scrubs should not be worn outside of the ASC
- ◆ Staff and Surgeons should not wear surgical scrubs from outside to work and into the OR
- ◆ Some centers allow staff to wear scrubs into work and change into clean scrubs before entering the OR
- ◆ The practices of the ASC must follow the policy



Surgical Attire

- ◆ Cloth hats can only be worn if covered by a disposable bouffant cap
- ◆ Surgeon skull caps should not be worn unless covered by a disposable bouffant cap
- ◆ If cloth hats are worn and not covered they must be laundered every day by a laundering company that launders the scrubs
- ◆ American College of Surgeons recently wrote an article stating that "the skullcap is symbolic of the surgical profession".
- ◆ "The skullcap can be worn when close to the totality of hair is covered by it and only a limited amount of hair on the nape of the neck or a modest sideburn remains uncovered."





- ◆ Surgical masks are to be either on or off
- ◆ Surgical masks are not to be dangling around the neck
- ◆ Masks are to be changed when wet or contaminated
- ◆ Masks should be tied properly around the head and neck
- ◆ Masks are to be worn when near a sterile field or during an intraoperative procedure



Other Clinical Issues and Infection Control

- ◆ Use of compounding Pharmacies
- ◆ 503 A versus 503 B Outsourcing Pharmacies
- ◆ 503 B no patient specific prescription is required
- ◆ (check with State regs)
- ◆ Added cost but saves time
- ◆ Individual doses can prevent cross contamination
- ◆ Do a cost analysis and look at cost of all the meds needed to prepare individual patient doses vs the compounded drugs

Medical Waste Containers

- ◆ Containers to be placed where medical waste is generated
- ◆ To be sealed and replaced when $\frac{3}{4}$ full
- ◆ Tops should be closed to prevent tipping and spillage
- ◆ Should be secure to prevent pilferage



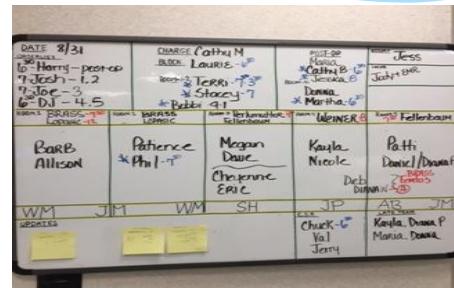
Medication Waste

- ◆ Check with State regs
- ◆ Medications are to be disposed of in a separate medical waste container
- ◆ Unused Meds are not to be dumped down the drain
- ◆ Black Container
- ◆ To be picked up and disposed of accordingly

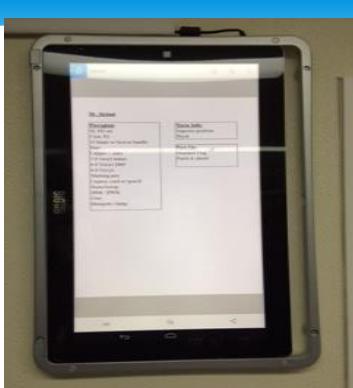
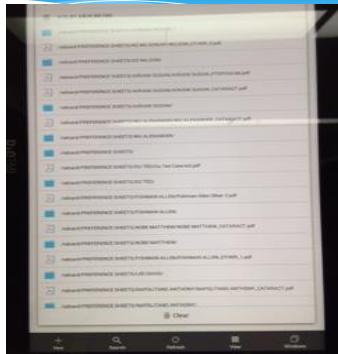


- ❖ Staff assignments are an important way of keeping the schedule moving
- ❖ Centers that have a large number of employees need to make sure that everyone is utilized efficiently
- ❖ As the surgery schedule changes the staff schedules need to change as well
- ❖ Morning surgery can be quicker with a higher volume surgeon
- ❖ Afternoon surgery can slow down with less volume
- ❖ Some centers do their YAG lasers in the afternoon
- ❖ The pace of YAG lasers is much different than cataracts

- * A white board can be used as method of communicating all staff assignments
- * The board is remarkable and can be altered at any time
- * Assignments that are changed can be immediately communicated
- * Another mechanism to improve turn over time, efficient staffing and accountability



- ◆ Another time saver are surgeon preference cards
- ◆ Problems with paper cards:
 - ◆ Storage in books
 - ◆ Worn out pages
 - ◆ Timely to update
 - ◆ Cross outs and illegible writing
 - ◆ Taping to wall
 - ◆ Visualization



- ◆ Big Tab HD is lighted
- ◆ Can be viewed in a dark room
- ◆ Easily hung on the wall
- ◆ Capacity for all surgeon preference cards on file
- ◆ No more storage books to take up space
- ◆ Easily updated
- ◆ Can be cleaned
- ◆ Reasonable pricing

Sterile Processing Department

- ◆ Staff should be Certified in Sterile Processing
- ◆ Have all available PPE
- ◆ Have SDS books available
- ◆ Create an “At a glance” chart with cleaning instructions for all brands of instruments.
- ◆ Laminate and mount in the Decontamination Room
- ◆ Have Competencies for the staff

- ◆ Sterile Processing University
- ◆ www.spdceus.com
- ◆ IAHCSSM
- ◆ www.iahcsmm.org



- ◆ Quick Rinse
- ◆ Used to flush cannulated instruments
- ◆ Re-usable cannulas
- ◆ I/A hand pieces
- ◆ Phaco hand pieces
- ◆ Flushes the instrument with water then follows with an air flush to remove water
- ◆ The bottle and tubing are emptied at the end of the day
- ◆ Can be cleaned and autoclaved

- ◆ Ultra sonic cleaners are heated
- ◆ Use a TOSI test for efficacy of the unit
- ◆ Rinse debris from instruments before placing in the unit
- ◆ At the end of the day clean thoroughly and wipe the inside with Alcohol to facilitate the drying process
- ◆ Not all instruments should be placed in the ultrasonic cleaner
- ◆ But it is an effective process for cleaning instruments



Safety

- ◆ Doors should not be propped open
- ◆ Can do so if moving stock or products but staff needs to be in the area
- ◆ No cardboard boxes in the clinical area
- ◆ Do not block fire exits

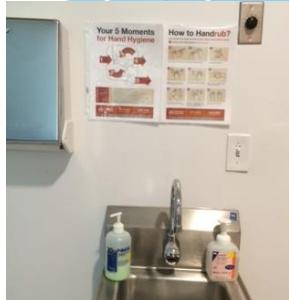




- ◆ Door to the trash room is propped open
- ◆ Fire door is not to be propped open
- ◆ Door to “Dirty” room is kept open

Hand Hygiene

- ◆ Posters for Hand washing
- ◆ Sanitizers available



Blood Pressure Cuff covers



Privacy Curtains

- ◆ Should have a policy for cleaning the curtains
- ◆ Remove and clean at least annually
- ◆ Have fire retardant documentation
- ◆ Make sure that the curtains provide complete privacy for the patients



- ◆ Nice Infection Control process
- ◆ Handle for privacy curtains
- ◆ Never touch the curtains
- ◆ Can remove and clean the handle





Instructions for #18734



- ◆ Glove Kiosks located throughout the center
- ◆ PPE Kiosks located outside each OR
- ◆ Can contain safety goggles
- ◆ Should be readily available to all staff



- ◆ In closing:
- ◆ There is no magic formula for running an ASC
- ◆ Strong Infection Control policies and practices must prevail
- ◆ There must be cooperation from Medical Staff, Clinical Staff and Administration
- ◆ Staff education and training is an essential component to achieve excellent patient outcomes

- ◆ Review and updates of Policy and Procedure manual will provide the center with an important tool for superior patient care
- ◆ Follow APIC, AORN, APIC, WHO and other authorities to formulate policies and to provide staff with important In-service education



- ◆ Results of Patient Surveys are a valuable source of knowledge when looking to improve processes
- ◆ Always involve the staff and have them participate in the patient survey reviews
- ◆ If a particular employee is complimented by a patient let them and everyone know about it
- ◆ Post the survey in the lounge area





Thank You!

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