

Project Firstline



Project Firstline gives frontline staff the infection control and prevention tools and information they need to protect themselves, their facility, their family and their community from infectious disease threats, such as COVID-19.

Encourage your staff to join today

hanys.org/project_firstline



CDC's Project Firstline infection control and prevention program is being made available to healthcare workers by HANYS, in collaboration with Health Research, Inc. and the Department of Health.

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Recognizing Risk Using Reservoirs

Session 2

How Germs Make People Sick



PROJECT
FIRSTLINE

CDC's National Training Collaborative
for Healthcare Infection Prevention & Control

Welcome

Agenda

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

POLLING QUESTION

What is your roll in your organization?

- a. Infection Prevention
- b. Quality
- c. Nursing
- d. Technician/aide
- e. Administrator
- f. Environmental Services
- g. Non-patient facing

POLLING QUESTION

What type of healthcare facility are you working in?

- a. Hospital in-patient
- b. Hospital out-patient
- c. Skilled nursing facility or nursing home
- d. Outpatient office or clinic
- e. EMS
- f. other

How Germs Spread and Make People Sick



How Germs Spread

Video: How Germs Spread in Healthcare

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



Five Elements of How Germs Spread and Cause Infection



Reservoirs



Pathways

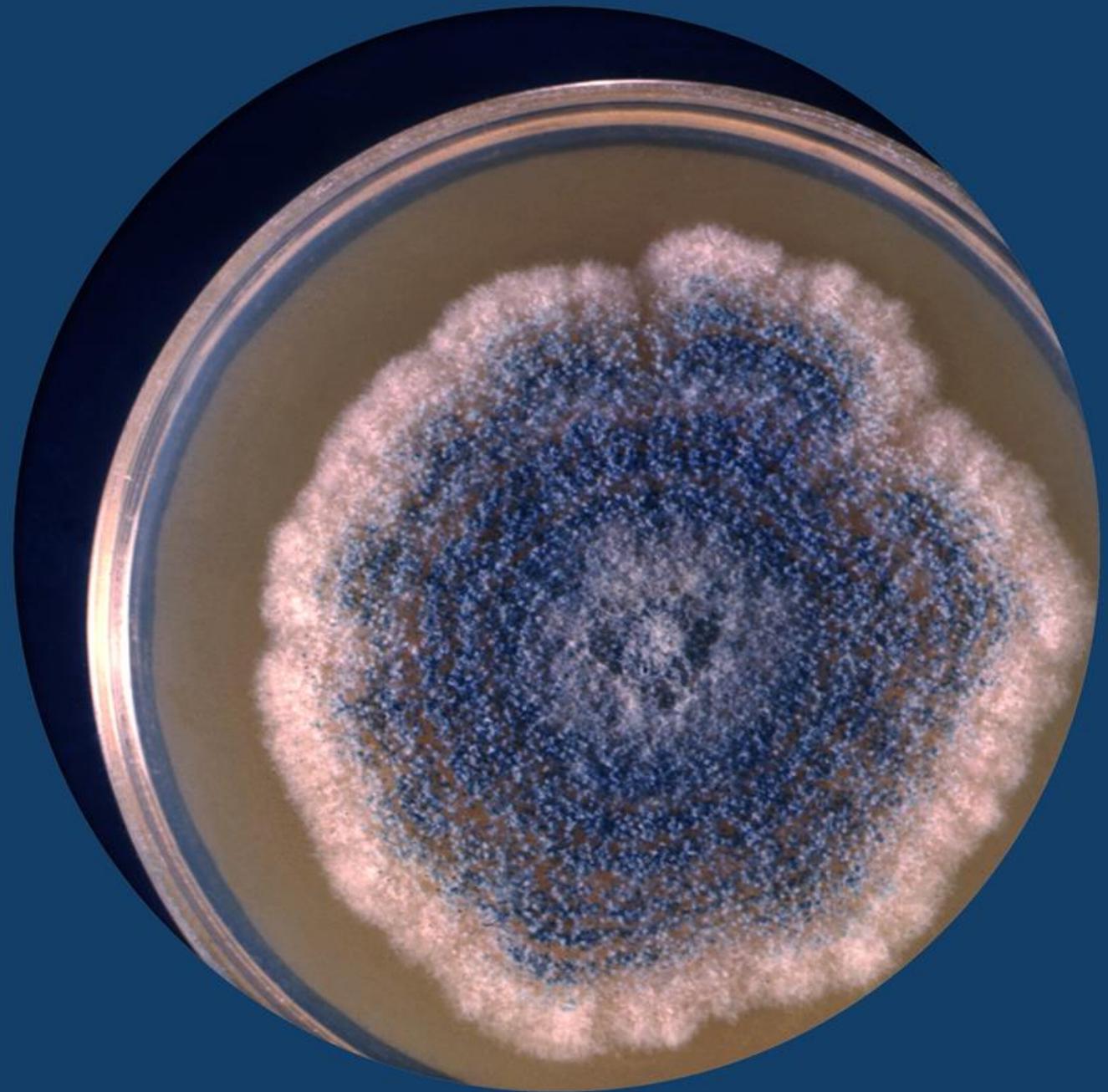


A Person to Infect

Getting around the Body's Defenses



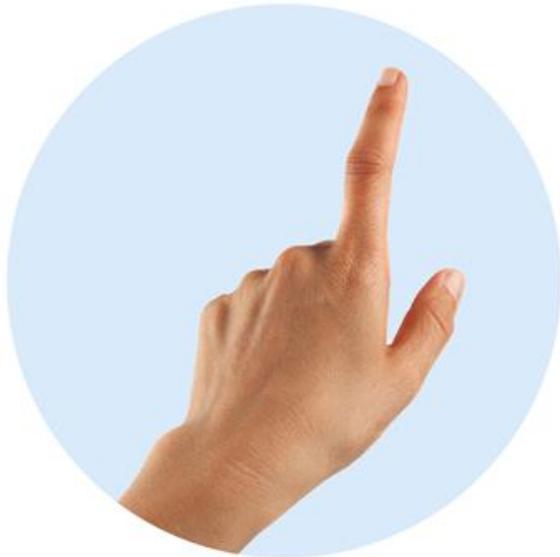
Survival



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

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!

Example Scenario

Strep on a Healthcare Worker's Hand

Germ:
Strep



Reservoir:
Healthcare
worker's hand

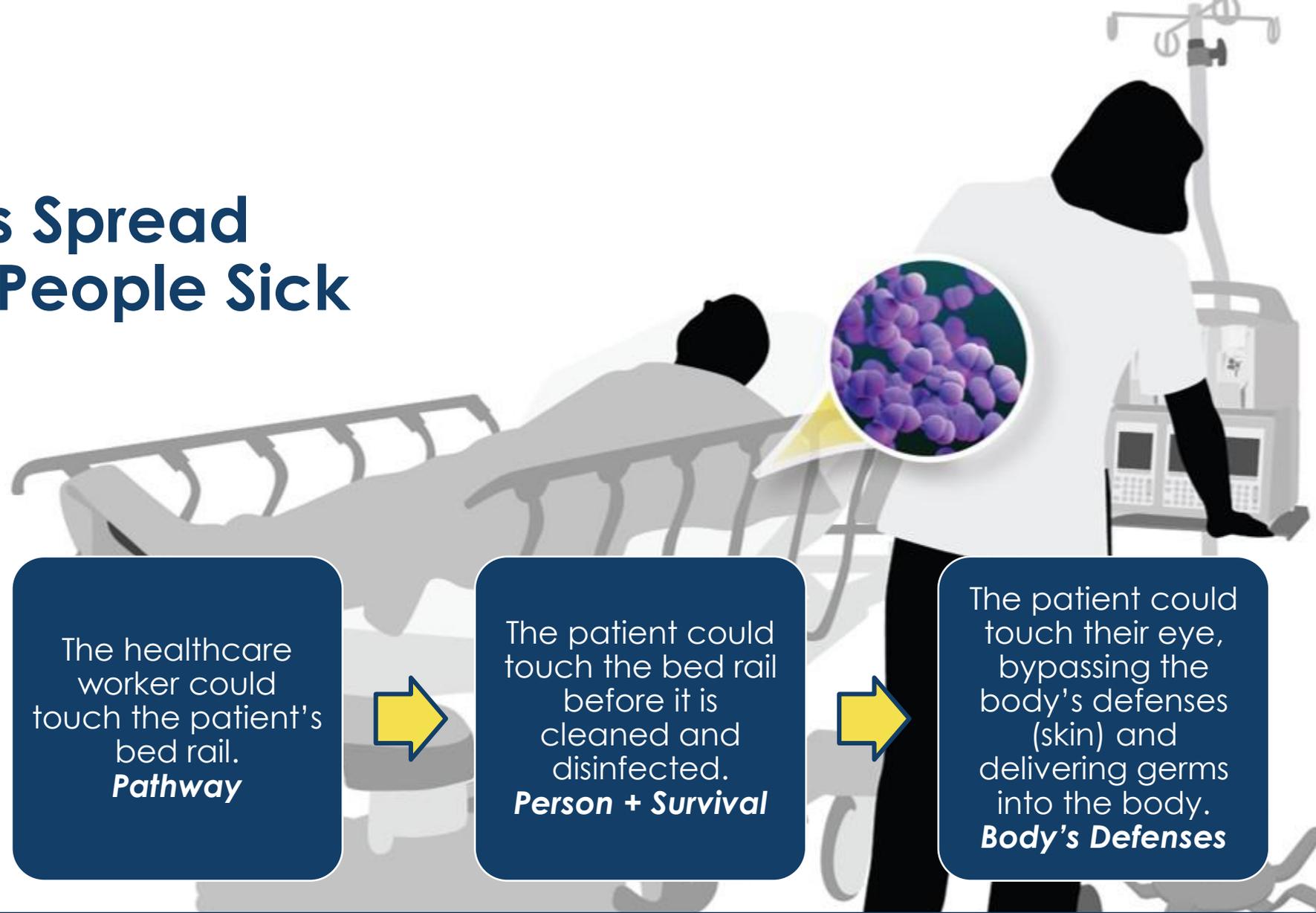


**Five
Elements:**

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

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

Create Your Own Scenario

E. coli in a patient's gut



C. difficile on a blood pressure cuff



Pseudomonas in a water faucet



Five Elements of How Germs Spread and Cause Infection



Scenario Summaries

E. coli in a patient's gut



C. difficile on a blood pressure cuff



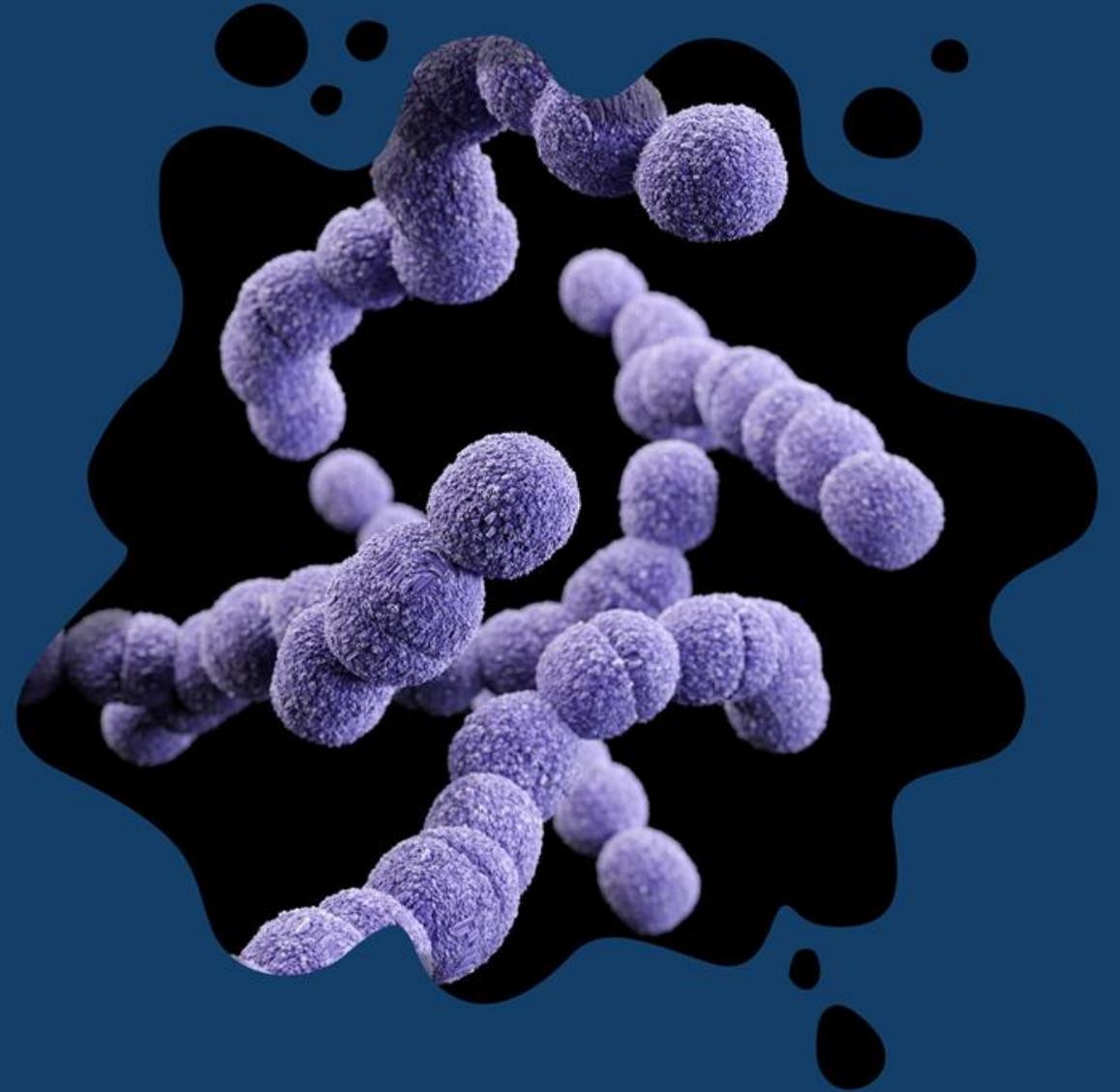
Pseudomonas in a water faucet



Bringing It Together

Reflection

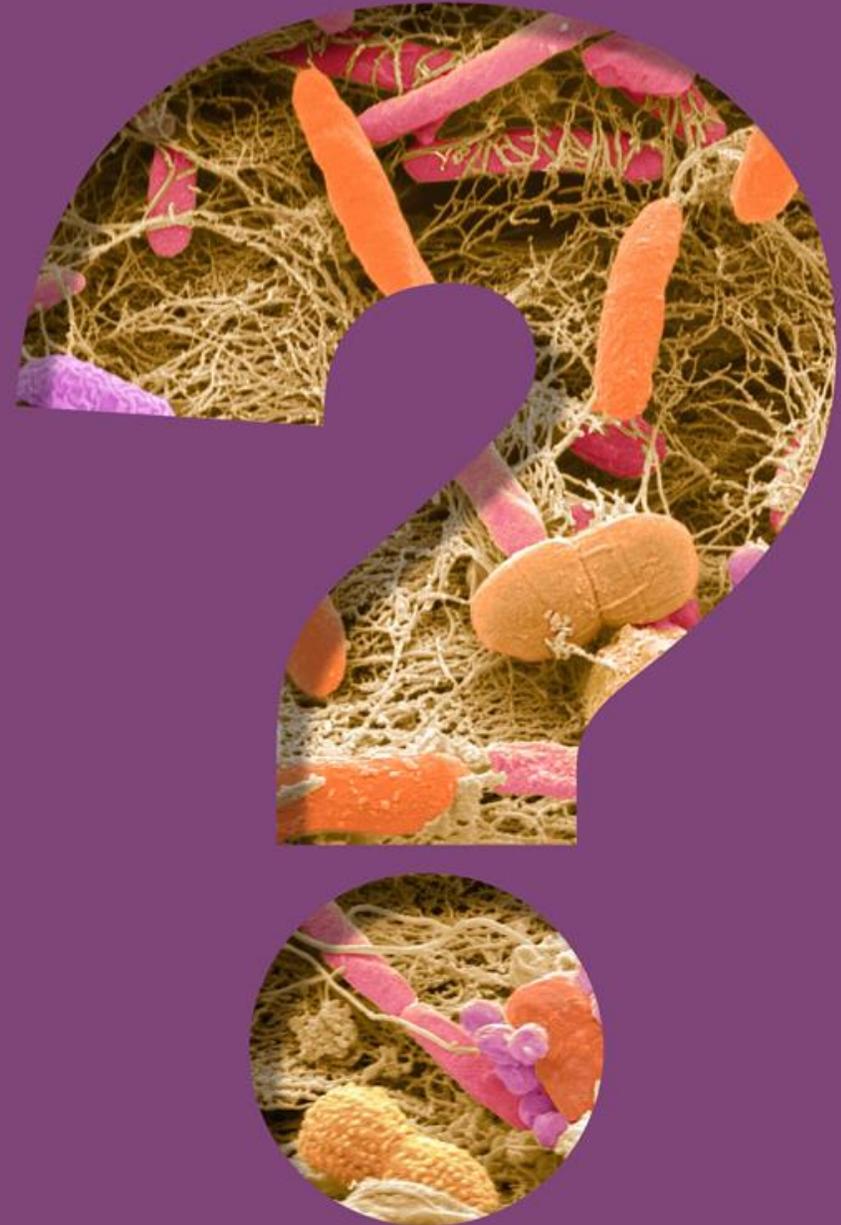
- Thinking about your daily work, can you identify any of your tasks that are related to any of the five elements?
- Jot down in your participant booklet two actions you can take to stop the spread of germs to you or your patients.



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.

Questions



Project Firstline

Infection control and prevention training *Tailored for the healthcare workforce*



Upcoming webinars (all sessions 9 – 9:30 a.m.)

September 1 Recognizing risk: A review

Recordings (hanys.org/project_firstline)

- The concept of infection control training
- The basic science of viruses
- How respiratory droplets spread COVID-19
- How viruses spread from surfaces to people
- How COVID-19 spreads: A review
- Environmental Cleaning and Disinfection
- Source Control in healthcare to prevent infections
- Hand Hygiene
- What does it mean to recognize risk?
- How germs make people sick**

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=PLvvp9iOILTQZQGtDnSDGViKDdRtlc13VX>



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/infectioncontrol/projectfirstline/videos/HowGermsSpread-LowRes.mp4>
- Project Firstline feedback form:
<https://www.cdc.gov/infectioncontrol/pdf/projectfirstline/TTK-ParticipantFeedback-508.pdf>
- HANYS Project Firstline
<https://www.hanys.org/quality/collaboratives-and-learning-networks/project-firstline/>