

# Recognizing Risk Using Reservoirs

## Session 2

# How Germs Make People Sick



Welcome

# Agenda

---

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



# Acknowledgement

This Project Firstline Presentation is brought to you by the North Dakota Department of Health (NDDoH), Division of Infectious Diseases and Epidemiology, and presented by NDDoH Infection Prevention Consultants.

All presenters have been trained on Project Firstline materials in correlation with the Centers for Disease Control and Prevention (CDC).

**We want to get to know you!**



# INTRODUCTIONS



- Morgan Messer ASN, RN
- Jamestown, ND
- COVID-19 Nurse Consultant
- Project First Line Facilitator

# Introductions

Insert photo here

- Carla Monica Cabahug BSN, RN
- Bismarck
- Infection Prevention Consultant
- Project Firstline Facilitator

# How Germs Spread and Make People Sick



# How Germs Spread



**Video:**  
*How Germs Spread  
in Healthcare*



# Five Elements of How Germs Spread and Cause Infection

---



# Reservoirs



# Pathways



# How Germs Spread in Healthcare: Four Main Pathways

---

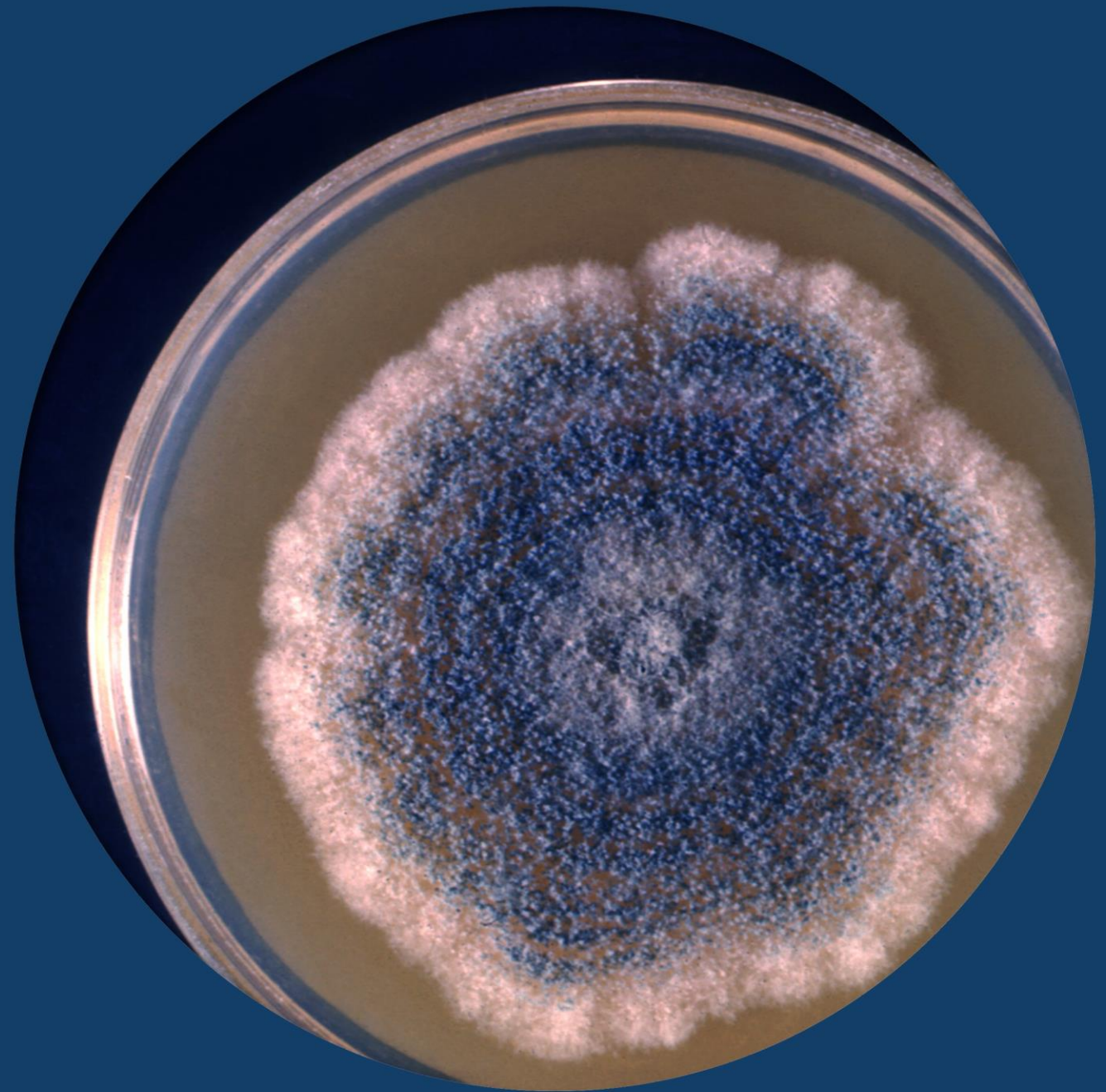
- 1 Through touch
- 2 When they're breathed in
- 3 Through splashes or sprays
- 4 Through clinical care tasks that bypass or break down the body's natural defenses

# A Person to Infect

## Getting around the Body's Defenses



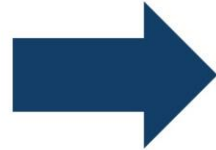
# Survival



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



**Reservoir**



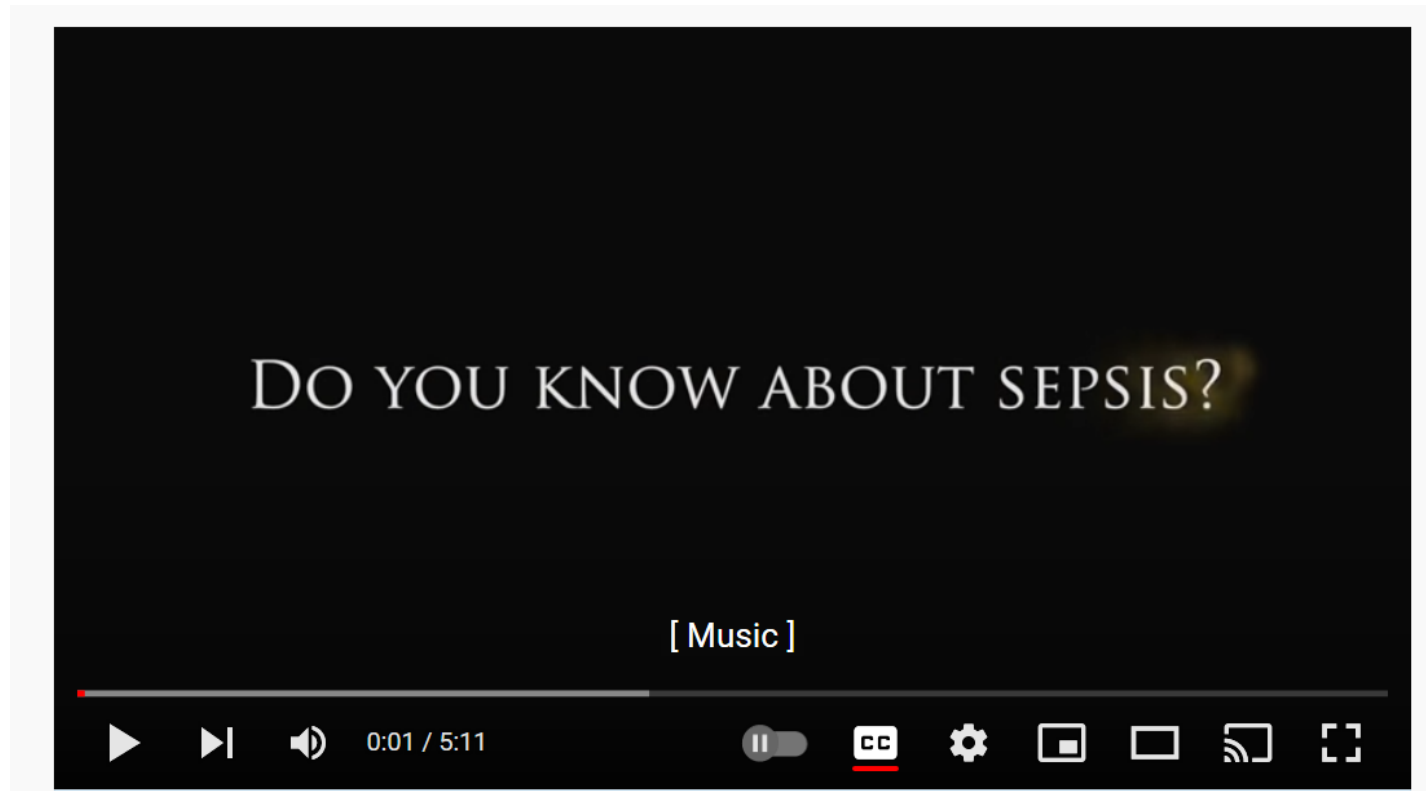
**Pathway**



**Recognize the risks and take infection control actions**



# YouTube video: Infection Prevention is Everyone's Business



Video link: <https://www.youtube.com/watch?v=SealY7kP2uI>

# 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!

## Example Scenario

# How Germs Spread and Make People Sick

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



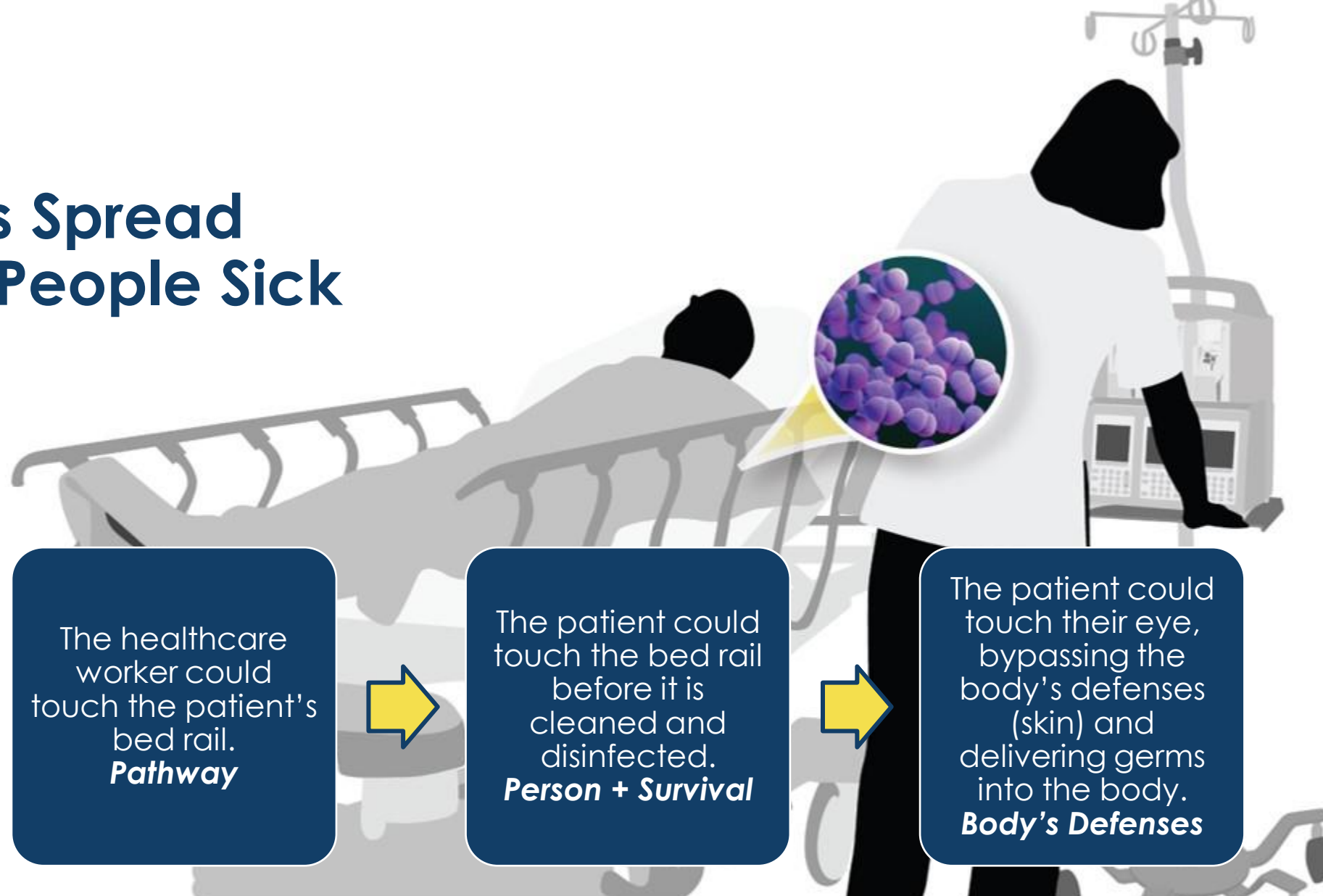
The healthcare worker could touch the patient's bed rail.  
**Pathway**



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**



## 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

# Create Your Own Scenario

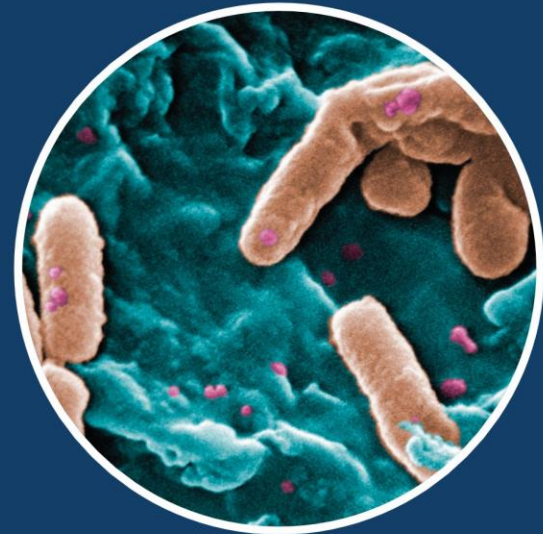
*E. coli* in a patient's gut



*C. difficile* on a blood pressure cuff



*Pseudomonas* in a water faucet



# Scenario Summaries

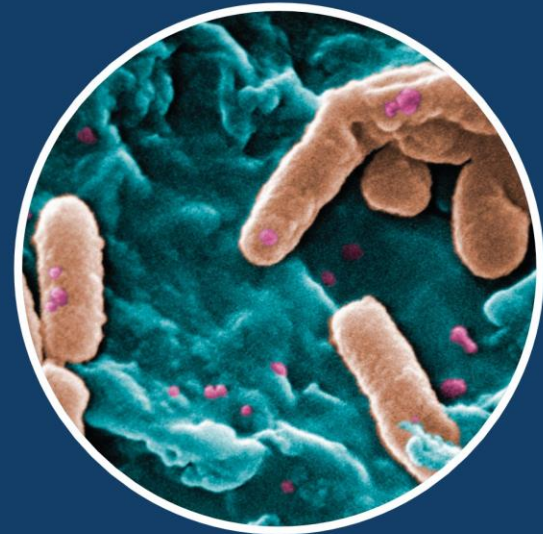
*E. coli* in a patient's gut



*C. difficile* on a blood pressure cuff



*Pseudomonas* in a water faucet



# Bringing It Together



# Five Elements of How Germs Spread and Cause Infection

---

Reservoirs



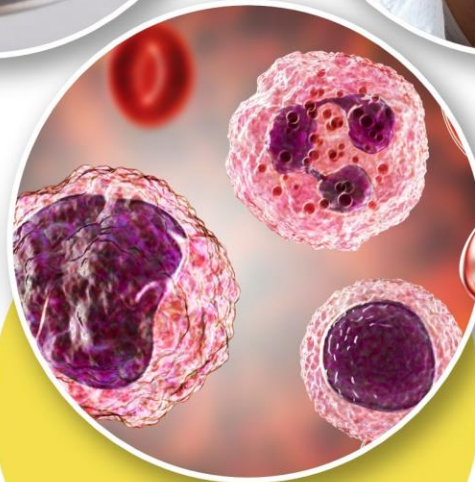
Person



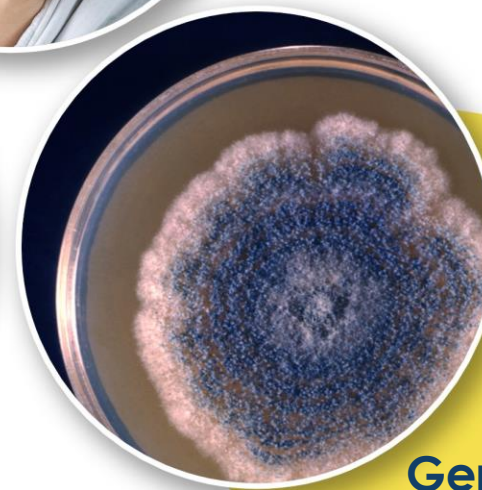
Pathways



Body's defenses



Germ survival

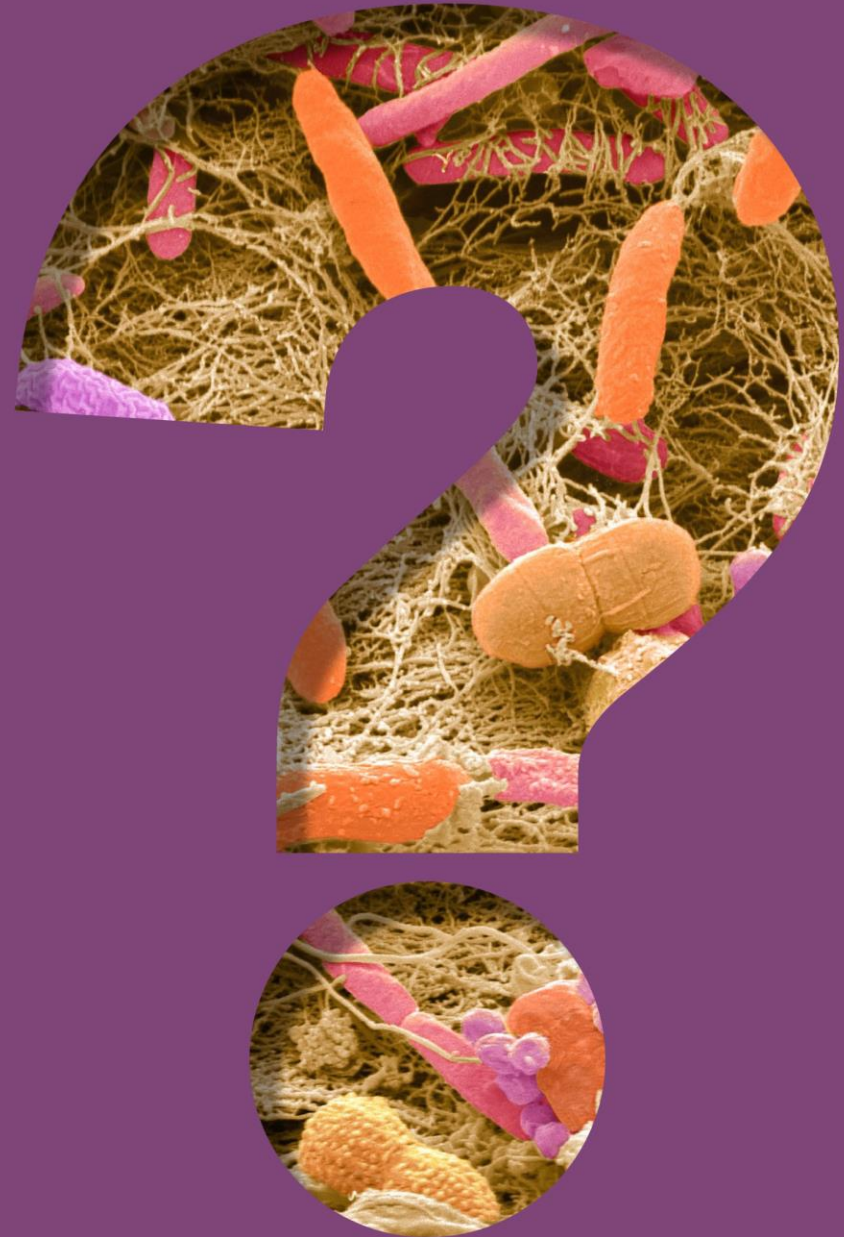


# Reflection

- 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.



# Questions



# Conclusion

# 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.

# 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](https://twitter.com/CDC_Firstline)



Project Firstline *Inside Infection Control* on YouTube:  
<https://www.youtube.com/playlist?list=PLvrp9iOILTQZQGtDnSDGViKDdRtlc13VX>



To sign up for Project Firstline e-mails, click here:  
[https://tools.cdc.gov/campaignproxyservice/subscriptions.aspx?topic\\_id=USCDC\\_2104](https://tools.cdc.gov/campaignproxyservice/subscriptions.aspx?topic_id=USCDC_2104)

- *How Germs Spread in Healthcare* video clip:  
<https://www.cdc.gov/infectioncontrol/projectfirstline/videos/HowGermsSpread-LowRes.mp4>
- Project Firstline feedback form:  
<https://www.cdc.gov/infectioncontrol/pdf/projectfirstline/TTK-ParticipantFeedback-508.pdf>

# Evaluation

Take the end of course evaluation for NDBON CEU certificate:

**INSERT CUSTOM LINK HERE**

If you are a room moderator for a group attending under one login, fill out the Group Attendance Form. EACH attendee will need to complete the evaluation form. Submit all forms to [dohpfl@nd.gov](mailto:dohpfl@nd.gov)

Recordings can be found on:  
[www.health/nd.gov/projectfirstline](http://www.health/nd.gov/projectfirstline)

Questions? Email us: [dohpfl@nd.gov](mailto:dohpfl@nd.gov)

Call us: (701)-328-2378

