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Infection Control Part II: Why Audiologists Need to Do It

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Moderator:
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Infection Control II:
What Audiologists Need To Do



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OBJECTIVES

- Review Written Requirements
- Work Practice Controls
- Selecting Products
- Putting it All Together



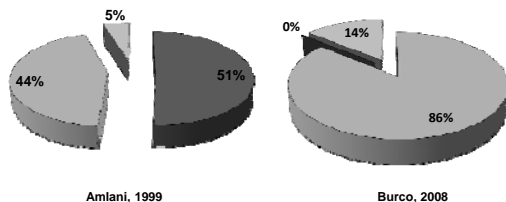


IS A WRITTEN PLAN NECESSARY?

- OSHA federal regulatory body responsible for overseeing implementation of safety procedures in the work place
- Guidelines on how to reduce exposure to infectious agents
- Scope of practice dictates OSHA's jurisdiction
- Obligated to uphold federally mandated infection control standards



Is there a written plan in place?




YES NO Don't Know

WRITTEN INFECTION CONTROL PLAN

REQUIREMENTS

1. Employee Exposure Classification
2. Hepatitis B (HBV) Vaccination Plan
3. Plan for Annual Training & Records
4. Plan for Accidents & Accidental Exposure Follow-up
5. Implementation Protocols
6. Post Exposure Plans & Records

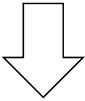


WRITTEN INFECTION CONTROL PLAN

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CLINIC SPECIFIC



1. EMPLOYEE CLASSIFICATION

- 1** Primary job assignment involves exposure to blood or other bodily fluids on a regular basis
- 2** Personnel whose secondary job assignment involves exposure to blood or other bodily fluids on a regular basis
- 3** Personnel whose job assignment does not involve exposure to blood or other bodily fluids

1. EMPLOYEE CLASSIFICATION

1 **AUDIOLOGIST:** intraop monitoring, post surgical audiological assessments, etc.

2 **AUDIOLOGIST:** handling HA/EMI, occasional cerumen removal, cleaning, disinfecting, sterilizing instruments, etc.

3 **AUD ADMIN, FRONT OFFICE STAFF:** no patient contact

2. HBV VACCINATION PLAN

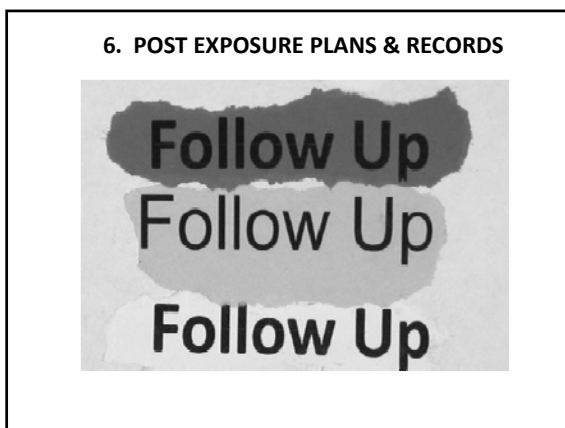
1 **EMPLOYER TO PROVIDE HBV VACCINATION FREE OF CHARGE**
EMPLOYEE NOT REQUIRED TO ACCEPT BUT MUST SIGN WAIVER

2 **EMPLOYER TO PROVIDE HBV VACCINATION FREE OF CHARGE**
EMPLOYEE NOT REQUIRED TO ACCEPT BUT MUST SIGN WAIVER

3. PLAN FOR ANNUAL TRAINING

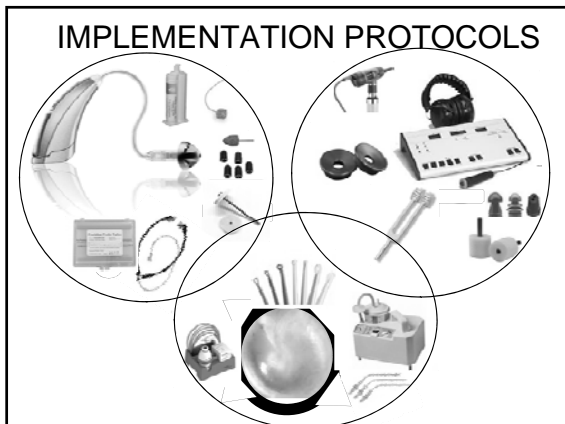
WITHIN 90 DAYS OF INITIAL HIRE	ANNUALLY
WITHIN 90 DAYS OF REASSIGNMENT	WHEN NEW OR UPDATED PROCEDURES IMPLEMENTED






WRITTEN INFECTION CONTROL PLAN

REQUIREMENTS	CLINIC SPECIFIC
1. Employee Exposure Classification	1. Employee Exposure Classification
2. Hepatitis B (HBV) Vaccination Plan	2. Hepatitis B (HBV) Vaccination Plan
3. Plan for Annual Training & Records	3. Plan for Annual Training & Records
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5. Implementation Protocols	5. Implementation Protocols
6. Post Exposure Plans & Records	6. Post Exposure Plans & Records



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IMPLEMENTATION PROTOCOLS

DEVELOP
WORK PRACTICE
CONTROLS

- **Profession-specific procedures designed to reduce the likelihood of cross-contamination**
 - Take list of services you provide
 - Create written procedure
 - Base procedure on Standard Precautions

Standard Precautions

- Appropriate personal barriers (gloves, masks, eye protection, gowns) must be worn when performing procedures that may expose to infectious agents
- Hands must be washed before and after every patient contact and after glove removal
- "Touch" and "splash" surfaces must be pre-cleaned and disinfected
- Critical instruments must be sterilized
- Infectious waste must be disposed of appropriately

PERSONAL BARRIERS

- GLOVES
- SAFETY GLASSES
- DISPOSABLE MASKS
- DISPOSABLE GOWNS



Standard Precautions

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Hands must be washed.....

- PATIENT APPTS
- GLOVE REMOVAL
- AS NEEDED



IMMEDIATELY AFTER REMOVAL

DURING PATIENT APPT

AFTER PATIENT APPT

Do you wash your hands...

Amlani, 1999

26% YES (after each patient?)

50% YES (after use of lavatory?)

82% YES (after each patient?)


87% YES (after use of lavatory?)

Burco, 2008

Standard Precautions

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TOUCH SURFACE:
area that comes in potential direct or indirect contact with hands



SPLASH SURFACE:
area that may be hit with blood or other body secretions from potentially contaminated source

CLEAN vs DISINFECT

define CLEAN as: **C-to F**

Category	Percentage
CLEAN	73%
DISINFECT	14%
OTHER	13%

define DISINFECT as:

Category	Percentage
CLEAN	22%
DISINFECT	55%
OTHER	23%

Amlani (1999):
Are you aware of distinction between the terms clean, disinfect, sterilize?
74% = YES

CLEAN vs DISINFECT

define CLEAN as: **C+**


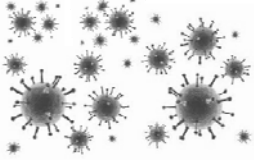
Category	Percentage
CLEAN	77%
DISINFECT	17%
OTHER	6%

Define DISINFECT as:


Category	Percentage
CLEAN	78%
DISINFECT	12%
OTHER	10%

Burco (2008):
Identify the terms clean, disinfect, sterilize...

TERMINOLOGY

<p>CLEAN</p> <ul style="list-style-type: none"> • Remove gross contamination • Germs not necessarily killed • Important precursor to disinfecting & sterilizing 	<p>DISINFECT</p> <ul style="list-style-type: none"> • Process whereby germs killed • Spectrum of kill depends • Performed on touch & splash surfaces or on individual patient's items that are not transferable to others 
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TOUCH SURFACE:
area that comes in potential direct or indirect contact with hands



SPLASH SURFACE:
area that may be hit with blood or other body secretions from potentially contaminated source


Burco, 2008

Standard Precautions

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Critical Instruments

- Instruments introduced directly into bloodstream
- Non-invasive instruments that come in contact with mucous membranes or bodily substances
- Instruments that can potentially penetrate skin from use or misuse



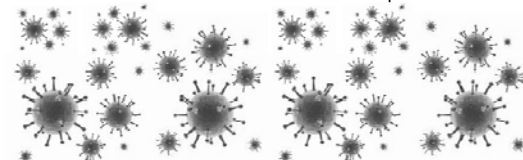
TERMINOLOGY

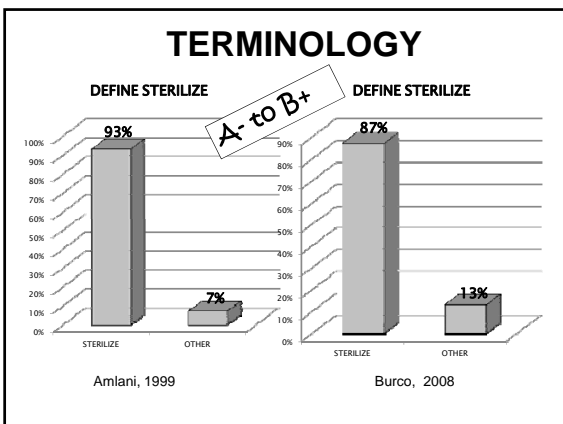
DISINFECT

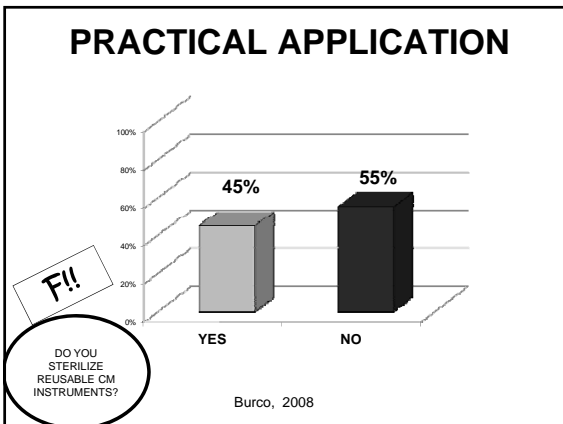
- Process whereby germs killed
- Spectrum of kill depends
- Performed on touch & splash surfaces or on individual patient's items that are not transferable to others

STERILIZE

- Process whereby ALL germs killed
- Specific product requirements
- Performed on all reusable critical instruments that have been cleaned prior to reuse









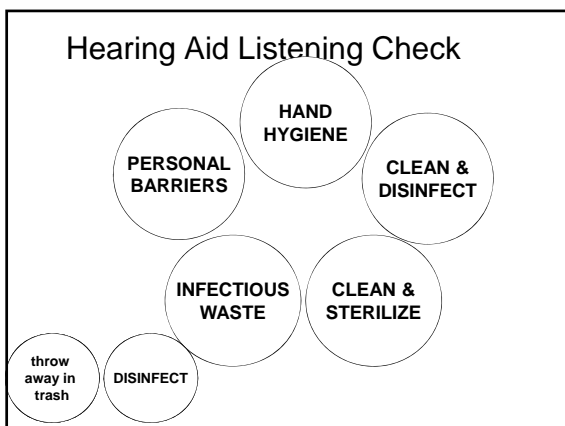
- ### Standard Precautions
- Appropriate personal barriers (gloves, masks, eye protection, gowns) must be worn when performing procedures that may expose to infectious agents
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 - "Touch" and "splash" surfaces must be pre-cleaned and disinfected
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Infectious wastes

- Sharp instruments 
- Contaminated waste 

Hearing Aid Listening Check

- Appropriate personal barriers (gloves, masks, eye protection, gowns) must be worn when performing procedures that may expose to infectious agents
- Hands must be washed before and after every patient contact and after glove removal
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- Critical instruments must be sterilized
- Infectious waste must be disposed of appropriately



Hearing Aid Listening Check Work Practice Control Procedure

- Accept hearing instrument w/disinfectant towelette
- Clean hearing aid surface w/portion of towelette; disinfect same surface with unused portion of towelette
- Discard used towelette in trash
- Attach hearing aid to listening bell of stethoscope
- After performing listening check, use fresh disinfectant towelette to clean listening bell and both ear pieces; disinfect same surfaces w/unused portion of towelette
- Return stethoscope to appropriate resting location
- Discard used towelette in trash

Personal Barriers

Clean & Disinfect

Infectious Waste

Hand Hygiene

Personal Barriers


Clean & Disinfect

Infectious Waste

- Put on an appropriately sized pair of gloves
 - Accept hearing instrument w/disinfectant towelette
 - Clean hearing aid surface w/portion of towelette; disinfect same surface with unused portion of towelette
 - Discard used towelette in trash
 - Attach hearing aid to listening bell of stethoscope
 - After performing listening check, use fresh disinfectant towelette to clean listening bell and both ear pieces; disinfect same surfaces w/unused portion of towelette
 - Return stethoscope to appropriate resting location
 - Discard used towelette in trash
- Remove gloves, throw away in trash, and wash hands

OBJECTIVES


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Select Product



PERSONAL BARRIERS



- Latex vs non Latex
- Powder vs Powderless
- Size matters!


HAND HYGIENE

- Traditional soap & water
- Addition of no-rinse hand degermers



HAND HYGIENE

- Liquid
- Medical grade
- Anti-microbial not critical
- No-rinse = alternative



- Spray, towelette, liquid
- Hospital Grade
- Non-alcohol based

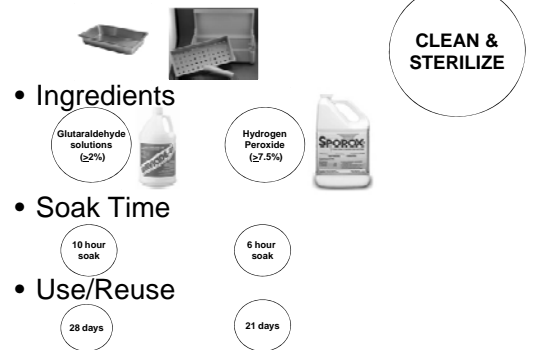
**DISINFECTANTS
DO NOT
STERILIZE**



- Cold sterilization

**CLEAN &
STERILIZE**

- Ingredients
 - Glutaraldehyde solutions (2%)
 - Hydrogen Peroxide (7.5%)
- Soak Time
 - 10 hour soak
 - 6 hour soak
- Use/Reuse
 - 28 days
 - 21 days




Material Safety Data Sheet (MSDS)

- Document that outlines hazards associated with chemical products
 - Chemical composition
 - Physical & chemical characteristics
 - Acute & chronic health effects
 - Exposure limits
 - Precautionary measures, first aid consideration
- Not necessarily included in packaging
- OSHA requires MSDSs


DISPOSABLE AUDIOLOGY SUPPLIES

Including it all together for you




- One time, one time use only
- Thrown out after use
- No need to clean, disinfect or sterilize
- Eliminates potential infection control errors

Diagnostic Tools & Supplies




- Disposable specula
- Disposable insert eartips
- Disposable headphone covers
- Disposable electrodes
- Disposable Immitance/OAE eartips
 - Generic
 - Biologic
 - Grason Stadler
 - Madsen
 - Interacoustics

Fitting Tools & Supplies



- Disposable probe tubes
- Disposable temporary earmolds
- Disposable grinding caps
- Disposable muslin buffs
- Disposable cleaning tools
- Disposable suction needles
- Disposable bite blocks

Cerumen Management



- Disposable curettes
- Disposable loops
- Disposable day hook
- Disposable suction tubes
- Disposable forceps
- Disposable collection jars

Reusable or Disposable?

Assume: 250 business days, 2 removals/day = 500 patients annually
 Assume: 250 business days, 1 removal/week = 50 patients annually

Reusable Cost	Disposable Cost
• 2 Buck Curettes = \$ 40	• Curettes (100/box @ \$60) = \$360
• 2 Day Hooks = \$ 80	• Hook (100/box @ \$60) = \$160
• 2 Forceps = \$100	• Forceps (10/box @ \$100) = \$200
• Soaking Tray = \$ 30	
• Sporox (3 gallons) = \$100	
TOTAL YEAR ONE = \$350	TOTAL YEAR ONE = \$800
• Sporox (3 gallons) = \$100	• Curettes (100/box @ \$60) = \$360
TOTAL YEAR TWO = \$100	• Hook (100/box @ \$60) = \$160
	• Forceps (10/box @ \$100) = \$200
	TOTAL YEAR TWO = \$500

- Sharps container
- Biohazard bags
- Spill kit



INFECTIOUS WASTE

OBJECTIVES

- Review Written Requirements
- Work Practice Controls
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TAKE HOME MESSAGES

- ▶ Infection control is a required element
- ▶ Use standard precautions as your guide
- ▶ Create work practice controls
- ▶ Select product
- ▶ Implement
- ▶ Rely on resources

