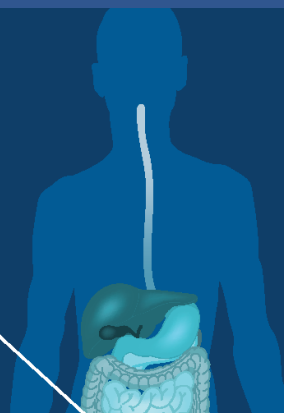
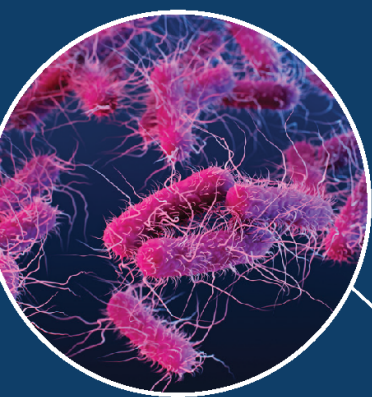


## GERMS CAN LIVE IN THE GUT

- The gut is filled with bacteria and some yeasts, which are part of a healthy immune system.
- Most gut germs don't cause problems in healthy people, but they can cause infection when they spread.
- Germs in stool can spread onto hands and skin when wiping or changing a diaper.

### Infection Control Actions to Reduce Risk

- Hand hygiene
- Use of personal protective equipment (gloves and gowns)
- Cleaning and disinfection
- Textile management
- Waste management



## GERMS CAN LIVE ON WET AND DRY SURFACES, AND MEDICAL DEVICES

- Tap water is safe to drink, but is not sterile.
- Most of the time, germs in tap water aren't a problem, but they can cause illness in patients with very weak immune systems.
- Germs in water can spread to surfaces and people and cause harm.
- If medical instruments and equipment (e.g., devices and central lines) get wet, bacteria can grow. When those devices are used, that bacteria can then get into a patient's body or blood and cause infection.
- Germs found on the body, in the air, and in stool can often be found on dry surfaces, and some can live for a long time.
- Dry surfaces include "high-touch" surfaces like bed rails, door handles, and light switches. They also include countertops, bed curtains, floors, and things that might not be touched as often.
- Germs from dry surfaces can also get onto devices that are used on or in patients.
- When a device, like a pulse oximeter, is used on a patient's body to provide care, any germs on that device can be spread to places in or on the patient's body.
- When a device is put into a patient's body, like an IV needle, endoscope, or artificial hip, any germs on the device can spread into the body.
- If not handled correctly, shared medical devices can spread germs from one patient to another.

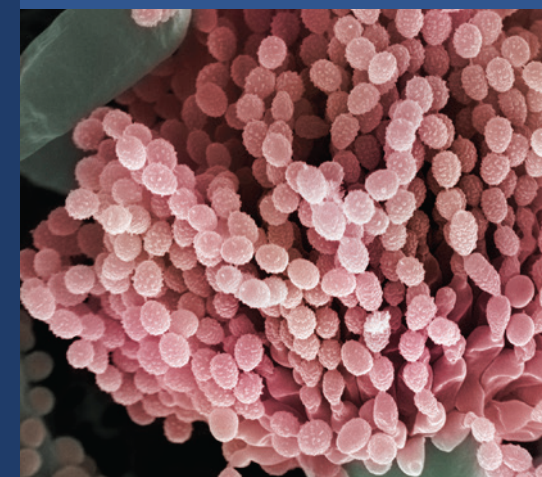
### Infection Control Actions to Reduce Risk

- Cleaning and disinfection
- Device sterilization
- Hand hygiene
- Use of personal protective equipment (gloves and gowns)



## WHERE IS THE RISK?

Know where germs live to stop the spread and protect patients



# PROJECT FIRSTLINE

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

# GERMS LIVE ON THE SKIN

## Germs spread through touch.

- Many germs grow on healthy skin.
- Germs on skin can get onto surfaces, other people, and things that will touch other people.

## Germs spread by bypassing or breaking down the body's defenses.

- Healthcare tasks often involve breaking the skin.
- Breaking the skin – from putting in an IV, drawing blood, surgery, or trauma – creates a pathway for germs to spread into the body.

## Infection Control Actions to Reduce Risk

- Hand hygiene
- Appropriate glove use
- Injection safety
- Cleaning and disinfection
- Source control (covering cuts and wounds)

# GERMS CAN LIVE IN THE RESPIRATORY SYSTEM

- When an infected person talks, breathes, sneezes, or coughs, they produce respiratory droplets that could spread germs.
- Germs are more likely to spread in places with poor ventilation or lots of people.
- Germs in the nose and mouth can be spread to the skin and hands when people touch their faces, which can then spread to surfaces or other people.

## Germs That Can Live in the Respiratory System

- Pseudomonas
- Staphylococcus aureus (staph, including MRSA) (tip of the nose)
- Viruses, like influenza and SARS-CoV-2

## Infection Control Actions to Reduce Risk

- Hand hygiene
- Use of personal protective equipment (respirators, eye protection)
- Source control (masking)
- Cleaning and disinfection
- Respiratory hygiene/cough etiquette
- Ventilation



# GERMS CAN LIVE IN THE BLOOD



- Viruses like HIV, hepatitis B, and hepatitis C can spread in healthcare when contaminated blood is on a sharp item.
- If that item causes a cut or break in someone else's skin (e.g., an accidental needlestick), germs can spread to that person and cause a new infection.
- Reusing needles or syringes is especially risky because germs in the blood can spread from one person to another.
- Blood in the environment – like on linens or a device – grows bacteria and spreads via touch or devices.

## Infection Control Actions to Reduce Risk

- Hand hygiene
- Use of personal protective equipment (gloves, gowns, eye protection)
- Safe injections
- Cleaning and disinfection
- Textile management