
Oregon *Clostridium Difficile* Initiative essentials for bedside care

Healthcare-Associated Infections Program
Acute and Communicable Disease Prevention
Oregon Public Health Division

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Oregon
Health
Authority



(Enter) DEPARTMENT (ALL CAPS)
Current as of 3/17/2016

Overview

- What is “*C. diff*”?
- Why is it a problem?
- What is my role?
- Bedside care essentials: Detect & Protect
 - Report symptoms
 - Gloves and Gowns
 - Hand hygiene
 - Resident hygiene
 - Linens

Clostridium difficile

BIOLOGY & HUMAN DISEASE

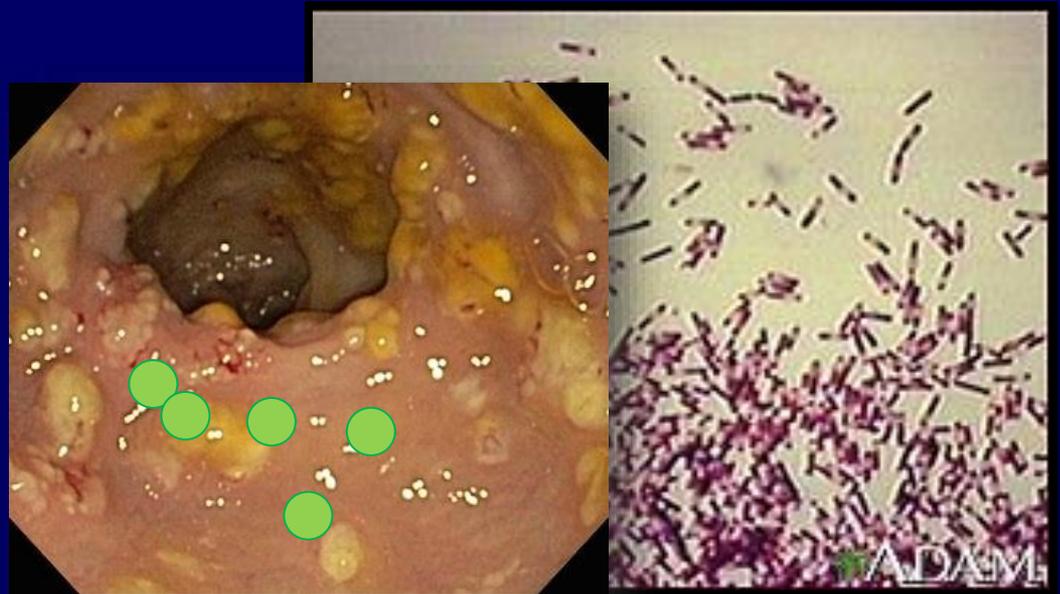
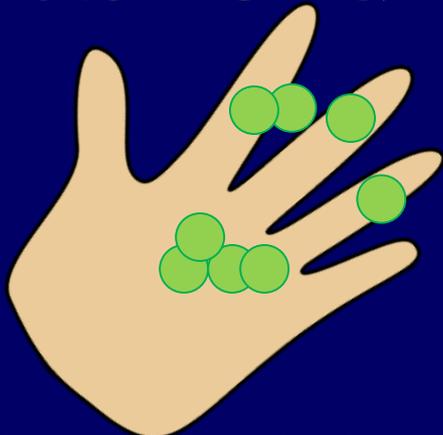
Let's begin at the beginning

- *Clostridium* spp. are ancient **spore-forming anaerobes**
- Soil, water, food, bodies, waste
- Long-time human **toxin-producing** pathogens
 - *Clostridium tetani*.....tetanus
 - *Clostridium botulinum*.....botulism
 - *Clostridium difficile*.....colitis



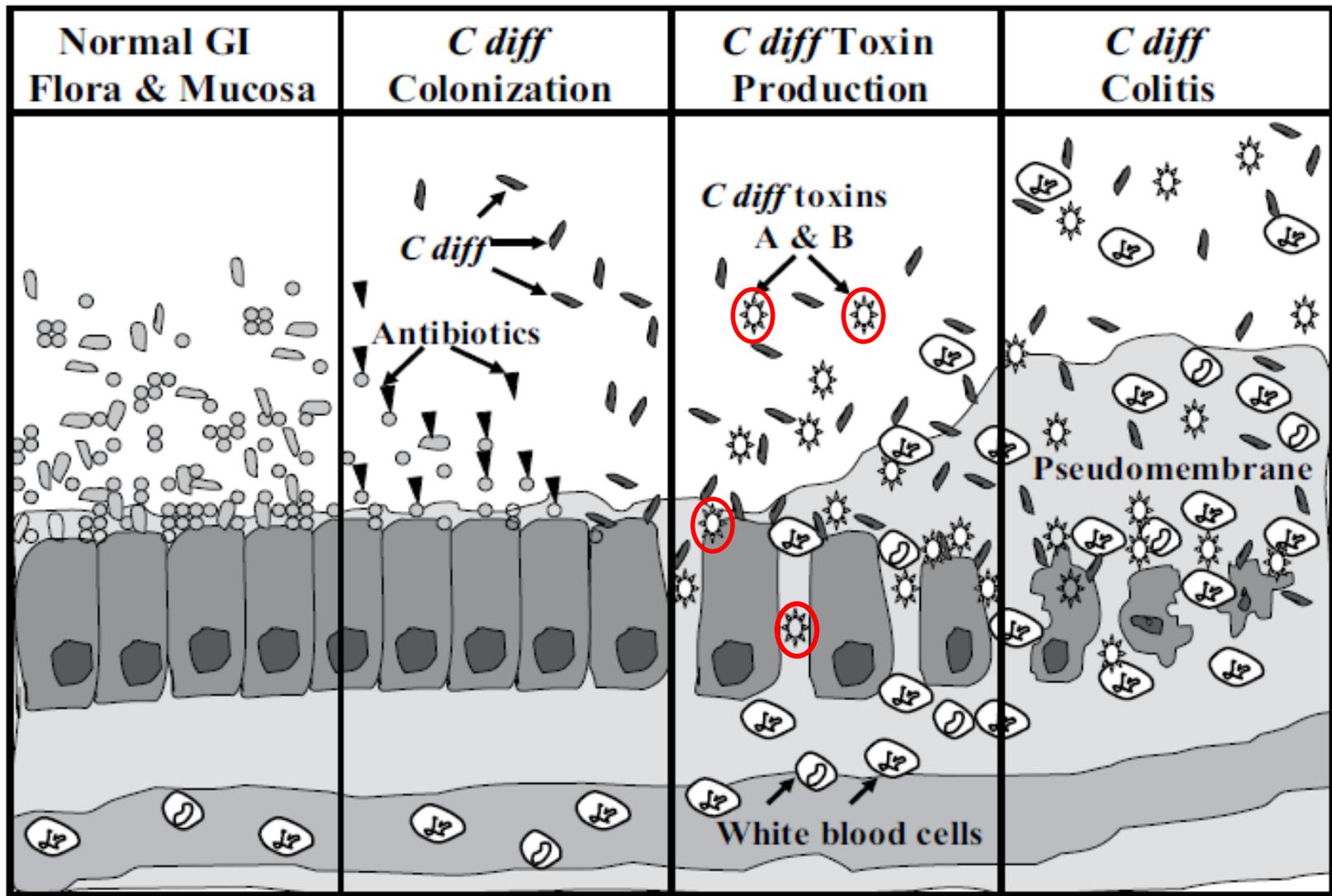
C. diff spores spread on hands, contaminated linens & surfaces

- Hands of healthcare workers caring for CDI-positive patients
- Environment
- CDI-positive persons
- Asymptomatic carriers
- Make **toxins A & B**



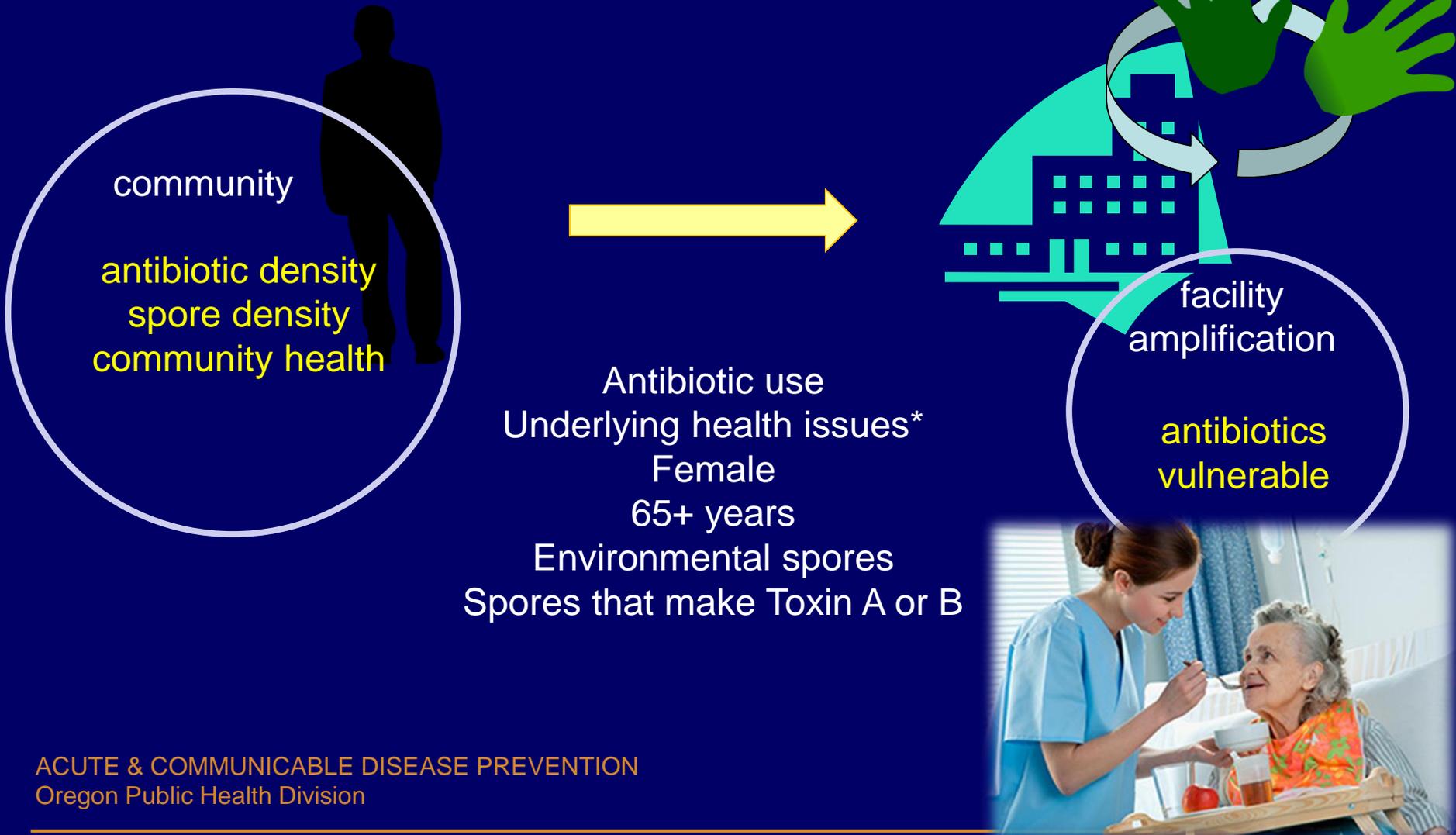
Gram-positive rods of *C. difficile*

Phase A → Phase B → Phase C → Phase D



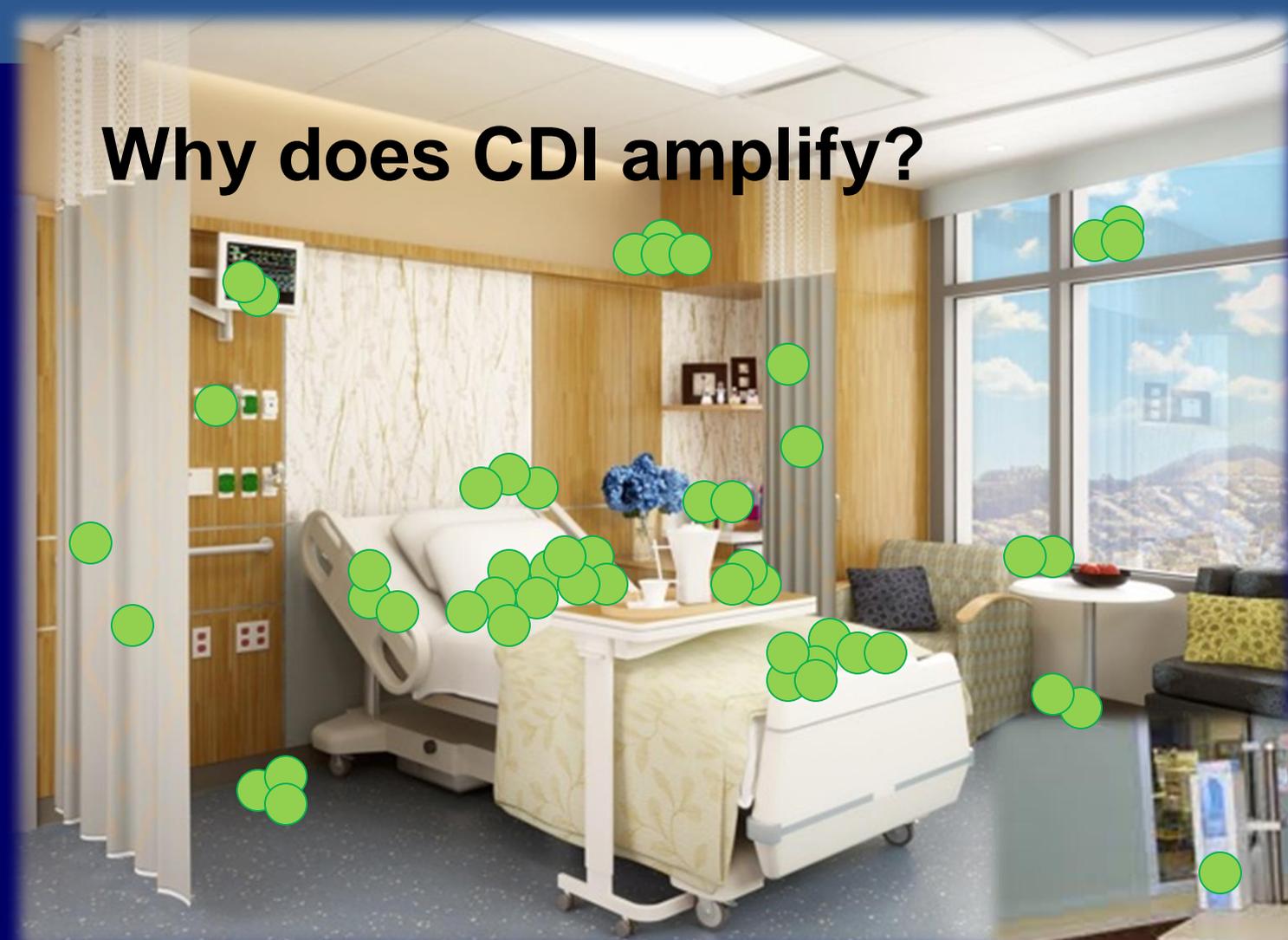
Phases of pathogenesis of *C. difficile* colitis. APIC, 2013: Figure 10.1

Why is CDI a problem in my facility?



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Why does CDI amplify?

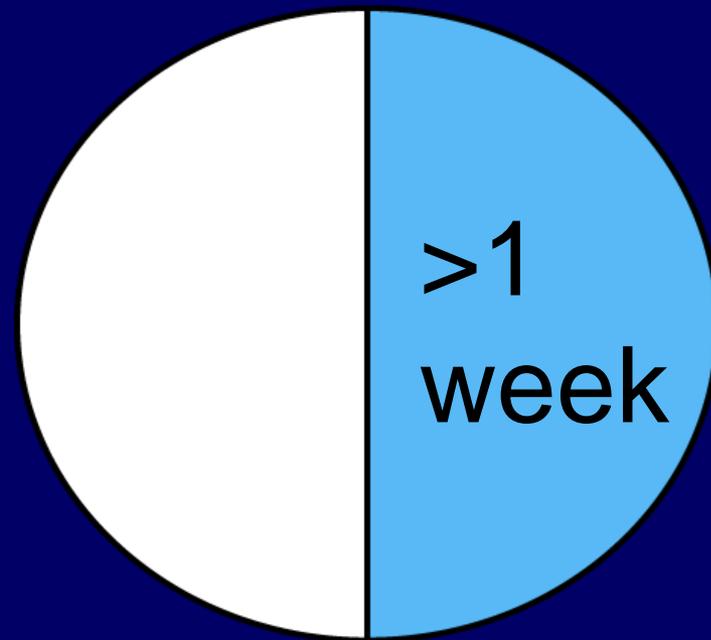


Concentration of spores in patient's environment

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Why wear gloves and gowns after diarrhea is over (but still finishing meds)?

- Half of residents will have spores on their skin more than 1 week after diarrhea over
- Spores live for months in the environment

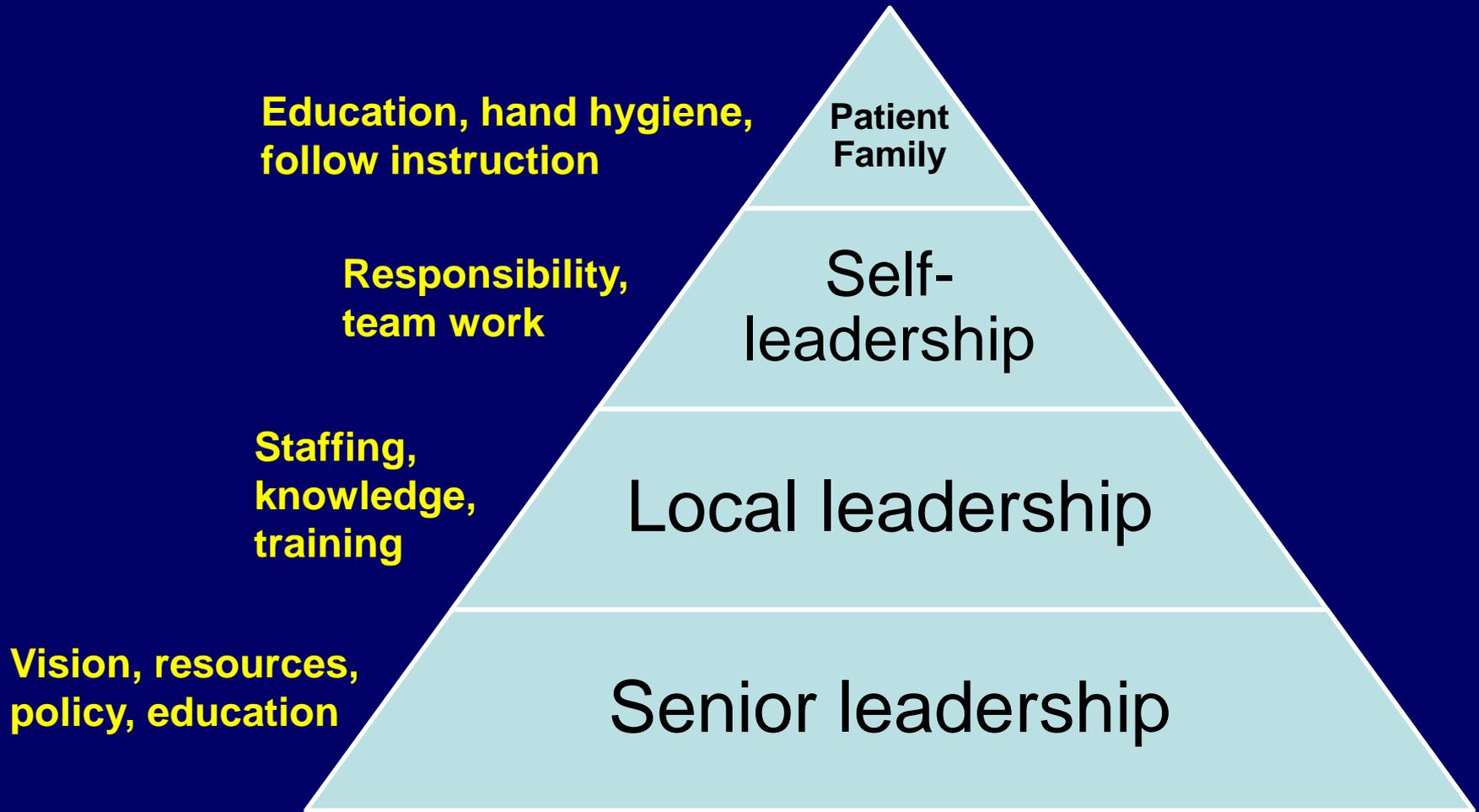


WHAT IS MY ROLE?

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Each part of the whole



Eyes & Ears: Early Detection

RISK

Has my resident had *C. diff* diarrhea before?

Is this resident on antibiotics,
which put her at risk for *C. diff* diarrhea?

SYMPTOMS

Does the resident have a change in stool today?
If so, is it bloody or painful or have a different smell?

Did the resident have this yesterday?

How many loose stools over what time period?

TEST

Has the medical staff been told of these symptoms
which could be *C. diff* diarrhea?

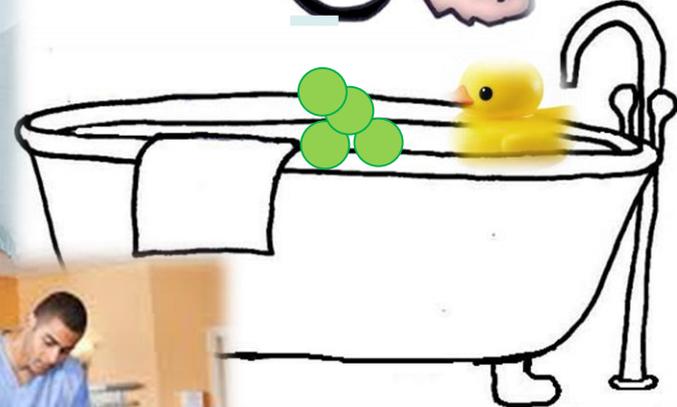
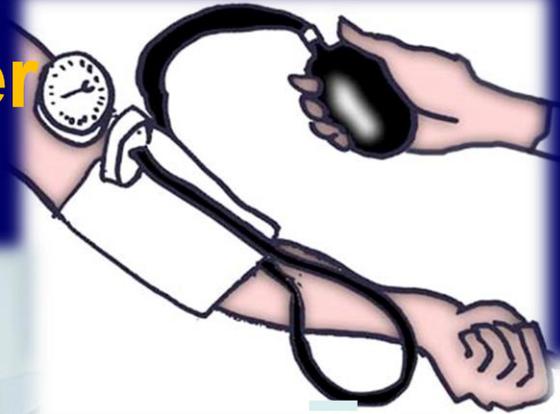
Has testing been ordered?

Eyes & Ears: Early Detection

TIP: Add suspect or confirmed C. diff residents to your team huddle



Hand hygiene: Before & After



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It's worth it



Why soap & water?

Sticky
spores



...need friction to
remove

Contact Precautions = Gowns & Gloves

Follow the sign: It's worth it



CONTACT PRECAUTIONS (IN ADDITION TO STANDARD PRECAUTIONS)

- Private Room**
 - A private room is indicated, however, patients infected with the same organism may share a room if necessary.
- Gloves**
 - Wear gloves for contact with the patient and/or environment. Change gloves after contact with infective material. Remove gloves before leaving the patient's environment.
- Gown**
 - Wear a gown if you anticipate that your clothes will come into contact with the patient, environmental surfaces, or items in the patient's room. Remove gown before leaving the patient's environment.
- Wash Hands**
 - Wash hands with antiseptic product immediately after glove removal and before leaving the patient's environment.
- Transport**
 - Limit the movement/transport of patients to essential purposes only. During transport, ensure that all precautions are maintained at all times.
- Equipment**
 - Dedicate the use of patient-care equipment to a single patient. If common equipment is used, clean and disinfect between patients.



Soiled Linens

*TIP: Use gown & gloves when changing linens for C. diff positive residents **EVEN IF** linens aren't visibly dirty.*

TIP: Bag dirty linens in the room; don't carry down the hall.



Cleaning & Disinfecting

- It's Everyone's business!
- Bleach (fresh) or special sporicidal

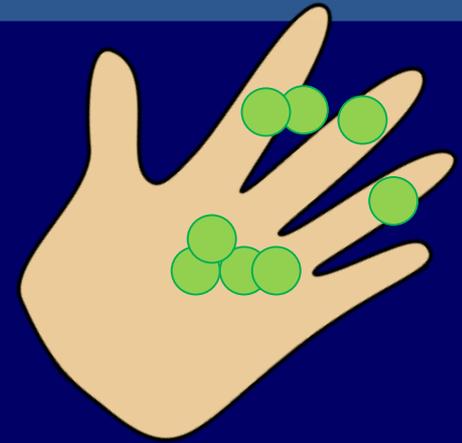
TIP: Ask for a product you can use when Housekeeping unavailable.

TIP: Clean "high-touch" areas at each change of shift.



Resident Hygiene

- Hand washing before meals in all residents
- For residents with *C. diff*:
 - Use the shower, avoid baths
 - Clean and disinfect shower area after each use



TIP: Offer towelettes to those who can't wash at sink.

*TIP: Shower known *C. diff* residents last.*

TIP: Encourage regular showers at least twice a week.

Housekeeping Considerations for *C. diff*

- Use commode liners, if possible
- Immediately clean and disinfect commode/toilet and arm rests/grab bars after each use.
- Toilet flush makes droplets

TIP: *Work from clean to dirty*



Take aways

- You are the core of resident care & safety
- You can provide resident-centered care
 AND prevent spreading *C. diff*!
- Discuss resident risk for *C. diff*
- Communicate changes
- Use gown and gloves when infectious diarrhea
- Soap & water, THEN alcohol hand rub
- Spores are stubborn

Case Studies

- Consider 3 scenarios of common infection control issues and the choice to perform good infection control in the face of resident care and time.
- Ideas?
- Showering: Resident with *C.diff* doesn't want to shower because too much hassle. However, this keeps down spore counts; less spread and reinfection. Offer heater, warm blankets, warm drink after, nice smelling soap/shampoo from home.
- Toileting: How to prepare commode if *C. diff* or noro or other infectious diarrhea; absorbant bags? How to clean and replace commode working from clean to dirty.
- Changing linens: prepare and use contact precautions.



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