

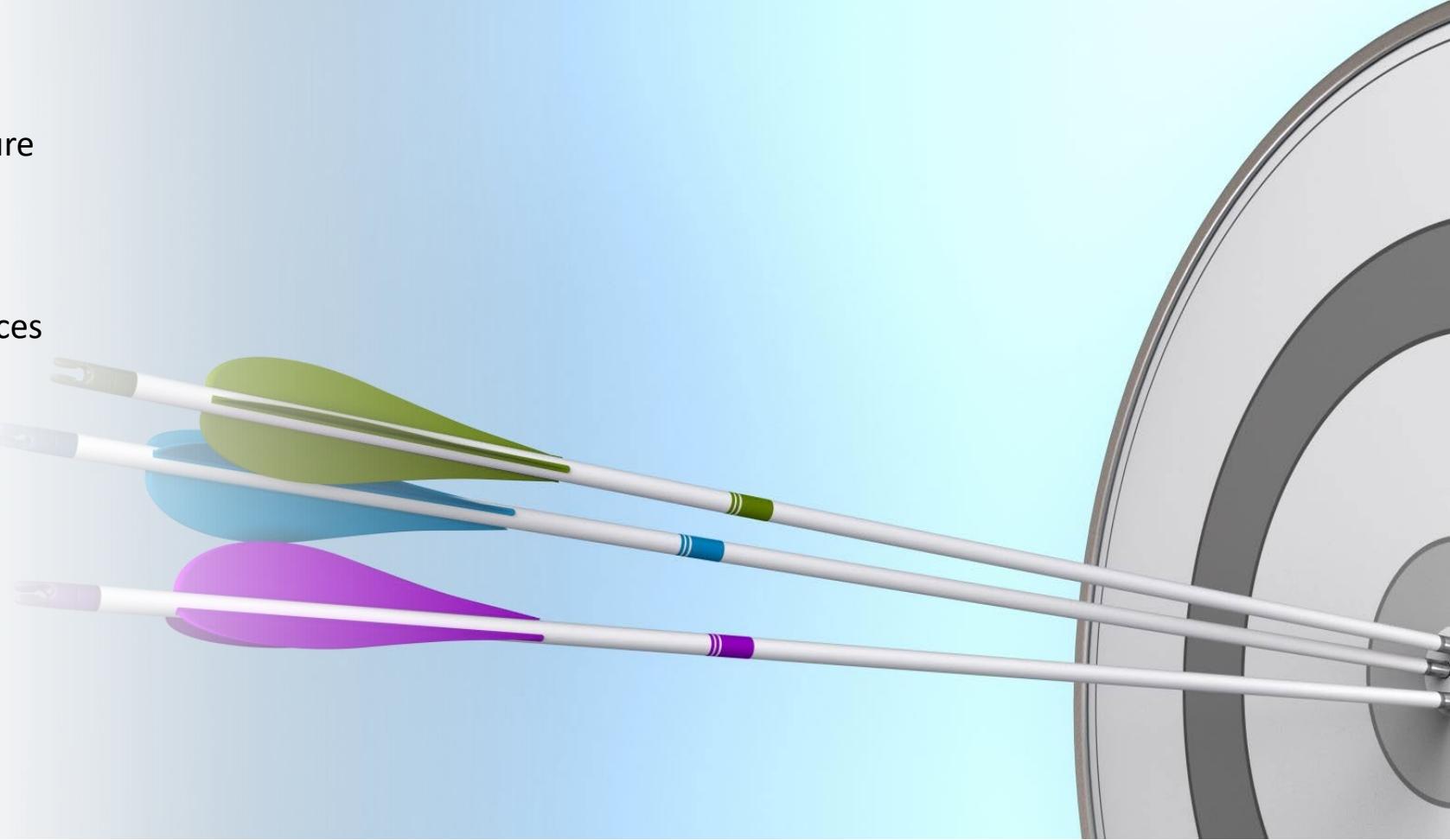


Perioperative Environmental Cleaning

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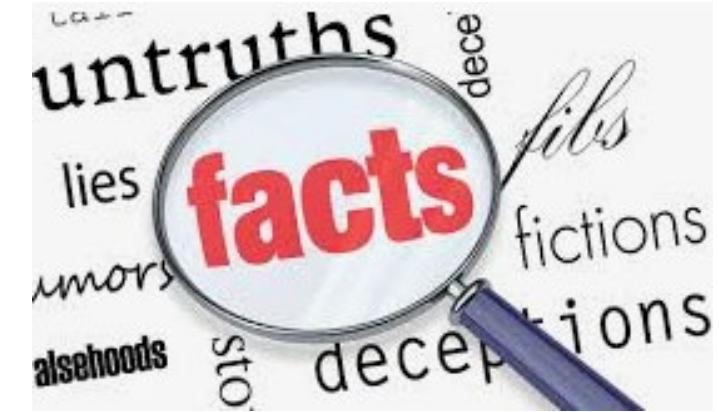
Objectives

- Following the presentation, the participants will be able to correctly identify general principles of procedure room/operating room (OR)cleaning.
- Following the presentation, the participants will be able to choose appropriate resources for best practices in procedure room/OR cleaning.
- Following the presentation, the participants will be able to match different type of procedure room/OR area cleanings with their appropriate definitions.



The Facts

- Who: IPs, OR staff, EVS staff
- What: Environmental cleaning specific to the procedural/operating room settings
- When: Several cleaning times
- Why: The perioperative/procedural area is complex and requires a vast knowledge of chemicals and processes to ensure every surface is cleaned/disinfected to reduce hospital acquired infections. Patients are very vulnerable to pathogens in this area.
- Where: Operating rooms, procedural suites



Resources

CDC, AORN, AHE

<https://www.cdc.gov/hai/prevent/resource-limited/cleaning-procedures.html>

Operating room

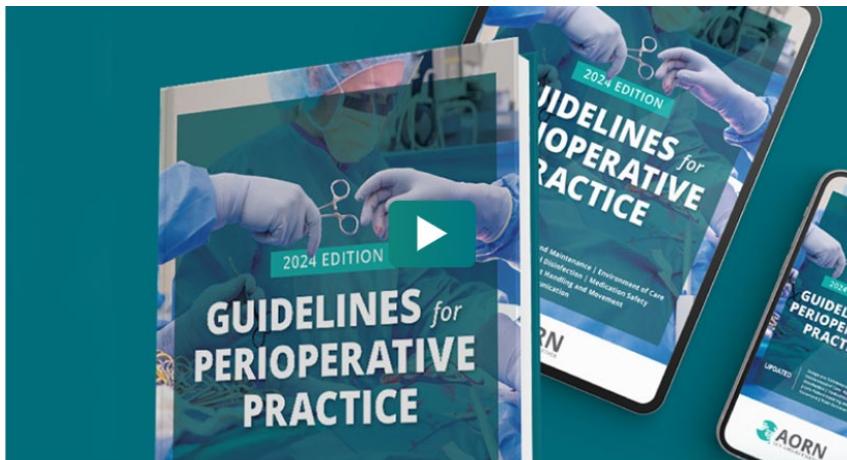
These are high-risk specialized patient areas with a mechanically controlled atmosphere where surgical procedures are performed. A high degree of asepsis is required because the vulnerability of the patients to infection is high.

Appendix B2 Table 1. Cleaning Procedure Summaries for Operating Room

Frequency	Person/Staff Responsible	Products/Technique	Additional Guidance/Description of Cleaning
Before first procedure	Shared cleaning possible: perioperative nursing/clinical staff and cleaning staff	Disinfect: <ul style="list-style-type: none">horizontal surfaces<ul style="list-style-type: none">furnituresurgical lightsoperating bedstationary equipment	See 4.6.1 Operating rooms Records of previous evening terminal clean required; if not or if no surgeries on the day prior, perform terminal clean (as below)
Before and after every procedure	Shared cleaning possible: perioperative nursing/clinical staff and cleaning staff	Clean and disinfect: <ul style="list-style-type: none">high-touch surfaces (e.g., light switches, doorknobs) outside surgical fieldany surface visibly soiled with blood or body fluidsall surfaces and noncritical equipment and the floor inside the surgical field	See 4.6.1 Operating rooms Remove all used linen and surgical drapes, waste (including used suction canisters, $\frac{3}{4}$ filled sharps containers), and kick buckets, for reprocessing or disposal Portable noncritical (e.g., compressed gas tanks, x-ray machine) equipment should be thoroughly cleaned and disinfected before and after each procedure
After last procedure (terminal clean)	Shared cleaning possible: perioperative nursing/clinical staff and cleaning staff	Clean and disinfect: <ul style="list-style-type: none">all surfaces and noncritical equipment in the operating roomthe entire floorany surface visibly soiled with blood or body fluidsscrub and utility areas/sinks	See 4.6.1 Operating rooms Carefully move the operating table and any mobile equipment to make sure that the floor areas underneath are thoroughly cleaned and disinfected Clean and disinfect low-touch surfaces, (e.g., the insides of cupboards and ceilings/walls) on a scheduled basis (e.g., weekly)

Resources

- Association for the Health Care Environment (AHE) Certified Surgical Cleaning Technician (CSCT) Program
- Association of Operating Room Nurses (AORN)
- [CDC](#) Environmental Cleaning Procedures



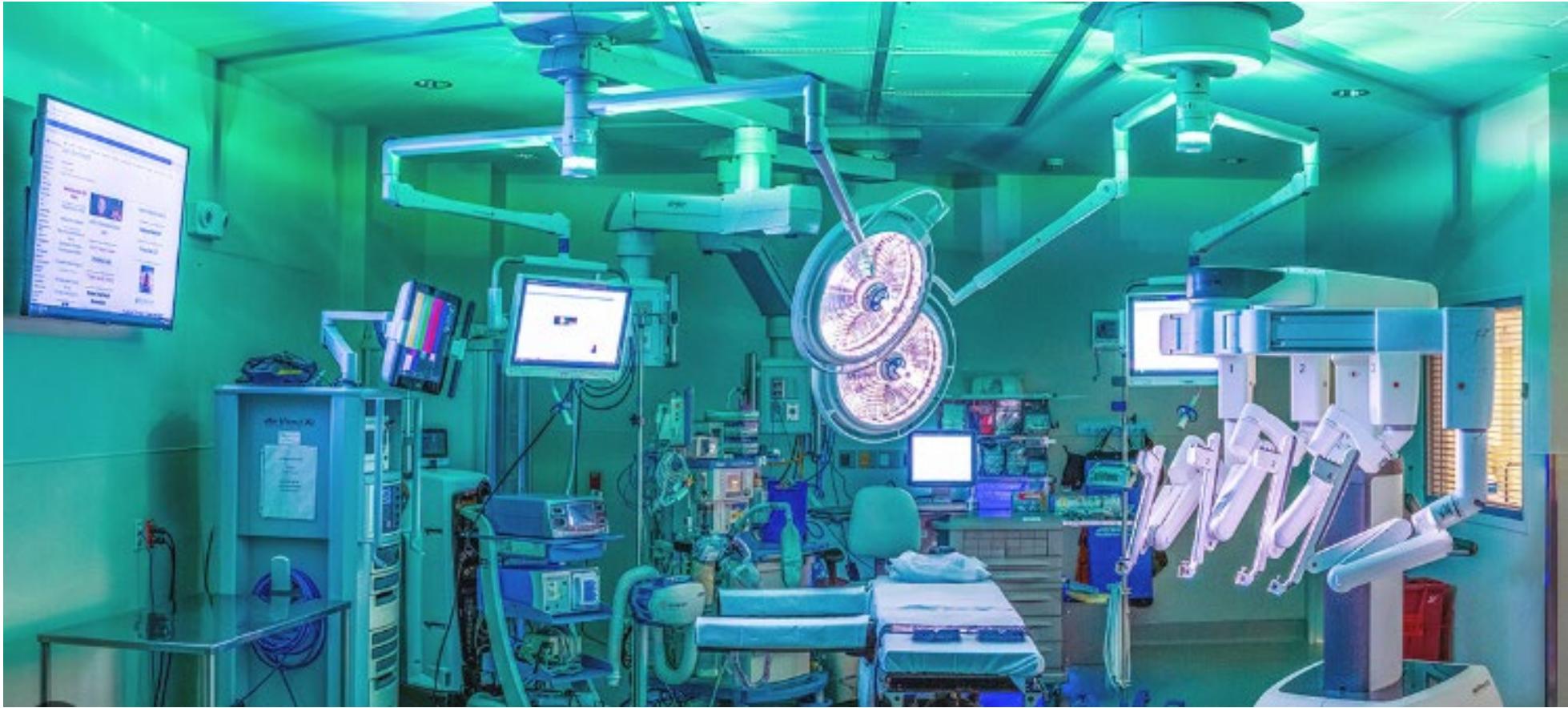
AHE's **Certification Training for Surgical Cleaning Technicians (CSCT)** program sets the standard for managing pathogens and practicing innovative techniques specific to the operating room and surgical suite — intense, high-stakes environments.

The CSCT program uses a train-the-trainer approach, allowing you to train your staff. This program emphasizes the importance of on-the-job performance and deepened self-awareness of working in the complex surgical environment.

This program made possible through the support and commitment to environmental services by Ecolab, an AHE Pinnacle Sponsor.

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Get to Know Your Procedural/Surgery Room



Furniture for Instrumentation



Kick Bucket



Prep Stand



Mayo Stands

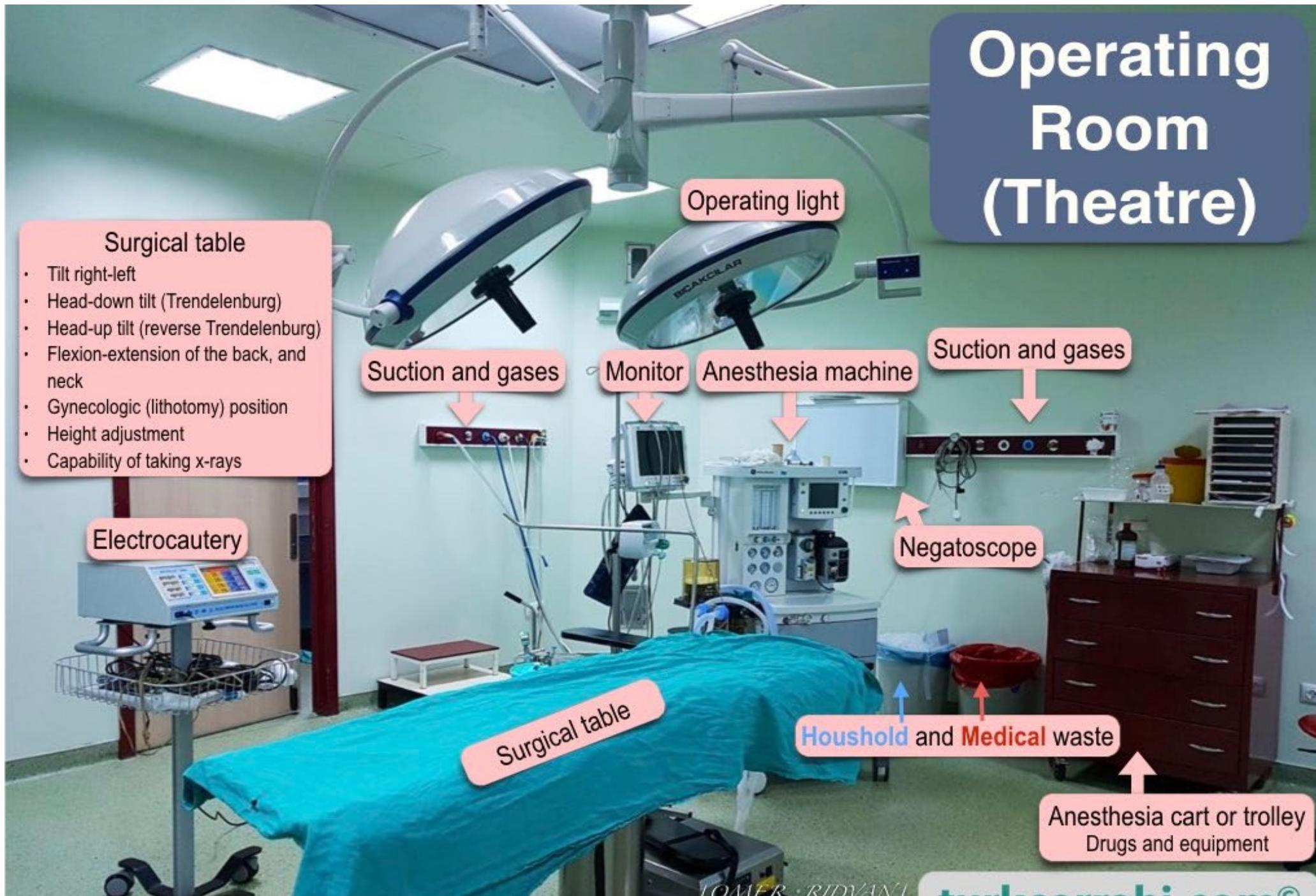


Back Table



Electronic Equipment

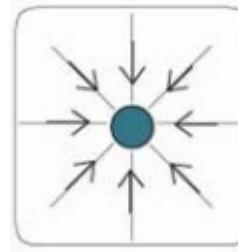
Operating Room (Theatre)



High Touch
Surfaces



General Principles of Environmental Cleaning



- Per CDC: Proceed in a methodical manner
- General rules: Top to Bottom, Outside in, Cleanest to Dirtiest. Clockwise or counterclockwise
- Must know equipment is clean before introducing it into the OR room
- All members of the team need to know what the approach will be. For instance, the approach to a room will be different if there are 2 or 6 people.
- Cleaning vs. Disinfection



Rules of Environmental Cleaning

- Dedicated OR cleaning Equipment
- No cleaning until patient has left the room.
- Floors in OR must be disinfected, not just a cleaner.
- No cotton mops
- No dry dusters
- No bristle brooms
- No double dipping
- Never double-dip cleaning cloths into portable containers (e.g., bottles, small buckets) used for storing environmental cleaning products (or solutions).
- Never shake mop heads and cleaning cloths—it disperses dust or droplets that could contain microorganisms.
- Never leave soiled mop heads and cleaning cloths soaking in buckets.
- Have dedicated supplies and equipment for the OR (e.g., mops, buckets).
- Use fresh mops/floor cloths and mopping solutions for every cleaning session, including between procedures.
- Use fresh cleaning cloths for every cleaning session, regularly replacing them during cleaning and never double-dipping them into cleaning and disinfectant solutions.
- No spray bottles
- Floor is always considered contaminated



Just Say No





Basics: Times for Cleaning/Disinfecting

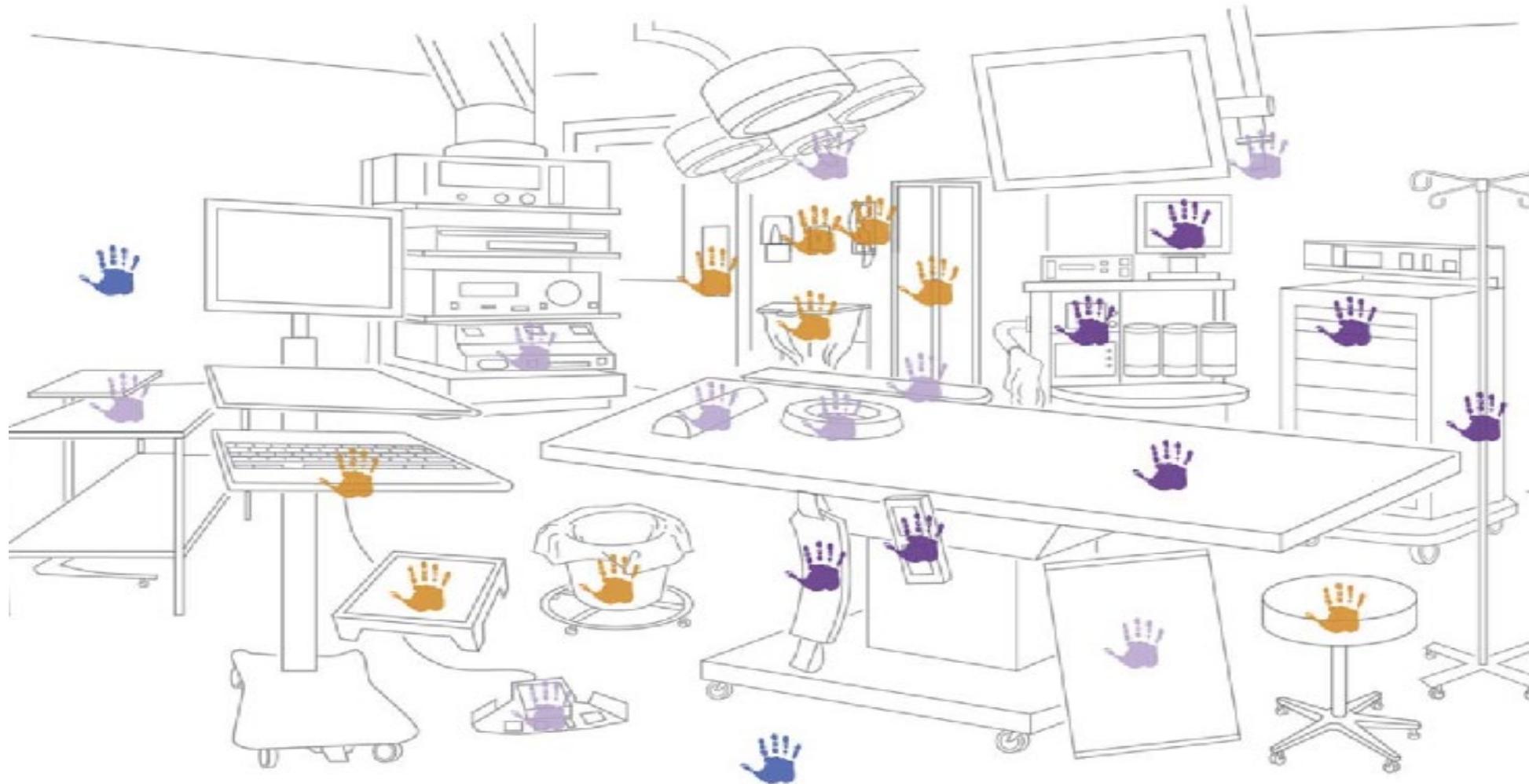
- 1) AM Damp Dusting (with disinfectant) of all horizontal surfaces
- 2) In-between case clean(after each case)- normally the most high-pressure clean
 - Enhanced- MDRO (AORN only) Contact Precautions
- 3) Terminal clean (normally in evenings or night shift)
- 4) Scheduled



Time is
Money



Turnover Cleans



 Every patient

 Every patient, if used

 Enhanced

 If soiled

OR Cleaning/Disinfecting Chemicals



Approaches or Methods of Cleaning: Game Plan



Method 1. Perimeter Method

Method 2. Divide-in-Half Method

Method 3. Zone-Cleaning Method

Disposable Wipes vs. Reusable Cloths



- Either is OK
- Recommended Low Linting
- Safety of Staff
- Environmental Impact
- Wet/Contact Time
- Ease of use
- Ability to perform as intended
- Maintenance of Product
- Size of Area
- Frequency
- Storage space
- Cost
- Laundering Process and Turn Around Time
- Technique (2 vs. 1 wipe, folding 8 areas)

Unidirectional Wiping





Highlight for Wipes

A patented and award-winning technology proven to enhance quality in weeks.

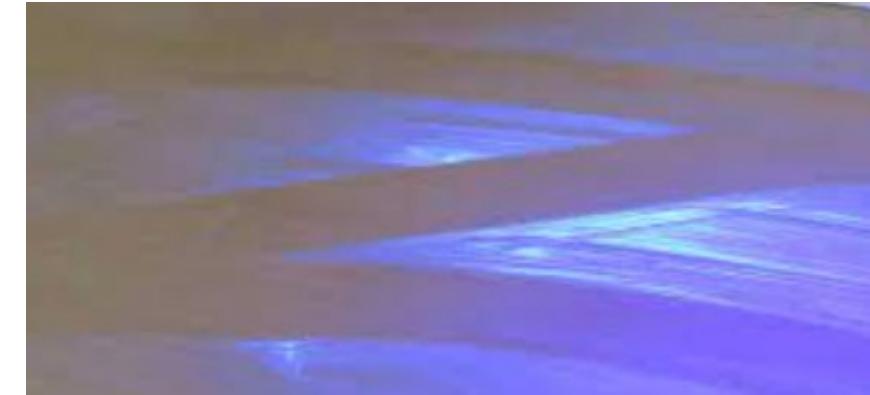


Helpful Visual Cues

CDC Audit Information

Methods for assessing cleaning practice include :

- direct performance observations
- visual assessment
- fluorescent markers



Methods for assessing the level of cleanliness include:

- measuring the residual bioburden (i.e., ATP)
- taking a bacteriological culture of the surface itself using a swab or contact agar plate method
- Combinations (turnover vs terminal), timing (between cases, end of day), reporting, interpretation of ATP testing and Black Light audits



Audit Reporting

- Where will it be reported?
- Are all the appropriate members receiving the data?
- Will you have time to work thought issues when you report?
Subcommittee or TAG group?

PPE

- Standard Precautions must be followed.
- PPE worn when handling contaminated items
- Gloves worn when reasonably anticipated contact with blood, body fluid or potentially infectious materials
- Mask, eye protection and face shields must be worn when contact with splashes, spray, splatter, or droplets of blood, body fluids or other potentially infectious materials is anticipated
- Wear respiratory protection if cleaning procedures are expected to generate infectious aerosols
- Hand hygiene post PPE



Clean Your Cleaning Equipment

- What reusable cleaning equipment is there?
- Who cleans it?
- How often?
- Storage?
- No Topping Off





Now Let's Make it Personal

Mapping Out Your Area



Sample Document for Observations

A	B	C	D	E	F	G	H
1	Procedural Area	Procedural Area Notes	Contact	Damp Dust Observed and Notes	Turnover Clean Observed and Notes	Terminal Clean Observed and Notes	
2	Main OR (example)	13 Rooms/Diverse Equipment	John Smith 123-4567	Observed use of PDI disposable Sani cloth used on all flat surfaces except xyz... Performed by OR staff	Observed. Missed portion of mayo stand and back table, zone cleaning approached observed. Performed by OR staff	Observed. Did not observe any cleaning of wheel casters. Used dry duster. Performed by EVS staff.	
3							
4							
5							
6							
7							
8							
9							
10							

Assessment Activity

- Sample experiment: Have staff representation from every area mark everything they clean/disinfect during turnover or terminal clean in an open OR with lots of equipment. (I used different color sticky notes for each area.) At the end of the session, you should be able clearly see what is missing post its and be able to address this in policy.



Creating an Evidence-Based Cleaning/Disinfection Plan

- Using resources such as CDC, AHE and AORN, create a cleaning responsibility grid with any stakeholders (EVS, OR staff (RNs and Techs), Anes tech, OR attendants and Leadership) Use all items mapped out that could potentially be in a procedure/operating room.
- This could take a while.
- Lessons learned: Create column for IFU cleaning/disinfection product , don't forget storage areas.

Source to Clean	In the AM All OR Staff	Between Every Case All OR Staff	After Last case of the Day for OR STAFF	Terminal Clean for EVS
Walls		Only if soiled or potentially soiled		Yes
Equipment like Bovie, Robot, Perfusion Machine, Patient Monitors	purple top wiped- horizontal surfaces	Yes	Yes	
OR Furniture- back table, Mayo,	purple top wiped	Yes	Yes	
Change Linen Receptacle		Yes	Yes and Wipe down	
Wipe Kick Bucket		Yes- if used	Yes	
Computer	purple top wipe horizontal surface of it	Yes	Yes	
Top of computer Desk	purple top wiped	Yes	Yes	Yes
Phone	purple top wiped	Yes	Yes	
IV Poles		Yes	Yes	
IV Pumps		Yes	Yes	



Policy and Procedure

- Based on your grid, the policy, which should be more generalized, will be easy to write.
- AORN has [sample cleaning policies](#) for damp dusting, turnover and terminal cleaning, enhanced and scheduled cleaning as a baseline.

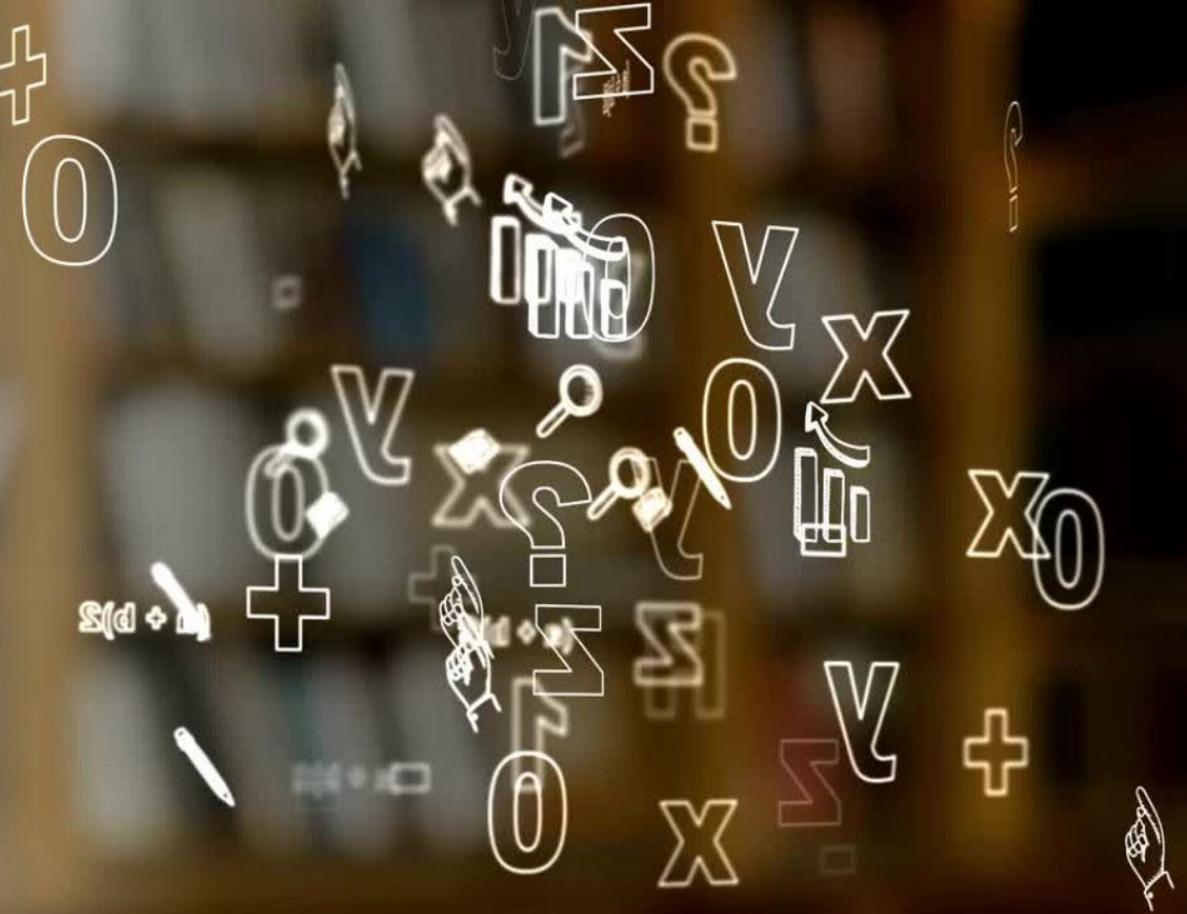
Creating a Working Checklist

- How will staff know that the previous clean has occurred?
- Process, paper, board?

Pre-Procedure Room Before First Case of the Day		Responsibility
Damp Dust from Top to Bottom (Furniture, Booms, Equipment, Countertops, Top of Computer Desk, Computer Keyboard, Anesthesia Machine, Shelves, Radio Cupboard, Back of Spotlights and Fixed Imaging Equipment)	OR Staff	
OR or Procedure Room Turnover	OR Staff	
Collect Linen and Wipe Linen Receptacle	OR Staff	
Remove Gross Soil	OR Staff	
Remove Large Debris From Floor	OR Staff	
Remove Trash, Wipe Trash Receptacle and Kick Bucket	OR Staff	
Clean and Disinfect		
Anesthesia Cart and Equipment (IV Poles and Pumps)	Anesthesia Tech	
Anesthesia Machine	Anesthesia Tech	
Anesthesia Pyxis	Anesthesia Tech	
Patient Monitors	Anesthesia Tech	
Room Decluttered	OR Staff	
Supplies put up and nothing on top of storage carts	OR Staff	
Computer, Keyboard, Monitor, Equipment Cords, Power Cords	OR Staff	
Patient Transfer, Bed, Bed Attachments, Straps and Positioning Devices	OR Staff	
Overhead Procedure Lights, top and bottom	OR Staff	
All OR Furniture (Table, Mayo Stand Prep Stand etc..)	OR Staff	
Mobile and Fixed Equipment and All Shelves of Equipment	OR Staff	
Spotlight	OR Staff	
Suction Regulators and Medical Gas Regulator	OR Staff	
Doors, Wall Panels, Light Switches & Kick Plates If High Use	OR Staff	
Imaging Monitors/Equipment	OR Staff	
Electrosurgical Units (all shelves), Microscopes, Robot, Lasers	OR Staff	
Floors and Walls If Soiled (Splash, Splatter, Spay) Mats & Step Stools and Move Mats to Clean Underneath Mats and Step Stools	OR Staff	
Patient Transport Devices (Straps, Handles, Side Rails, attachments)	OR Staff	
Telephones	OR Staff	
Computer and Accessories	OR Staff	
All Step Stools Wiped down	OR Staff	
End of Day		
Computer Desk (including lower shelves 1 x per day)	OR Staff	
Unicels or Carts	OR Staff	
Equipment in Substerile Room at end of day and sides of blue bin	OR Staff	
Put up supplies	OR Staff	
Suture Cart wipe down	OR Staff	
Ensure nothing stored on top of carts	OR Staff	
Non-essential positioning equipment removed daily	OR Staff	
PACS Computer and all flat surfaces near it wiped daily	OR Staff	
Terminal Clean		
Substerile Room Countertops and Sinks, Outside of Autoclaves, Top of Blue Bin	EVS	
Glass and Blinds	EVS	
Booms	EVS	
Storage Shelf Above Scrub Sink and Scrub Sink	EVS	
Top of Computer Desks	EVS	
All Floors, Move Mats and Clean Under Mats	EVS	
Storage Cabinets, Supply Carts, Furniture	EVS	
Spotlight	EVS	
Wheels and Casters of All Equipment	EVS	
Top of Anesthesia Desk Surface	EVS	
AC Returns, Vents, Ceiling Anes Plugs	EVS	
Light Switches/Door Handles	EVS	
Outside of Blue, Black and Red Bins	EVS	
Chairs, Stools, Step Stools	EVS	
WEEKLY Cleaning		
Vacuum back and wipe down all parts of Anesthesia Cart, back of computers in room	Anesthesia Tech	
Anesthesia Shelving with Supplies Wiped down	Anesthesia Tech	
Vacuum and wipe back of Anesthesia machine before Terminal Clean	Anesthesia Tech	

Education

- Observe and review
- What are they missing
- General Principles
- Approaches
- Time Frames





Your ORs Await!