Horizontal Infection Prevention

Let’s Get HIP!

Presented by:

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Disclosure

• Jim is employed by Diversey. His expenses to attend this meeting (travel, accommodation, and salary) are paid by this company. Diversey has had no input into this presentation from a commercial interest.
Bugs Bug Us! Acronyms Annoy Us!

VIRAL SHAPES

- Polyhedral (Adenovirus)
- Spherical (Influenza)
- Helical (Tobacco mosaic virus)
- Complex (Bacteriophage)

[Image of petri dishes and viral shapes]

[Image of bacterial cultures]

[Images of acronyms associated with disease control organizations]

[Images of DNA double helix and viral particles]
Forget About It!

- *all* patients
  - at
  - *all* times
  - in
  - *all* healthcare settings

(195 pages)
Routine Practices - Jim

• If they are leaking, limit their movement and protect yourself
• If, during care, you touched it or used it: Disinfect it

• 21 Words!
Point-of-care risk assessment (PCRA)

• before every interaction with
• every patient and/or the patient’s environment,
• to ensure that appropriate control measures (i.e., routine practices and, if necessary, additional precautions) are in place to prevent transmission of microorganisms
Routine Practices

• Hand hygiene program (including point-of-care ABHR)
• Source control (triage, early diagnosis and treatment, respiratory hygiene, spatial separation)
• Patient placement, accommodation, and flow
• Aseptic technique
• Use of PPE
• Sharps safety and prevention of bloodborne pathogen transmission
• Management of the patient care environment
  • Cleaning of the patient care environment
  • Cleaning and disinfection of non-critical patient care equipment
  • Handling of waste and linen
• Education of patients, families and visitors
• Visitor management
Routine Practices - Jim

• If they are leaking, limit their movement and protect yourself
• If, during care, you touched it or used it: Disinfect it

• 21 Words!
Where’s the bug?

- Skin ($10^2 – 10^7$/cm$^2$)
- Feces ($10^{12}$ / gram dry weight)
- Mucous Membranes ($10^8$ / mL)

Fredricks 2001
Kelly 1994
Marsh 2000
This patient has:

* Skin!
* Feces!
* Mucous Membranes!

PERFORM HAND HYGIENE AFTER CONTACT WITH THIS PATIENT OR THEIR ENVIRONMENT!
PHAC - Additional Precautions

• Routine practices properly and consistently applied should prevent transmission by the contact route.
  • ...extensive contamination of the environment
  • ...microorganisms with a very low infectious dose
  • ...conditions/clinical presentations and specific etiologies listed below...
  • Modifications for specific healthcare settings follow
**CONTACT PRECAUTIONS**

- We just found out that this patient has a bug that could be carried to the next patient.
- Now we **really** mean you have to perform hand hygiene and try not to soil your uniform!
- We are not sure about the guy next door, yet, so do whatever you want!
Horizontal vs Vertical Infection Control

S. aureus

Enterococcus

Candida

GNR

Subset VRE

Subset C. glabrata

Subset P. aeruginosa

Acinetobacter

Subset MRSA

ESBL-producing Enterobacteriaceae in Healthcare

Settings (AROS) for Antibiotic-Resistant Organisms Screening, Testing, and Surveillance


Morbidity and Mortality W

Centers for Disease Control and Prevention

United States

DRUG-RESISTANT ORGANISMS IN MULTIDRUG-RESISTANT MULTIDRUG-RESISTANT RESISTANT RESISTANT
All Microorganisms

- Hand Hygiene
- Cleaning and Disinfection
- Screening
- PPE
- High Touch Surface Disinfection
- Susceptible Host

Horizontal
Summary

• Don’t panic over acronyms
• Work consistently with patients who have skin, feces and/or mucous membranes
References


Questions?

• Save for the panel!