EDUCATION

STERIS UNIVERSITY

A Quick Welcome to the Sterile Processing Department

1H

One Integrated Approach to Healthcare.

STERIS

Continuing Education Contact Hours

- STERIS Corporation is an approved provider of continuing nursing education by the California Board of Registered Nursing (CBRN) – provider # CEP 11681, and an approved Administrator Education Unit (AEU) provider by the Board of Ambulatory Surgery Certification (BASC) – provider # 1417.
- This program is approved by CBRN, Certified Board for Sterile Processing and Distribution (CBSPD), International Association of Healthcare Center Service Materiel Management (IAHCSMM) for:
  - 1 contact hour(s) of continuing education credit.
- Participants must be present for the entire presentation/seminar to achieve successful completion and receive continuing education credit; partial credit will not be given.

Disclaimers

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- Commercial products referred to or seen during this presentation do not constitute a commercial support by the speakers.

Learning Objectives

Upon completion of this presentation, you will be able to:

- Describe the various activities performed by healthcare professionals working in sterile processing departments.
- Identify specific activities necessary for the development of policies and procedures.

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Importance of Sterile Processing

- Central hub of healthcare facility
- Efforts effect virtually every patient in facility

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Sterile Processing Personnel Challenges

- Low priority and misunderstood
- Time demands
- Intimidation
- No formal sterile processing education

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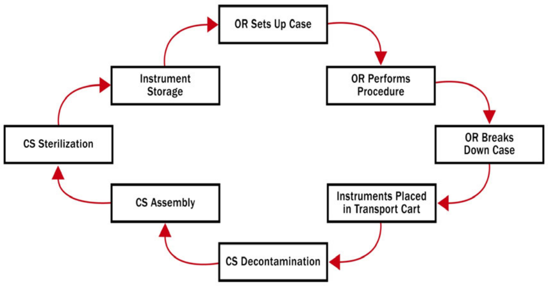
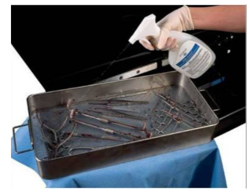
Understand the Flow



Point of Use

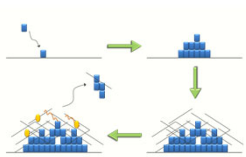
- OR, L&D and Clinics
- At the point of use:
  - Separate disposable from reusable, including sharps
  - Keep instruments moist
  - Pretreat per ST79
  - Prepare for transport



Decontamination Delay

Delays in transport:

- Dried debris difficult to clean
- Development of biofilm
- Damage to passivation layer of surgical instruments

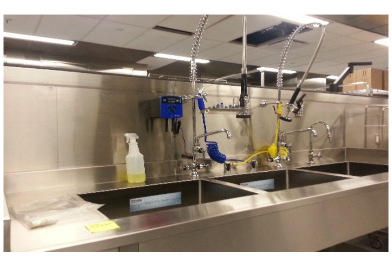


Biofilm Development

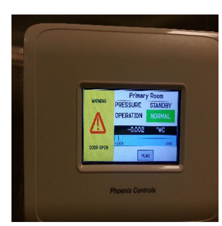
Physical Environment

Traffic Patterns

Lighting



Ventilation



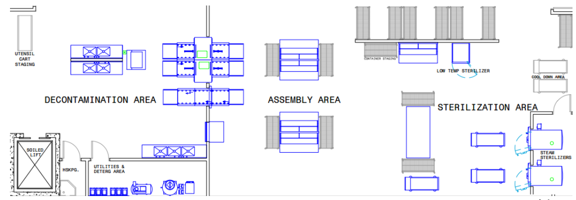
Smooth Surfaces

- Floors, walls, ceilings
- Work surfaces
- Compatible with cleaning chemicals

Work Flow

"The decontamination area should be physically separated from all other areas of processing department…"

— AAMI ST79



Employee Safety

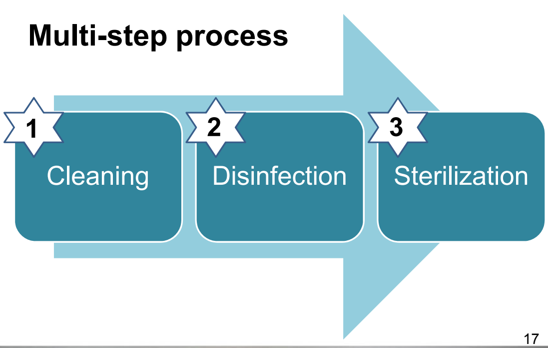
- PPE
- Hand Hygiene
- Emergency Eyewash Equipment

Environmental Service

- Daily cleaning/disinfection of floors and horizontal surfaces
- Sequence cleaning from clean → dirty
- Keep separate cleaning supplies

Decontamination

Multi-step process



Microbicidal Processes

- Designed to provide a particular level of lethality (kill)
- Depending on the level of decontamination disinfection or sterilization may be used

Manual vs. Automated Cleaning

Manual Cleaning

- **First:** soak
- **Second:** wash
- **Third:** rinse/treated water

Assembly Area

Instrument Inspection

- Clean
- Working order

Packaging

- Peel pouches
- Sterilization wrap
- Rigid sterilization containers

Loading the Sterilizer Cart

- Do not overload
- Basins positioned for drainage
- Packages should never contact sterilizer chamber walls

Sterilization

- Testing requirements
- Monitoring practices
- Record keeping practices
- Failure investigation
- Extended cycles

Equipment Monitoring

- Routine maintenance
- Preventative/breakdown maintenance
- Maintenance records

Routine Monitoring

- Bowie-Dick air removal test
  - Prevacuum cycles
- Biological testing
- Other testing
  - Following installation, relocation or major repairs

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Chemical Indicators

- Six types
- Three categories
  - Exposure
  - Special applications
  - Internal
- FDA recognizes only Types 1, 2 and 6
- Each Type has different performance specifications

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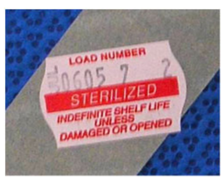
Process Control

Lot control label



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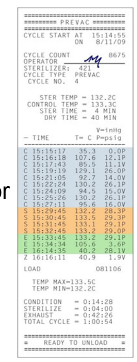
Load Release (Non-Implant Loads)

At the end of the cycle:

- Review cycle print out tape
- Review external chemical indicator


PREVAC

CYCLE START AT 15:14:55
ON 8/11/09

CYCLE COUNT 8675
OPERATOR
STERILIZER: 421
CYCLE TYPE PREVAC
CYCLE NO. 4

STER TEMP = 132.2C
CONTROL TEMP = 133.3C
STER TIME = 4 MIN
DRY TIME = 40 MIN

– TIME	T= C	V=inHg P=psig
C 15:15:17	35.3	0.0P
C 15:16:18	107.6	12.1P
C 15:17:43	85.5	11.1V
C 15:19:19	129.1	26.0P
C 15:21:05	92.7	14.0V
C 15:22:24	130.2	26.1P
C 15:24:09	94.5	15.0V
C 15:25:26	130.2	26.1P
C 15:27:11	95.6	16.0V
S 15:29:45	132.2	28.3P
S 15:30:45	133.5	29.3P
S 15:31:45	133.1	29.1P
S 15:32:45	133.2	29.0P
E 15:33:45	133.2	29.1P
E 15:34:34	105.6	3.6P
E 16:14:35	40.2	28.1V
Z 16:16:11	40.9	1.9V

LOAD 081106

TEMP MAX=133.5C
TEMP MIN=132.2C

CONDITION = 0:14:28
STERILIZE = 0:04:00
EXHAUST = 0:42:26
TOTAL CYCLE = 1:00:54

= READY TO UNLOAD =

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Post Sterilization

- Place loading carts
  - Low traffic areas
- Handle when completely cool
- Inspect package integrity

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Handling and Distribution

Transport sterile/clean in controlled environments

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Product Recalls

- In the event of a recall:
  - Recall all items from affected loads
  - Reprocess all items
- Clear, written policies and procedures

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Action Plan

- Survey sterile processing departments routinely
  - Standards compliance
  - Industry recommended practice compliance
- Approach systematically
- Collaboration between departments

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Evaluation and Registration

- Thank you for attending this CE activity
- Please complete and submit the evaluation form

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Revision History

Date	Revisions	Revised By:	Notes
2/12/2018	• Speaker notes updated to reflect changes in ST79:2017: s7, and 10. • Slide 12 "Controlled Environment" deleted. • Slide 11: Speaker notes updated to reflect ST79:2017 recommendation for HVAC operating parameters. • ST79 Reference updated to 2017 edition, Slide 32.	S. Beauclair	
06/07/18	Updated the CE slide and added Disclaimer slide	S. Beuaclair	