

# Risk Management in the Sleep Center

## The Down and Dirty on Infection Control

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# Conflict of Interest Disclosures

## Speaker:

1. I do not have any potential conflicts of interest to disclose, **OR**

2. I wish to disclose the following potential conflicts of interest

Type of Potential Conflict	Details of Potential Conflict
Grant/Research Support	
Consultant	
Speakers' Bureaus	
Financial support	
Other	

3. The material presented in this lecture has no relationship with any of these potential conflicts, **OR**

4. This talk presents material that is related to one or more of these potential conflicts, and the following objective references are provided as support for this lecture:

1.

2.

3.

# Objectives

- Practice Universal Precautions
- Define equipment and reusable sensor disinfection
- Utilize disposable and one-time-use equipment appropriately
- Review of unique SDC Risks



“The patient in the next bed is highly infectious. Thank God for these curtains.”

# Required Skills

1

Apply universal precautions

2

Use personal protection methods

3

Know what to do if exposed

4

Encourage others to use universal precautions

# Four Ways to Prevent HAI

1. Maintain cleanliness of the hospital
2. Personal attention to handwashing before and after every contact with a patient or object
3. Use personal protective equipment whenever indicated
4. Use and dispose of sharps safely

# UNIVERSAL PRECAUTIONS

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Universal precautions are infection control guidelines designed to protect workers from exposure to diseases spread by blood and body fluids

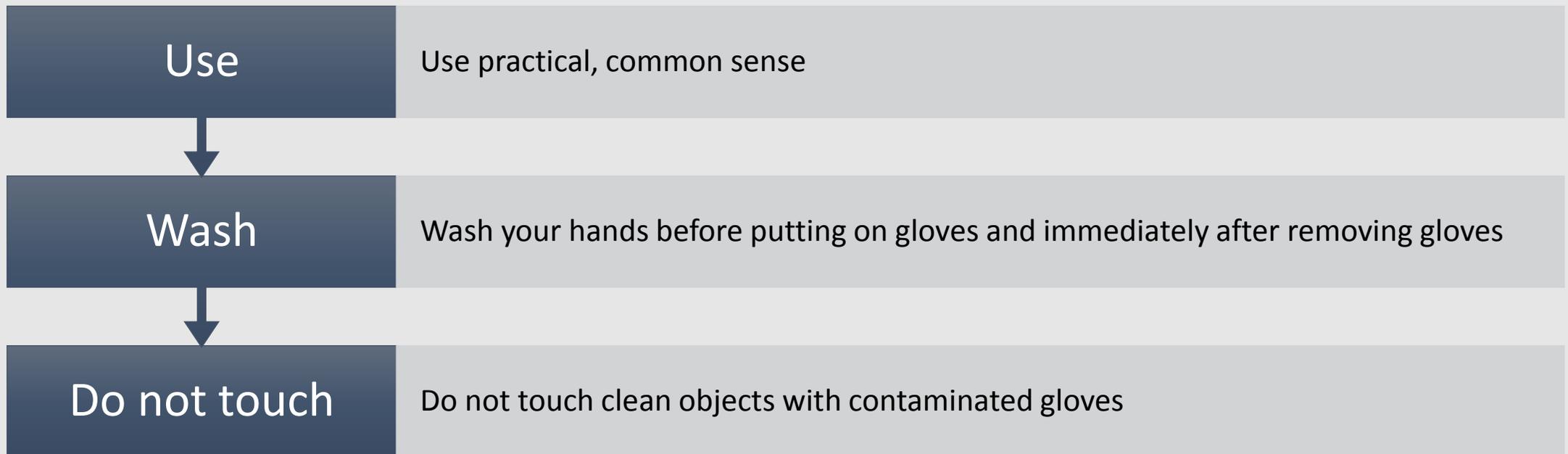
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Always treat blood, body fluids, broken skin and mucous membranes as if they were infected

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Always follow Universal Precautions because you cannot tell by looking at a person whether they have a contagious disease

# UNIVERSAL PRECAUTIONS



## Wear

Wear gloves if you may come in contact with blood, body fluids, secretions and excretions, broken or open skin, human tissue or mucous membranes

## Bag

Bag all disposable contaminated supplies

## Clean

Clean all surfaces that may be contaminated with infectious waste, such as beds, wheelchairs and shower chairs

# UNIVERSAL PRECAUTIONS

# Personal Protective Equipment



- Gloves, aprons, gowns, eye protection, and face masks
- Health care workers should wear a face mask, eye protection and a gown if there is the potential for contamination from blood or other bodily fluids

# Prevalence of HAI

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CDC estimates that each year nearly 2 million patients in the United States get an infection in hospitals, and about 90,000 of these patients die as a result of their infection.

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More widespread use of hand hygiene products that improve adherence to recommended hand hygiene practices will promote patient safety and prevent infections.

THE FAR SIDE



# WHEN NOT TO USE ALCOHOL HAND GELS

- When hands are visibly soiled
- Before eating
- After using the restroom
- When caring for patients with C. Difficile

# It Seems So Basic

Healthcare workers adherence issues:

- handwashing agents cause irritation and dryness,
- sinks are inconveniently located,
- lack of soap and paper towels,
- not enough time,
- understaffing or overcrowding,
- and patient needs taking priority.

## Easy Access

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Easy access to hand hygiene supplies is essential for acceptance and use of products.

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Dispenser systems should function adequately and deliver an appropriate volume of product.

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Soap should not be added to a partially empty soap dispenser because of potential bacterial contamination of the soap.

# TJC IC Standards

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The organization plans infection prevention and control activities, including surveillance, to minimize, reduce, or eliminate the risk of infection

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Everyone who works in the organization has responsibilities for preventing and controlling infection

# Required Performance

All Staff need to:

- apply universal precautions
- be immunized against Hepatitis B
- use personal protection methods
- know what to do if exposed
- encourage others to use universal precautions

# Application of Learning – Employee Return Demonstration

## Recommended Hand Hygiene Technique

### Handrubs

- Apply to palm of one hand, rub hands together covering all surfaces until dry
- Volume: based on manufacturer

### Handwashing

- Wet hands with water, apply soap, rub hands together for at least 15 seconds
- Rinse and dry with disposable towel
- Use towel to turn off faucet

## Let It Dry!

In the U.S., there has been a report of a flash fire that occurred as a result of an unusual series of events;

- which included a healthcare worker applying an alcohol gel to her hands,
- then immediately removing a polyester isolation gown,
- and touching a metal door before the alcohol had evaporated.

Removing the polyester gown created a large amount of static electricity that generated an audible static spark when she touched the metal door, igniting the unevaporated alcohol on her hands.

[www.cdc.gov/handhygiene](http://www.cdc.gov/handhygiene)



# Employee Files

Employee-Related Risks	
	Screening for immunity to communicable diseases
	Staff understanding of disease transmission and prevention
	Degree of compliance with infection control practices, including hand hygiene
	Inadequate screening for transmission of communicable diseases
	Practice accountability issues
	Sharps injuries
	Bloodborne pathogen exposures
	Influenza vaccination
	Mask fit testing

# Use of Hand Lotions

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Provide healthcare workers with hand lotions or creams in order to minimize the occurrence of irritant contact dermatitis associated with handwashing.

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Information should be obtained from manufacturers regarding the effect that hand lotions, creams, or alcohol-based handrubs have on the effectiveness of antimicrobial soaps.

# Summary

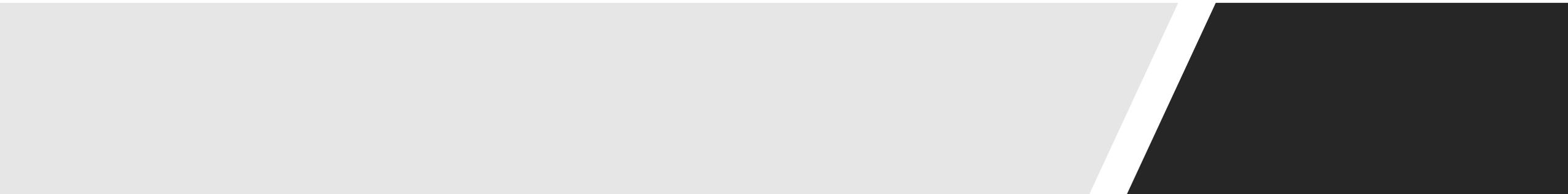
Know	Know the main guidelines for each of the clinical environments you are assigned
Accept	Accept responsibility for minimizing opportunities for infection transmission
Manage	Let staff know if supplies are inadequate or depleted

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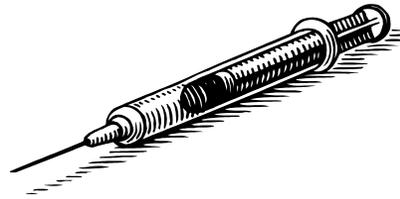
Educate patients and families/visitors about hand-washing and infection prevention

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Educate patients on infection prevention for PAP equipment



# Safe Use and Disposal of Sharps



- Keep handling to a minimum
- Do not recap needles; bend or break after use
- Discard each needle into a sharps container at the point of use
- Do not overload a bin if it is full
- Do not leave a sharp bin in the reach of children

# Infection Control Policy

All reusable electrodes, clinical equipment, and PAP equipment must be

- thoroughly cleaned
- disinfected after each use
- in a manner consistent with **manufacturer recommendations**, infection control guidelines, and OSHA standards

## Policy continued

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Disposable electrodes, single-use sensors and items are discarded after use

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Reusable equipment, PAP interfaces and other PAP equipment is cleaned and disinfected after every patient use

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The technical staff is responsible for keeping all equipment, patient areas and technical areas clean

# Disinfection and Sterilization Guides

- Follow recommendations for
  - High level thermal disinfection
  - High level chemical disinfection
  - Sterilization
  - **Validating number of cycles**

# TJC & Use of High Level Disinfectants

The organization implements infection prevention and control activities when:

- ***sterilizing medical equipment, devices and supplies***

***High level disinfection must be used for respiratory equipment (CPAP therapy)***

# Precautionary Measures Lacking for High Level Disinfectants

## 2011 Health and Safety Practices Survey of Healthcare Workers

- 17% never received training on safe handling of HLD
- 19% reported that safe handling procedures were unavailable
- 44% did not always wear water-resistant gown or outer garment
- 9% did not always wear protective gloves
- 'Exposure was minimal' was the most frequently reported reason for not wearing PPE
- 12% reported skin contact with HLD during the past week
- Workers reporting skin contact were 4 times more likely to report not always wearing protective gloves

<http://www.cdc.gov/niosh/updates/upd-01-14-15.html>

# Disposables

- EEG electrodes
- Snap electrodes
- CPAP masks
  - tubing/chambers
  
- **ASET Guideline 2015**
- Skin Safety During EEG Procedures – A Guideline to Improving Outcome
- [https://www.aset.org/files/public/Skin\\_Safety\\_During\\_EEG\\_Procedures.pdf](https://www.aset.org/files/public/Skin_Safety_During_EEG_Procedures.pdf)



# Set up trays

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- Use squeeze tubes not tubs
- Set up cart for single patient use only
- Label container to identify product



# Patient Care Areas



# Patient Care Areas



# Patient Care Areas



# Patient Care Areas



Clean linen can be stored in a patient room as long as it is wrapped in plastic protection wrap and stored in a cabinet

A. True

B. False

# Patient Care Areas

- Linens
- Storage Rooms
  - Clean and Dirty
  - Cardboard Boxes
  - Vinyl Mats on Wire Shelves
- Facilities are thoroughly cleaned and disinfected between patients
- Patient areas must be disinfected between patients and kept clean and neat at all times

# Sleep Lab - Patient Area Cleaning Audit Tool

(Fax completed tool to Infection Control)

Name of person cleaning:	Room number:
Auditor Name:	Date of Audit:

Contact Items	Pass	Fail	Corrected / Re-inspected
1. Patient Bed			
2. Bedside Table			
4. TV Control			
5. Bedside Lamp			
6. Headboard			
7. Walls and Doors			
General Items			
8. Hi/Lo dusting (Vents, Lights, etc)			
9. Floor Care (Dust/Damp Mop/Vacuum)			
10. Trash Receptacles			
11. Chairs			
12. Closet			
13. Counters and Sinks			
14. TV Set			
Restroom			
15. Toilet			
16. Sink			
18. Mirror			
19. Dispensers (Soap, Paper)			
20. Hand/Towel Rails			
21. Trash Receptacles			
22. Vents/Walls			
23. Floors			
TOTAL			
SCORE			

# Sleep Lab Risks

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Lice

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Pest(s)

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Patients bringing in  
equipment and linens from  
home

# Integrated Pest Control

## Facility risks

- Bugs
  - Ants
  - Cockroaches
- Rats
  - Indoors and Outdoors  
(Yes they climb trees)

## Have a plan

- Prevention
- Monitoring logs,
- Passive surveillance,
- Training (pesticide use)

# Lice

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- Head lice are spread most commonly by direct head-to-head (hair-to-hair) contact
- Head lice survive less than 1–2 days if they fall off a person and cannot feed
- Policy on terminating study and follow up cleaning

# Bed Bugs

- The best way to prevent bed bugs is regular inspection for the signs of an infestation.



- tell-tale bite marks on the face, neck, arms, hands, or any other body parts while sleeping ( may take 14 days).
- the bed bugs' exoskeletons after molting,
- bed bugs in the fold of mattresses and sheets,
- rusty-colored blood spots due to their blood-filled fecal material that they excrete on the mattress or nearby furniture, and
- a sweet musty odor.

# References

- World Health Organization. (2010). WHO Patient Safety Curriculum Guide for Medical Schools.
- World Health Organization. (2010). Topic 1: What is patient safety?
- CDC, Influenza  
<http://www.cdc.gov/flu/professionals/infectioncontrol/>
- Emanuel, L., Berwick, D., Conway, J., Combes, J., Hatlie, M., Leape, L., Reason, J., Schyve, P., Vincent, C., & Walton, M. (2008). What exactly is patient safety? *Advances in Patient Safety*, Vol. 1: Assessment. Retrieved from  
[http://www.ncbi.nlm.nih.gov/bookshelf/br.fcgi?book=aps2v1&part=advances-emanuel-berwick\\_110](http://www.ncbi.nlm.nih.gov/bookshelf/br.fcgi?book=aps2v1&part=advances-emanuel-berwick_110)
- Burke, J. P. (2003). Infection control — A problem for patient safety. *The New England Journal of Medicine*, 348, p. 651-656.

# AAST Resources

- AAST Infection Control Policy.  
<https://go.aastweb.org/store/search.aspx?searchterm=infection+control>
- AAST Maintenance and Cleaning Core Competency  
<http://cdn2.hubspot.net/hubfs/488356/PDFs/MaintenanceCleaning.pdf?t=1456421417867>

And that's  
the down  
and dirty!

