

Recognizing Risk Using Reservoirs

Session 2

How Germs Make People Sick


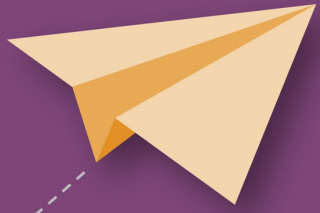


1

Welcome

Agenda

- Welcome and Introductions
- How Germs Spread and Make People Sick
- How Can an Infection Occur?
- Bringing It Together
- Conclusion



Recognizing Risk Using Reservoirs | Session 2: How Germs Make People Sick

2

How Germs Spread and Make People Sick



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3


3



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4

4



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5

5



How Germs Spread

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6

6

<https://www.cdc.gov/infectioncontrol/projectfirstline/videos/HowGermsSpread-LowRes.mp4>



7

How Germs Spread in Healthcare: Four Main Pathways

- 1 Through touch
- 2 When they're breathed in
- 3 Through splashes or sprays
- 4 Through clinical care tasks that bypass or break down the body's natural defenses



8

Knowing Where Germs Live and How They Spread Helps You Recognize Risk



Reservoir



Pathway



Recognize the risks and take infection control actions



How Can an Infection Occur?



Scenarios: How Can an Infection Occur?

- Example scenario:
 - Start with a germ and a reservoir.
 - Walk through the five elements of germ spread.
- Create your own scenario!

11

Example Scenario

Strep on a Healthcare Worker's Hand

Germ:
Strep



Reservoir:
Healthcare worker's hand



Five Elements:

1. Reservoirs
2. Pathways
3. Person
4. Body's defenses
5. Survival

12

Example Scenario

How Germs Spread and Make People Sick

The germ is on the healthcare worker's hands (skin)
Reservoir

The healthcare worker could touch the patient's bed rail.
Pathway

The patient could touch the bed rail before it is cleaned and disinfected.
Person + Survival

The patient could touch their eye, bypassing the body's defenses (skin) and delivering germs into the body.
Body's Defenses

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13

Create Your Own Scenario

E. coli in a patient's gut

C. difficile on a blood pressure cuff

Pseudomonas in a water faucet

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14

Five Elements of How Germs Spread and Cause Infection



15

Scenario Summaries

The complex block contains three dark blue rounded rectangular panels. Each panel has a title and a circular image: 'E. coli in a patient's gut' (microscopic orange rod-shaped bacteria), 'C. difficile on a blood pressure cuff' (microscopic purple rod-shaped bacteria with long flagella), and 'Pseudomonas in a water faucet' (microscopic green and orange rod-shaped bacteria on a textured surface).

16

Bringing It Together



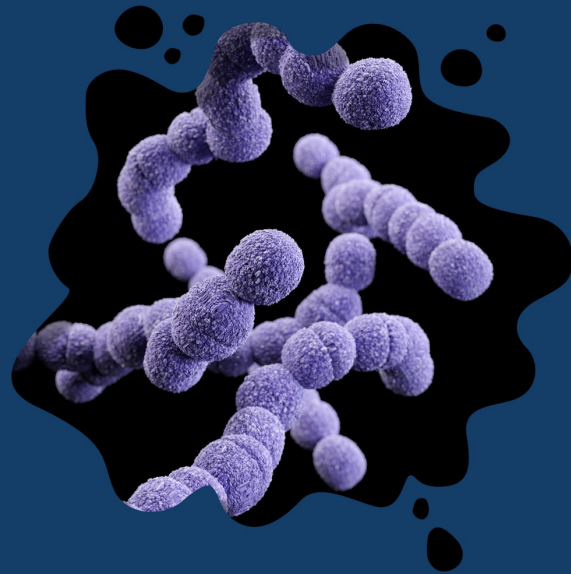
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17

17

Reflection

- Thinking about your daily work, can you identify any of your tasks that are related to any of the five elements?
- Jot down in your participant booklet two actions you can take to stop the spread of germs to you or your patients.



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18

18

Questions



19

Key Takeaways

- ✓ Five elements for a germ to spread and cause an infection: reservoir, pathway, person to infect, getting around the body's defenses, survival.
- ✓ Infection control actions at any one of these key points stop germs from spreading and causing infection.
- ✓ Main pathways for germs to spread in healthcare: touch, breathing in, splashes or sprays, bypassing or breaking down the body's natural defenses.

20

How to Get Involved and Feedback



Project Firstline on CDC:
<https://www.cdc.gov/infection-control/projectfirstline/index.html>



CDC's Project Firstline on Facebook:
<https://www.facebook.com/CDCProjectFirstline>



CDC's Project Firstline on Twitter:
https://twitter.com/CDC_Firstline



Project Firstline *Inside Infection Control* on YouTube:
<https://www.youtube.com/playlist?list=PLvrp9iOILTQZQGfDnSDGViKDdRtlc13VX>



To sign up for Project Firstline e-mails, click here:
https://tools.cdc.gov/campaignproxyservice/subscriptions.aspx?topic_id=USCDC_2104

- *How Germs Spread in Healthcare* video clip:
<https://www.cdc.gov/infection-control/projectfirstline/videos/HowGermsSpread-LowRes.mp4>

