New IP Lunch and Learn



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Infection Preventionist Lunch and Learn Series

- A new call series for infection preventionists (IPs) of all care settings that:
 - o Encourages learning, growth, and networking.
 - Provides education and information that is non-regulatory.
 - Discusses topics relevant to new IPs.
- Each session will have time set aside for Q&A.

Antibiotic Stewardship

What is Antibiotic Stewardship?

- Per the Centers for Disease Control and Prevention (CDC): The effort to measure and improve how antibiotics are prescribed by clinicians and used by patients
- These efforts are most successful when a team approach is utilized.

Core Elements of Antibiotic Stewardship

Antibiotics

- Drugs used to kill bacteria
- Mechanisms and bacterial targets differ for each antibiotic
- Many different families of antibiotics



Antibiotic Side Effects

- Rash
- Nausea and diarrhea
- Yeast infections
- Clostridioides difficile (C. diff)
- Antibiotic-resistant infections

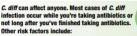
C. diff Infection

CDC: <u>Progression of a C.</u> diff Infection

Accessible version: https://www.cdc.gov/cdiff/what-is.html

THE PROGRESSION OF A **C. DIFF INFECTION**

C. diff is a bacterium (germ) that causes diarrhea and colitis (an inflammation of the colon).
C. diff infections can be life-threatening.



- Previous infection with C. diff or known exposure to
 the corresponding to the correspond
- . Being 65 or older
- · Recent stay at a hospital or nursing home
- A weakened immune system, such as people with HIV/AIDS, cancer, or organ transplant patients taking immunosuppressive drugs

If you have signs or symptoms, see

- The doctor will review your signs and symptoms and order a lab test.
- If it's positive, you'll take an antibiotic for 10 days.

After you've recovered, you could still be colonized.

- The germs will be in your body, but you won't feel sick. So you won't need treatment.
- But you can still spread it to others, so always practice good hand hygiene.
- Tell all of your healthcare providers that you've had C. diff.

Some people get C. diff over and over again.

 For those with repeat infections, fecal microbiota transplants have shown promising results.



C. diff develops within a few days or up to several weeks after you take antibiotics. Symptoms can include:

- Diarrhea
- Fever
- · Stomach tenderness or pain
- Loss of appetite
 Nausea



You might be admitted to the hospital.

 Your healthcare providers will use precautions such as wearing gloves and gowns to prevent the spread of C. diff.



About 1 in 6 people who get *C. diff* infection will get it again in the subsequent 2-8 weeks

 If you have symptoms again, see your doctor.



C. diff is contagious, but you can keep others from getting it.

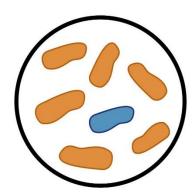
- Wash your hands with soap and water every time you use the bathroom and always before you eat.
- Try to use a separate bathroom if you have diarrhea.
- . Take showers and use soap.



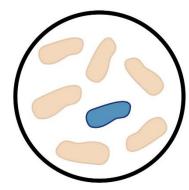


Health and Human Services
Centers for Disease
Control and Prevention

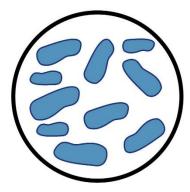
HOW ANTIBIOTIC RESISTANCE HAPPENS



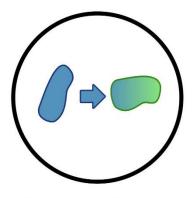
Lots of germs and some are drug resistant



Antibiotics kill the bacteria causing the illnes as well as the good bacteria protecting the body from infection



The drug resistant bacteria is now able to grow and take over



Some bacteria give their drug resistance to other bacteria



- Normal bacterium

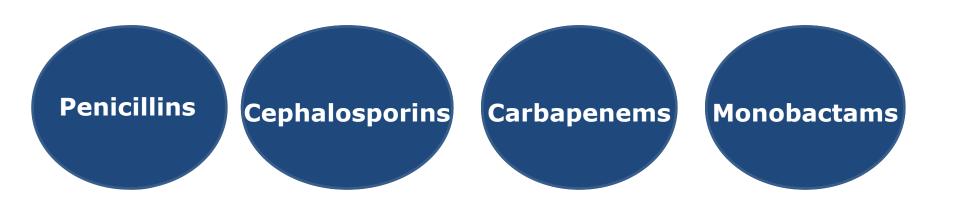


- Resistant bacterium



- Dead bacterium

Beta-lactamantibiotics



Antibiotic Resistant Infections

The CDC developed a list of targeted multidrug-resistant organisms (MDROs), many of which are healthcare-associated:

- Carbapenem-resistant Acinetobacter baumannii (CRAB)
- Candida auris (C. auris)
- C. diff
- Carbapenem-resistant Enterobacterales (CRE)

CDC: Antibiotic Resistance Threats in the United States, 2019

Impact of MDROs

- Additional isolation precautions
- Complex treatment
- Increased surveillance needs (point prevalence screening [PPS], admission screening)
- Outbreak investigations



Core Elements of AS for Hospitals and Nursing Homes



Leadership commitment



Tracking



Action



Accountability



Reporting



Drug expertise



Education

Core Elements of Outpatient AS





Action for policy and practice



Tracking and reporting



Education and expertise

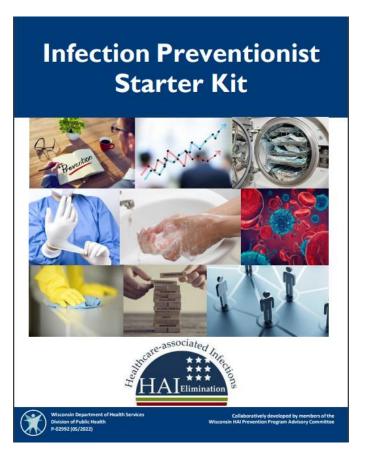
In Summary

- Infection preventionists play an important role in antibiotic stewardship.
- The work of the infection prevention program and antibiotic stewardship program complement each other.
- We can improve patient outcomes by having strong antibiotic stewardship programs.

Questions?

What topics or content would you like to see covered on future calls?

Please submit your ideas to <u>Ashley O'Keefe</u> at <u>ashley.okeefe@dhs.wisconsin.gov</u>.



IP Starter Kit

HAI Prevention Program Contact Information

HAI Prevention Program

dhswihaipreventionprogram@dhs.wisconsin.gov

608-267-7711

For additional contact information visit the DHS Wisconsin HAI Prevention Program Contact Information webpage.

Upcoming Lunch and Learn Session

Date: Tuesday, May 9, 2023

Topic: IP Competencies