

ANTIBIOTIC RESISTANCE

HOW TOO MUCH
OF A GOOD THING
CAN BE BAD



HC21
HealthCare 21 Business Coalition

CONSUMER
GUIDE
ON HEALTH
2016-2017

Antibiotics are some of the most commonly prescribed drugs in human medicine.

According to the CDC, they are also the single most important factor leading to antibiotic resistance around the world. Use this Guide to learn about the importance of antibiotic stewardship and what YOU can do.



WHAT IS ANTIBIOTIC RESISTANCE

Antibiotic Resistance is when bacteria no longer respond to drugs designed to kill them.

Are you aware that one of the main contributors to antibiotic resistance is the overuse and misuse of antibiotics?



OVER USE

Taking antibiotics anytime a person is sick, even when they are not the proper treatment, like when someone has a virus.

When taken improperly, antibiotics remove good bacteria, leaving only the resistant bacteria to reproduce. This has resulted in antibiotic-resistant bacterial infections, or Superbugs, and it's happening all over the world!

MISUSE

Not finishing the full course of antibiotic because a person "feels better" can allow some bacteria to survive and develop resistance.

Source: CDC

Source: Mayo Clinic

In the U.S., Antibiotic - Resistant Bacteria Causes:



2 Million Infections



23,000 Deaths



8 Million Additional Hospital Days



\$20-30 Million Direct Healthcare Costs

Source: CDC

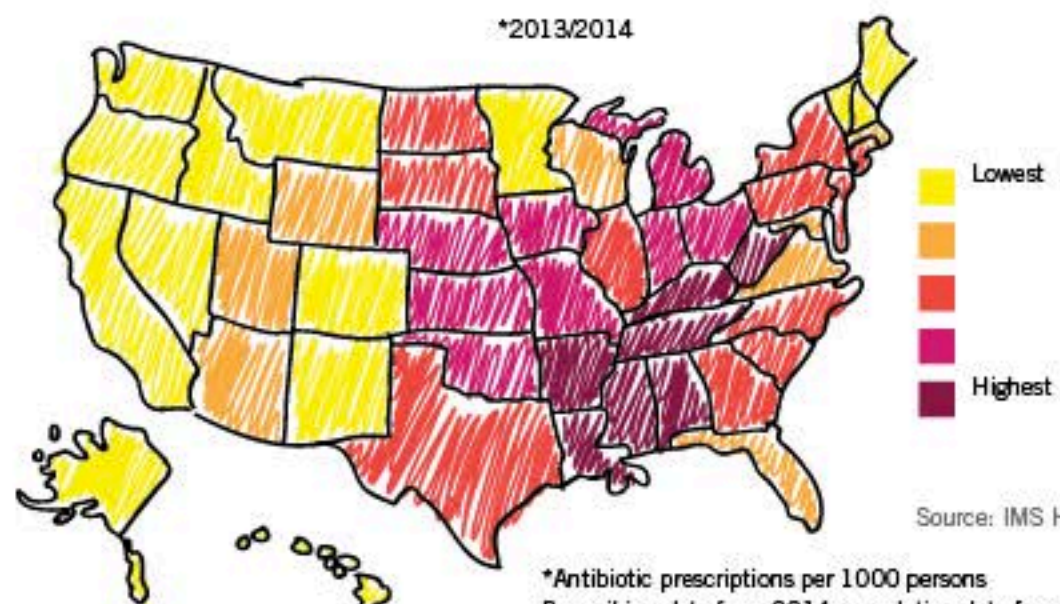
WHERE DO INFECTIONS HAPPEN

While they can happen most anywhere, most deaths related to antibiotic resistance occur in healthcare settings, such as hospitals and nursing homes.



COMMUNITY ANTIBIOTIC PRESCRIBING RATES BY STATE*

50% of all antibiotics prescribed in U.S. health provider offices are either unnecessary or inappropriate



Source: IMS Health

*Antibiotic prescriptions per 1000 persons
Prescribing data from 2014; population data from 2015

WHEN & HOW SHOULD I USE ANTIBIOTICS?

Illness	Usual Causes		Antibiotic Needed
	Viruses	Bacteria	
Cold / Runny Nose	✓		NO
Bronchitis / Chest Cold (in otherwise healthy children and adults)	✓		NO
Whooping Cough		✓	Yes
Flu	✓		NO
Strep Throat		✓	Yes
Sore Throat (except strep)	✓		NO
Fluid in the Middle Ear (otitis media with effusion)	✓		NO
Urinary Tract Infection		✓	Yes

Source: CDC



6 SMART FACTS ABOUT ANTIBIOTIC USE



Antibiotics are **LIFE-SAVING** Drugs



Antibiotics only treat **BACTERIAL** infections



Green colored mucus is **NOT** a sign that an antibiotic is needed



There are potential **RISKS** when taking any prescription drug



Some ear infections **DO NOT** require an antibiotic



Most sore throats **DO NOT** require an antibiotic

Talk to your clinician about when and how to safely use antibiotics.
www.cdc.gov/getsmart

REDUCING THE NEED FOR ANTIBIOTICS

If your doctor prescribes an antibiotic to treat a bacterial infection, **BE SURE TO...**

- **COMPLETE** the full course of the medication.
- **DON'T SKIP** any doses.
- **DON'T SAVE** left over antibiotics.
- **DON'T TAKE SOMEONE ELSE'S** antibiotic medication.
- **ASK QUESTIONS** if you are uncertain about how to take the medication and if it's appropriate.

Source: U.S., Food and Drug Administration



Did you know that antibiotics **DO NOT** cure illness caused by viruses, such as colds, flu, bronchitis, many sinus and ear infections and most sore throats?

ANTIBIOTICS ONLY FIGHT BACTERIAL INFECTIONS

Source: CDC

AT HOME

- Don't share razors, towels, tweezers or clippers.
- Keep kitchen and bathrooms clean.
- Avoid cleaning products with added antibacterials.
- Wash wounds with soap and water.
- Don't put gym bags or purses on counters or the dinner table.

AT THE GYM

- Wipe equipment with alcohol-based wipes/sprays.
- Shower immediately after workouts.
- Keep cuts clean and covered.
- Put a clean towel over mats.

Source: Consumer Reports *Choosing Wisely*

MORE TO KNOW

When I'm in the Hospital WHAT CAN I DO?

SPEAK UP: If you have a catheter, ask DAILY if it is necessary. Ask how your doctor prevents surgical site infections.

KEEP HANDS CLEAN: Be sure everyone who touches you has just cleaned their hands.

BE INFORMED ABOUT ANTIBIOTICS: Ask if a test will be done to ensure the right antibiotic is prescribed.

KNOW SIGNS & SYMPTOMS OF INFECTION: Tell your doctor if your surgical/catheter site becomes red, painful or has drainage. You may also develop a fever.

WATCH OUT FOR DEADLY DIARRHEA (C.difficile): Notify your doctor if you have diarrhea 3 or more times in 24 hours.

PROTECT YOURSELF: To avoid complications, get vaccinated against the flu and other infections.

Source: CDC

"Poor MRSA or c.diff rates can be a red flag that a hospital isn't following best practices in preventing infections and prescribing antibiotics."

Source: Consumer Reports

Antibiotics can cause 1 out of 5 emergency department visits for adverse drug event.

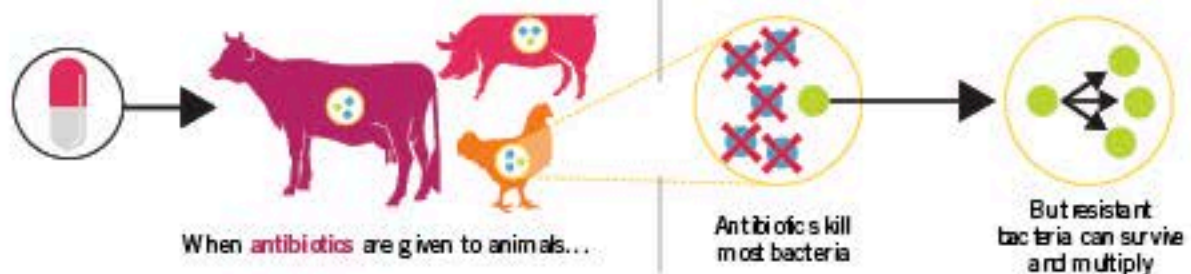
Source: CDC



ANTIBIOTIC RESISTANCE from the farm to table

RESISTANCE

Animals can carry harmful bacteria in their intestines



SPREAD Resistant bacteria can spread to...



animal products



produce through contaminated water or soil



prepared food through contaminated surfaces



the environment when animals poop

IMPACT
Some resistant infections cause...



mild illness



severe illness and may lead to death

About 1 in 5 resistant infections are caused by germs from food and animals.

Source: Consumer Antibiotic Resistant Threats in the United States, 2013



Learn more about antibiotic resistance and food safety at www.cdc.gov/foodsafety/antibiotic-resistance.html
Learn more about protecting you and your family from resistant infections at www.cdc.gov/drugresistance/protecting-yourself-family.html

ABOUT HEALTHCARE 21 BUSINESS COALITION

HealthCare 21 Business Coalition is a non-profit organization focused on improving the cost and quality of health care in Tennessee. We believe it is important to provide user-friendly information on health care quality to help you and your family members make educated decisions about your care. Quality health care begins with you and the decisions you make about your health. Use this Guide to learn more about how to stay well and find the care that is right for you.

HealthCare 21 Business Coalition is a member of the National Business Coalition on Health.

WWW.HC21.ORG



Reducing Costs
Improving Quality
Creating Value



TWO COMMON SUPERBUGS AND WHAT YOU NEED TO KNOW

M R S A

(methicillin-resistant staphylococcus aureus)

WHAT:

MRSA is an infection from staph bacteria, most commonly on the skin, that cannot be treated with most antibiotics that cure ordinary staph infections.

WHERE:

MRSA is found in healthcare settings and is often associated with invasive procedures or devices like IV tubing and surgeries.

MRSA can also be found in the general community and begins as a painful boil on the skin. It is contagious and those at higher risk are high school wrestlers, childcare workers and those living in crowded conditions.



C.diff

(clostridium difficile)

WHAT:

C.diff is a bacteria that causes mild to severe diarrhea, fever, nausea and abdominal pain and is resistant to antibiotic treatment.

WHERE:

C.diff is often found in people who are hospitalized or in a nursing home and is often associated with taking antibiotics, which allows it to multiply in the gut.

C.diff is commonly spread when someone touches a surface or person contaminated with trace amounts of feces and then touches their mouth or nose.

