ARO'S

Antibiotic Resistant Organisms



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Resistant Organisms Spread by Contact Transmission

Methicillin Resistant Staphylococcus aureus (MRSA)
Vancomycin Resistant Enterococcus (VRE)
Multidrug resistant Pseudomonas aeruginosa
Multidrug resistant E. coli and other coliforms
Clostridium difficile

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Clostridium difficile is a major cause of nosocomial diarrhea spread by contact transmission



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Colonization

The presence of microorganisms on the surface of tissues without invading the tissues

Infection

Microorganisms are invading the tissues

Disease

Infection with damage to the tissues

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Screening cultures for colonization with resistant organisms



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Our hands are regularly colonized with a variety of microorganisms even if they look "clean"



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Bacteremia is an example of a disease where bacteria have invaded the blood stream



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Cleaning & dressing an infected leg wound using contact precautions



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Pneumonia is a common and serious hospital infection



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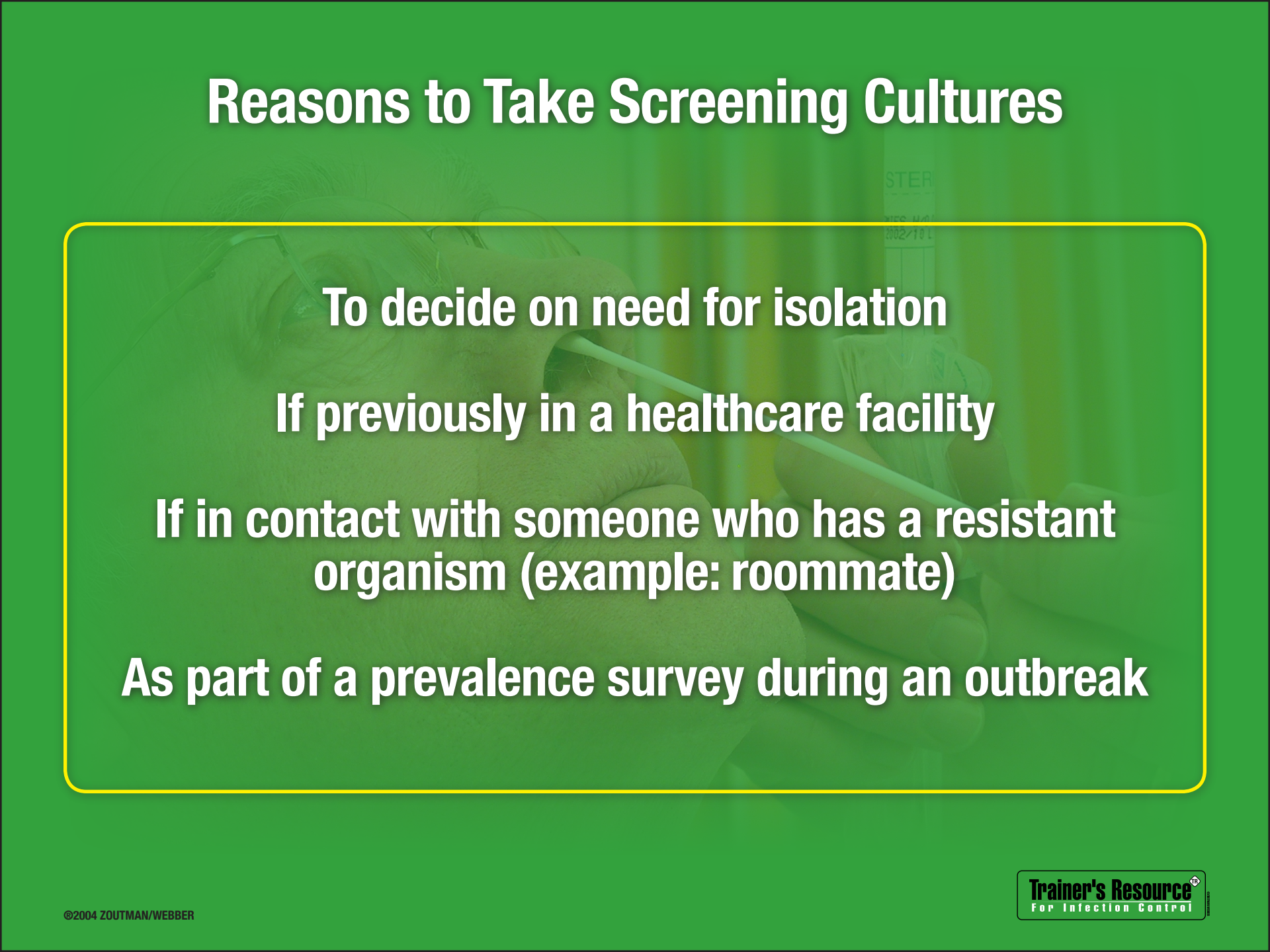
Stool sample to be tested for Vancomycin Resistant Enterococci (VRE)



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Reasons to Take Screening Cultures



To decide on need for isolation

If previously in a healthcare facility

If in contact with someone who has a resistant organism (example: roommate)

As part of a prevalence survey during an outbreak

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MRSA

Methicillin Resistant Staphylococcus aureus

- Increasing around the world
- Especially common in hospitals and other healthcare institutions
- Colonizes the nose, axilla & rectum
- Resistant to the most commonly used antibiotics
- Spread largely by contact transmission
- Healthcare workers transiently colonized on their hands

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VRE

Vancomycin Resistant Enterococcus

- Increasing in many jurisdictions
- Seen in hospitals & other healthcare institutions
- Colonizes the lower bowel
- Resistant to most antibiotics
- Spread largely by contact transmission
- Contaminates the environment & equipment
- Healthcare workers transiently colonized on their hands
- Effectively removed by hand hygiene

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CDAD

Clostridium difficile Associated Diarrhea

- Caused by a bacteria in the bowel
- C. difficile produces toxins that causes diarrhea
- Antibiotic use is a risk factor
- Spread by contact transmission
- C. difficile spores contaminate the environment
- Effectively removed by hand hygiene

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Questions?

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