SQ: Infection, Healthcare-Associated, Clinical

HealthStream™

Welcome to **SQ: Infection, Healthcare-Associated, Clinical**.
Select START MODULE to begin.
Be sure to click on the interactive elements to advance.

- Introduction
- Infection Control and Antibiotic Stewardship Programs
- Resistant Infectious Threats
- CMS Reportable Infections
- How to Protect People from HAIs
- Module Conclusion

Introduction

This module will review the following:

- Characteristics of effective infection control and antibiotic stewardship programs
- Resistant germs seen in healthcare
- Ways to protect individuals and stop outbreaks from resistant germs

Please look at these important terms.

Select "+" to expand.

Glossary

Antibiotic

A medicine that stops the growth of or kills germs

Antibiotic-resistant bacteria

Germs that change and are not killed by a medicine that was made to kill them

Antibiotic-resistant infection

A type of infection caused by a germ that is not killed by a medicine that was made to kill them

Antibiotic stewardship program (ASP)

A program that includes a group of individuals who work together to improve how antibiotics are ordered by providers and used for individuals

Central line

A venous access device inserted into and kept in the vena cava, innominate, or subclavian veins that is used to infuse fluids or medicines, or gain access to the heart to measure pressures in the venous circulation

Healthcare-associated infection (HAI)

A preventable infection that develops on or after the third day while receiving medical care

Infection control program (ICP)

A program that includes a group of individuals who create policies and practices to prevent infections

Multidrug-resistant organisms (MDROs)

Germs that change and are not killed by more than one medicine made to kill them

Nationally recognized guidelines

Set of standards that are widely accepted

Pneumonia

Inflammation of the lungs, usually from infection by bacteria, viruses, or fungi

Quality Assessment and Performance Improvement (QAPI)

A program with methods to identify problems and provide solutions to improve the safety and quality of care in healthcare settings

Sepsis

A systemic inflammatory response to infection that usually involves fever or hypothermia, tachycardia, tachypnea, and evidence of inadequate blood flow to the organs

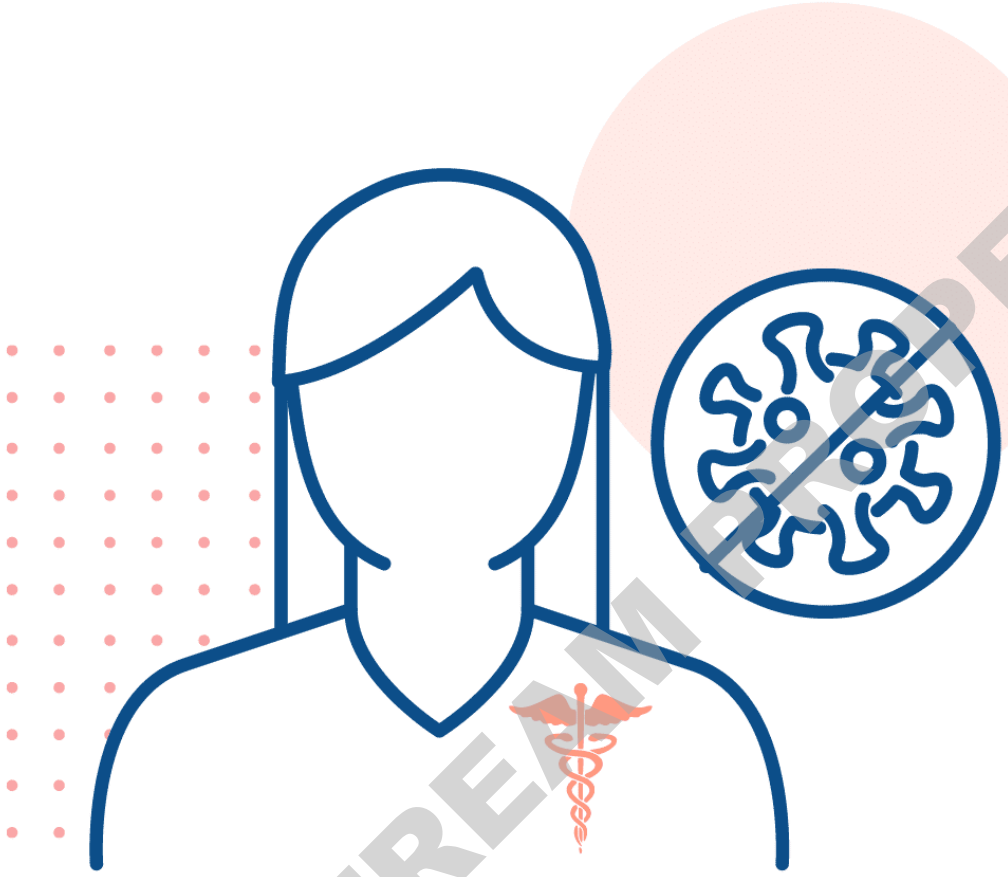
Let's get started!

Complete the content above before moving on.

Infection Control and Antibiotic Stewardship Programs

Infection control programs (ICPs) and antibiotic stewardship programs (ASPs) play a vital role in healthcare safety. They work together to reduce and prevent healthcare-associated infections (HAIs) and antibiotic resistance.

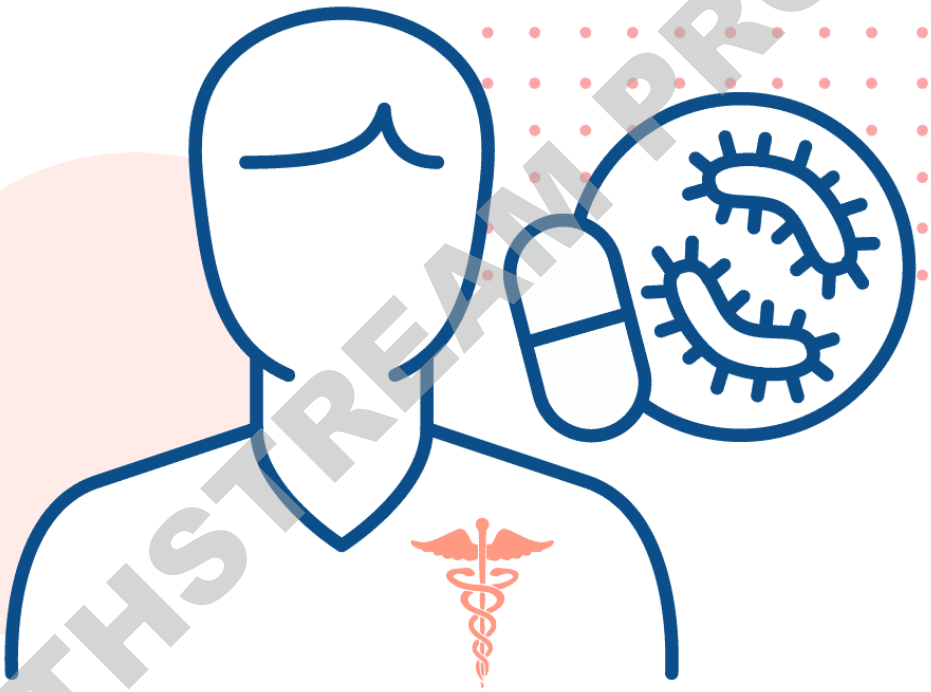
Different people lead these programs. The two leaders will work closely together.



The infection control leader (infection preventionist/infection control professional):

- Directs the infection control program.
- Ensures that infection control policies and procedures follow national guidelines.
- Records the actions of the program, including tracking, prevention, control, and monitoring activities.

- Reports HAIs and other infections to the quality assessment and performance improvement (QAPI) team.
- Works with other healthcare leaders, the ASP, and QAPI teams.
- Offers competency-based training to staff.



The antibiotic stewardship leader:

- Directs the antibiotic stewardship program and monitors antibiotic use.
- Records actions such as post-prescription review, feedback, and preauthorization.

- Regularly reports information on antibiotic use and resistance to prescribers, pharmacists, nurses, and hospital leadership.
- Connects with other healthcare leaders and improvement teams.
- Offers case-based training to staff.
- Connects with the infection control program.

These programs are most effective when they:

- Have a leader who is an expert in the area.
- Have strong senior leadership support.
- Include the QAPI program.
- Use national guidelines and best practices, such as the Centers for Disease Control and Prevention (CDC) guidelines.
- Provide training to staff.

Infection control and QAPI programs work closely together and help provide the ASP information. The role of the ASP is to improve the use of antibiotics.

When antibiotics are overused, it can lead to antibiotic-resistant infections.

CONTINUE

Resistant Infectious Threats

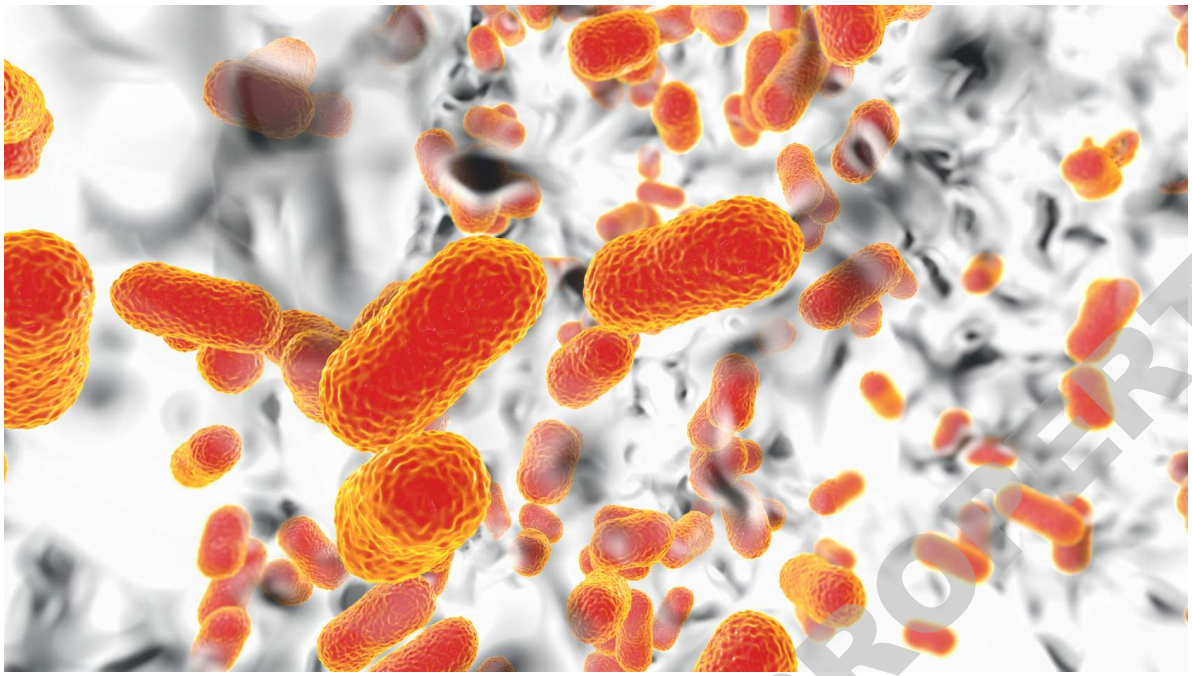
Antibiotic-resistant bacteria are a serious concern in healthcare. The CDC tracks antibiotic resistance and provides reports on its website.

The report sorts infectious threats into four groups:

Here are five urgent antibiotic-resistance threats:

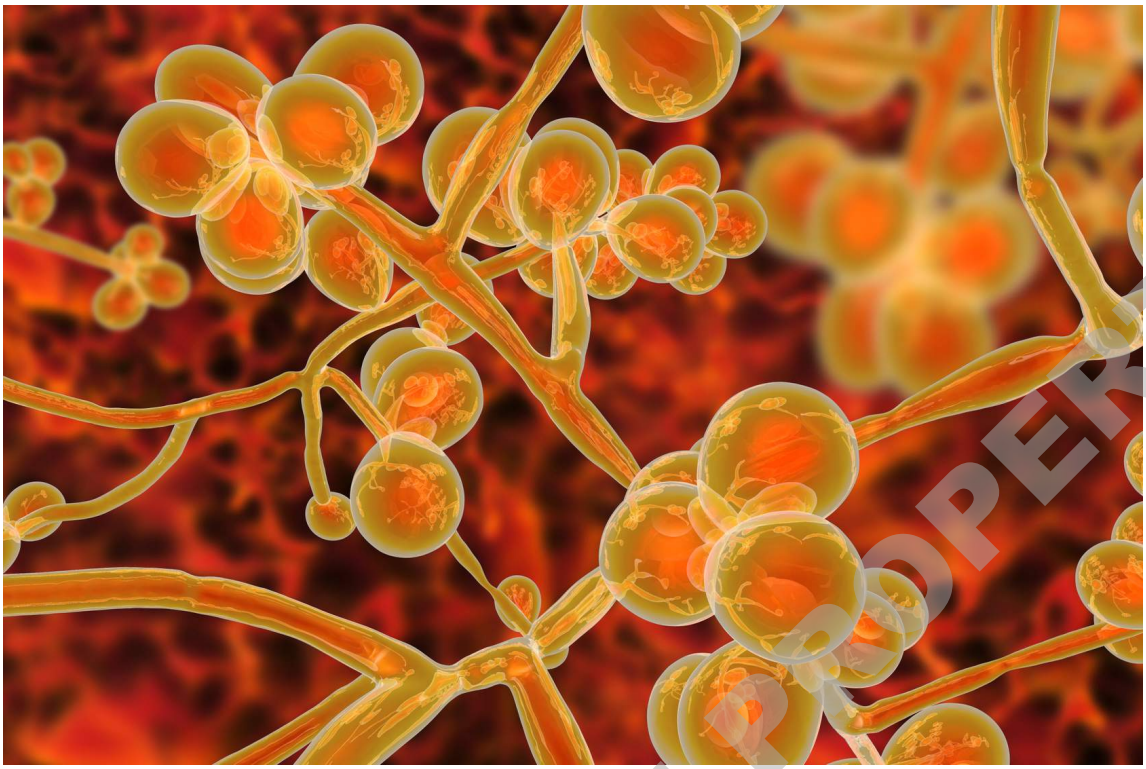
Carbapenem-resistant *Acinetobacter*

This mostly affects a person's lungs, causing pneumonia. It may also cause wound, bloodstream, and urinary tract infections. It is spread through soiled surfaces or shared medical equipment. Almost all infections happen in people who recently received healthcare.



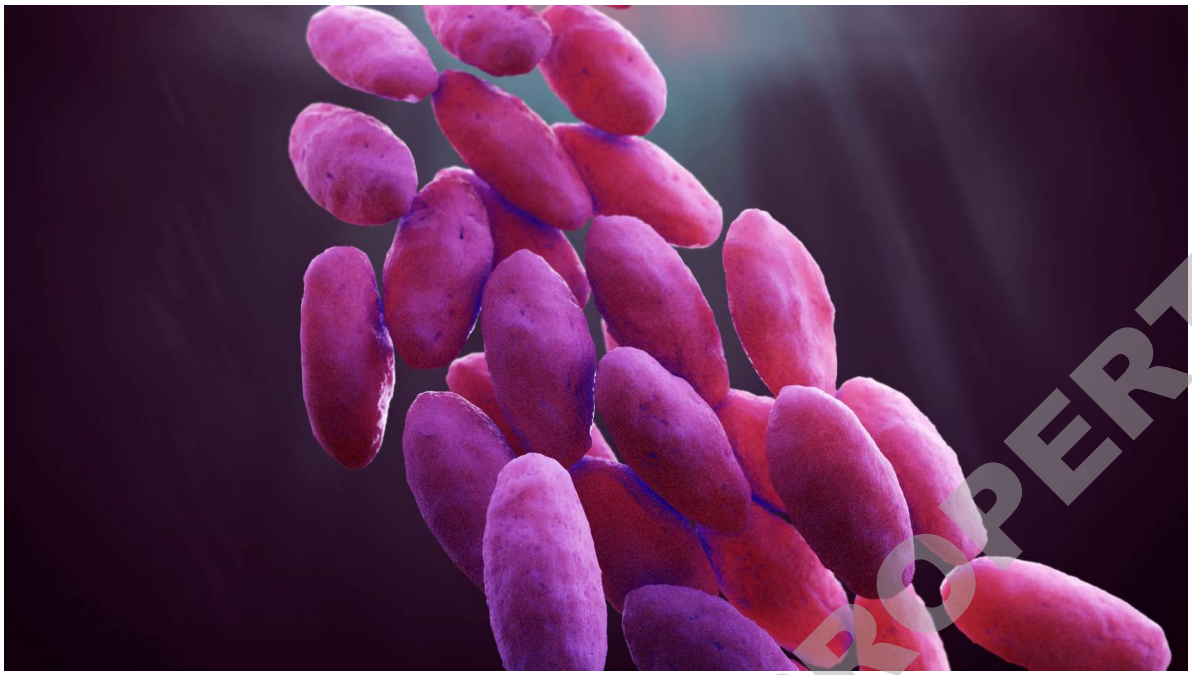
Candida auris

This newly emerging, multidrug-resistant fungus causes severe illness. It affects many body systems, including the heart, brain, eyes, and blood. It is spread easily from person to person or through soiled surfaces.



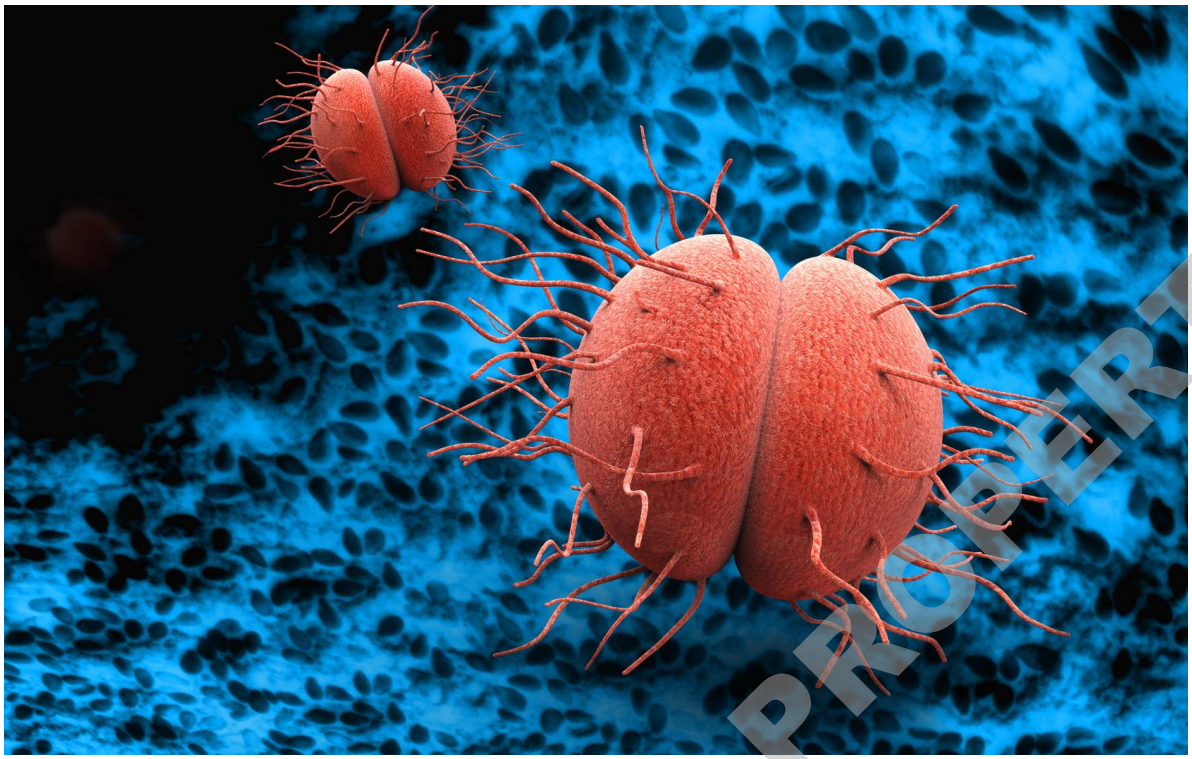
Carbapenem-resistant Enterobacterales (CRE)

Escherichia coli (*E.coli*) and *Klebsiella pneumoniae* are two examples of germs that are resistant to carbapenem medicines. CRE affects the bloodstream, lungs, and urinary system. It is resistant to almost all antibiotics and limits treatment options. Many people die from CRE. It is spread through contact with stool or wounds with CRE.



Drug-resistant *Neisseria gonorrhoeae*

Neisseria gonorrhoeae causes gonorrhea, a sexually transmitted disease (STD). It is spread through contact with an infected partner's penis, vagina, mouth, or anus. It can result in life-threatening ectopic pregnancy and infertility and can increase the risk of getting and giving human immunodeficiency virus (HIV).



Clostridioides difficile (*C. difficile*)

C. difficile is a common cause of antibiotic-associated diarrhea. It causes damage to the intestinal tract and may result in sepsis. It is spread through contact with fecal matter. Its spores can be spread to people via the hands of workers who have touched a contaminated surface or item such as a toilet or bathtub.

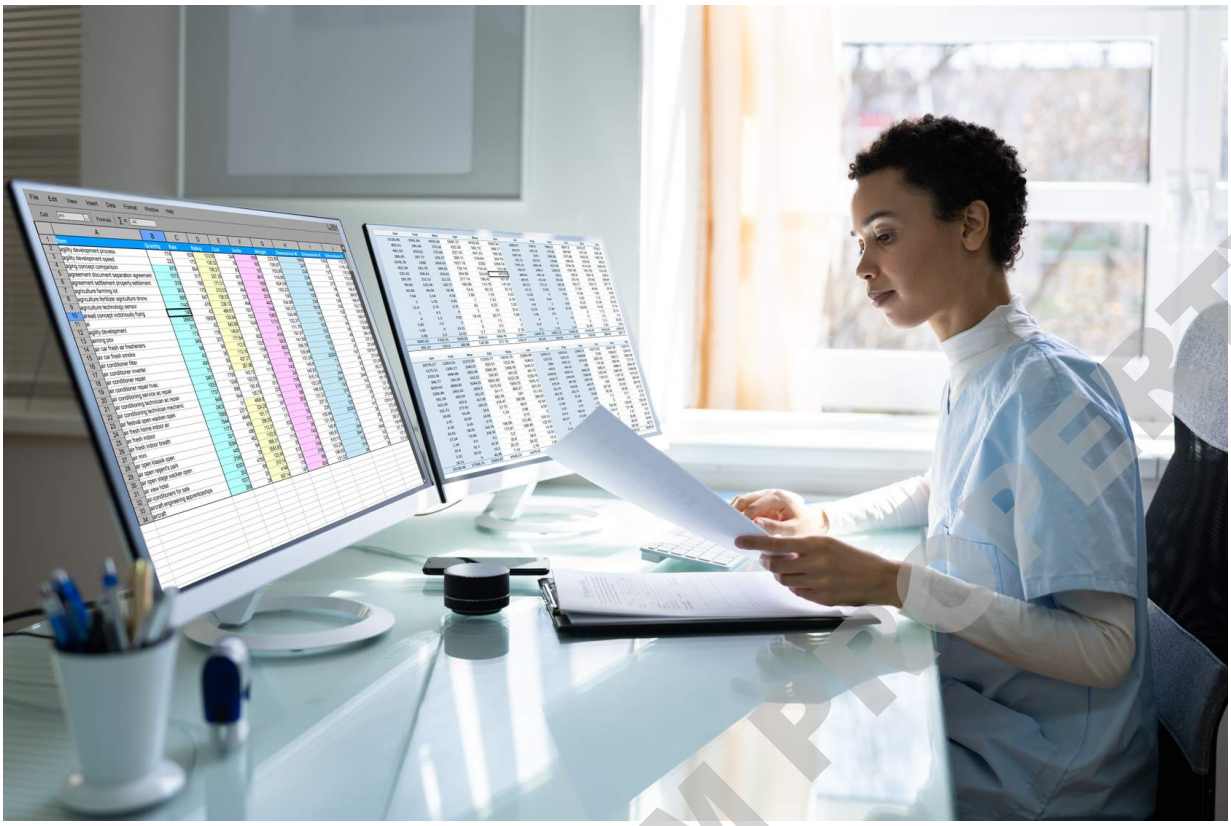
CONTINUE

CMS Reportable Infections

Centers for Medicare & Medicaid Services (CMS) requires certain healthcare organizations to report some persistent infections.

Reportable hospital infections include:

- Central line-associated bloodstream infection (CLABSI)
- Catheter-associated urinary tract infection (CAUTI)
- Methicillin-resistant *Staphylococcus aureus* (MRSA)
- *Clostridioides difficile* infection (*C. difficile*)
- Surgical site infection (SSI)



Reported Data

- Data is compared across the nation.
- Data helps healthcare organizations work towards decreasing bad infections.
- Data helps healthcare organizations improve how they prevent and control infections.
- Data is entered into the CDC's National Healthcare Safety Network (NHSN).
- CDC uses data to provide progress reports.
- CDC uses data to guide infection prevention activities in healthcare settings.
- Reports are available on the CDC website.

During the COVID-19 pandemic, data entry into the NHSN was optional for a short time. There were fewer data entries across all HAIs.

CONTINUE

How to Protect People from HAIs

HAIs are preventable. Healthcare workers can help stop HAIs by doing the following:

- Preventing the spread of germs
- Improving antibiotic use
- Knowing about infections in the local area

Below are ways to keep staff and the people in their care safe.

Follow policies from the infection control team to prevent the spread of germs. Keeping all areas clean and doing something as simple as handwashing can protect individuals.

Vaccination protects healthcare workers from influenza, COVID-19, and other diseases. It also helps to prevent a rapid spread. Some healthcare organizations are required to report data on vaccinated staff within their organization.

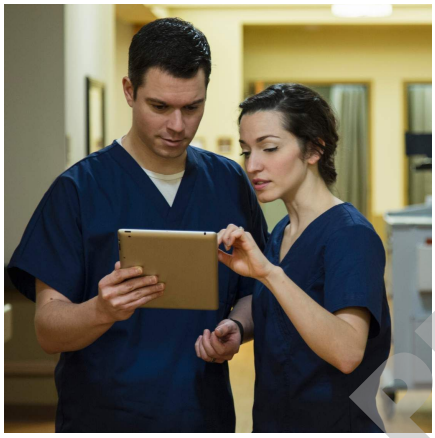
Questions may be asked on admission to screen for people at risk. Individuals may also be asked about recent travel or medical care received in another setting.

When a person has an infection

The QAPI team and the infection control team will work together to review the data. They will offer strategies on how to avoid future HAIs.

In-person visits may be limited for family, friends, and others if there are infection control problems on a unit.

Educate the person on how to prevent the spread to others.



Alert other staff involved in the person's care about the infection. Make sure everyone uses the appropriate personal protective equipment (PPE).

Tell staff about the infection and PPE when transferring the person to a different unit or facility.

The antibiotic stewardship and QAPI teams work with the infection control team to monitor infections, prevent further HAIs, and improve antibiotic use. These teams also use current information from CMS, the CDC, and local health departments to track infections.

The Nurses' Role in Antibiotic Stewardship

Nurses can play a key role in antibiotic stewardship when they are prescribed.

- Improve testing and diagnosis by doing the following:
  - Tell practitioners about symptoms that may need a urine culture.
  - Collect culture correctly to prevent specimen contamination.
  - Make sure cultures are collected before starting antibiotics.
- Speak up about antibiotic treatment:
  - Watch and report on the response to the antibiotic, including culture results, and check if the correct antibiotic was chosen.
  - When a person can handle and switch to oral antibiotics.
- Teach about possible harmful effects related to antibiotic use, especially C. difficile infection.

Choose the best option and select SUBMIT.

A nurse is caring for a person with a new HAI. What can the nurse do to help prevent the spread of infection?

- ○ Teach the person how to prevent the spread of their infection to others.
- ○ Do not tell the person that they have an infection because it will upset them.

- Ask the person what they think they should do.
- Have the person eat with the door closed.

SUBMIT

Complete the content above before moving on.

Module Conclusion

This module has reviewed the following:

- Characteristics of effective infection control and antibiotic stewardship programs
- Resistant germs seen in healthcare
- Ways to protect individuals and stop outbreaks from resistant germs

References

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This is the end of the module. To exit and return to the Activity Details, select **EXIT**.