

# Iowa Gets Smart

## Know When Antibiotics Work



# Learning Objectives

- Learn about antibiotic resistance.
- Learn why antibiotic resistance is a problem.
- Understand how and how not to use antibiotics.
- Use current recommendations to prevent antibiotic resistant bacteria.



# What Are Antibiotics?



- Strong medicines that kill or slow the growth of bacteria and stop some infections.
- They work only for infections caused by bacteria.
- Common antibiotics.

# What Is Antibiotic Resistance?

- Bacteria can't be killed by the antibiotic that is meant to kill them.
- Bacteria become stronger and are harder to treat with antibiotics in the future.
- Bacteria that are resistant to one antibiotic are often resistant to other antibiotics.

# Antibiotic Resistant Bacteria

- Often need stronger antibiotics.
- Usually make an infection harder to treat.
- Can affect anyone.

# Why Worry About Antibiotic Resistance?

- The number of antibiotic resistant bacteria is steadily increasing.
- Infections caused by resistant bacteria are harder to treat.
- Children are at risk because they tend to use a large amount of antibiotics.

# Why Should Parents Be Worried?

- Using antibiotics the wrong way can kill some bacteria, but let stronger bacteria stay alive. These stronger bacteria are harder to treat with antibiotics.
- This can be a problem later when a child gets a bacterial infection caused by a resistant bacteria.

# Why Should Parents Be Worried?

- Resistant bacteria may need stronger medicine to treat the infection.
- In some cases, your child may need to be in the hospital and get antibiotics through an IV needle.



# Antibiotics-What To Do



- Discuss with your child's healthcare provider if he/she has an illness that needs antibiotics.
- Make sure your child takes the medicine exactly as told.
- Always have them finish their antibiotics, even if your child is feeling better.



# Antibiotics-What To Do



- Call your child's healthcare provider if he/she isn't getting better.
- Make sure your child:
  - Gets plenty of rest
  - Drink lots of fluids
  - Is kept away from second-hand smoke

# Antibiotics-What **Not** To Do

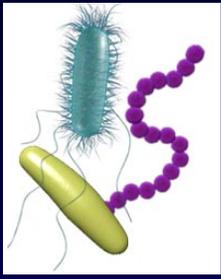
- Do **not** use antibiotics to treat viral infections (colds and influenza).
- Do **not** use antibiotics given to someone else.
- Do **not** give antibiotics to someone else.
- Do **not** stop antibiotics just because your child feels better.

# Antibiotics Will **Not**:

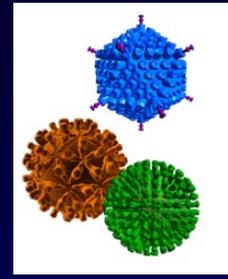
- Help with viral infections (colds, most coughs, and influenza).
- Keep others from getting viral illnesses.
- Make your child feel better if the infection is caused by a virus.
- Shorten the length of time your child is ill if the infection is caused by a virus .

# Antibiotics Do Not Work For:

- Colds
- Influenza
- Most coughs
- Most bronchitis
- Sore throats (except those caused by Strep)
- Most vomiting and diarrhea illnesses



# Bacteria vs. Viruses



- Viruses
  - **Cannot** be killed with antibiotics.
  - Cause illnesses like colds, influenza, and most coughs.
  - Over-the-counter medicines may provide relief and help you feel better.

Illness	Virus	Bacteria	Antibiotics?
Cold	<input checked="" type="checkbox"/>		
Influenza	<input checked="" type="checkbox"/>		
Chest cold	<input checked="" type="checkbox"/>		
Sore throat	<input checked="" type="checkbox"/>		
Strep Throat		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Bronchitis	<input checked="" type="checkbox"/>		
Runny nose	<input checked="" type="checkbox"/>		
Ear infection*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pneumonia*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sinus Infection*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Adapted from CDC

\* Consult your healthcare provider

# Sore Throats

- Usually caused by viruses and do not need antibiotics.
- Strep throat is caused by bacteria and does need antibiotics.
  - A throat swab showing Strep is needed before antibiotics are given.
- Treatment
- Prevention



# Ear Infections (Acute Otitis Media)



- Although usually caused by bacteria, mild infections often improve without antibiotics
- Signs and symptoms
- Treatment
- Prevention



# Colds



- Caused by viruses and cannot be treated by antibiotics.
- Symptoms
- Treatment
- Preventing colds
- When to call a healthcare provider

# Sinus Infections

- Usually caused by bacteria
- Often follows a common cold
- Symptoms
- Treatment
- Prevention



# Cough or Bronchitis



- Usually caused by viruses.
- Symptoms
- Treatment
- Prevention

# Current Recommendations

- Do not ask your child's healthcare provider for antibiotics if the illness is caused by a virus.
- Always take antibiotics exactly as told.
- Do not save antibiotics for future use.
- Do not use antibiotics given to someone else.



# A Prescription For Your Child. . .



- Get plenty of rest
- Drink plenty of fluids
- Use a pain reliever for fever and muscle aches (Tylenol or ibuprofen)
- Use a cool mist humidifier or saline spray for congestion
- Avoid second-hand smoke
- Take antibiotics when necessary



# Call Your Child's Healthcare Provider If:



- Your child gets worse or doesn't improve.
- Your child has difficulty breathing.
- Your child has chest pain.
- Your child gets white patches and swelling on the tonsils.



# Staying Healthy



- Teach your child to cover their mouth and nose with a tissue when coughing or sneezing, or to cough into their upper sleeve.
- Always discard tissues after use.
- Practice good hand washing at home and in public areas.
- Do not share saliva.



# Wash Your Hands Often!



- Use soap and warm running water.
- Rub hands with soap for 15 seconds (sing the ABCs song).
- Rinse well under running water.
- In public areas, dry hands using hot air blower or disposable paper towels.

Ask your healthcare provider if antibiotics are the right treatment for your child's illness.



# Resources

[www.cdc.gov/drugresistance/community/antibiotic-resistance.htm](http://www.cdc.gov/drugresistance/community/antibiotic-resistance.htm)

<http://www.idph.state.ia.us/adper/common/pdf/cade/antibioticreport.pdf>

[www.aware.md](http://www.aware.md)

<http://familydoctor.org/680.xml> (American Academy of Family Physicians)

<http://www.who.int/mediacentre/factsheets/fs194/en/>

[http://www.cdc.gov/drugresistance/community/campaign\\_materials/Black-White/VirusBacteriaChart\(BW\).pdf](http://www.cdc.gov/drugresistance/community/campaign_materials/Black-White/VirusBacteriaChart(BW).pdf)

[http://www.cdc.gov/tobacco/factsheets/secondhand\\_smoke\\_factsheet.htm](http://www.cdc.gov/tobacco/factsheets/secondhand_smoke_factsheet.htm)

[www.epa.gov/iaq/pubs/humidif.htm](http://www.epa.gov/iaq/pubs/humidif.htm)

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