# ERYTHROMYCIN-RESISTANT GROUP A STREPTOCOCCUS

THREAT LEVEL CONCERNING



Group A *Streptococcus* (GAS) bacteria can cause mild infections such as sore throat and impetigo, and severe invasive disease such as cellulitis, pneumonia, flesh-eating infections, and sepsis.

#### WHAT YOU NEED TO KNOW

- GAS is the most common bacterial cause of sore throats, often referred to as strep throat.
- GAS can also cause severe invasive infections. People who are elderly, have skin breakdown, or have chronic medical conditions (such as diabetes) are at increased risk.
- Each year in the United States, GAS causes approximately 1 to 2.6 million cases of strep throat, 12,500 to 20,000 invasive infections, and 1,250 to 1,900 deaths.
- Increasing resistance to erythromycin and clindamycin complicates treatment of GAS infections.

Data represents only invasive infections.



U.S. Department of Health and Human Services Centers for Disease Control and Prevention

## INFECTIONS OVER TIME

#### **ERYTHROMYCIN RESISTANCE**

The percent of invasive GAS infections that are resistant to erythromycin has nearly tripled in 8 years.



## **RESISTANCE COMPLICATES TREATMENT**

We have all known someone who has had strep throat—imagine if it were untreatable. Germs would spread, more people would get sick, and some might develop rheumatic fever, a complication of strep throat that can damage the heart.



Currently, GAS is not resistant to penicillin or amoxicillin, first-line antibiotics for strep throat. However, doctors often use erythromycin and azithromycin (macrolide antibiotics) to treat strep throat, particularly for people who are allergic to penicillin. Additionally, clindamycin, in combination with penicillin, is the recommended treatment for severe, lifethreatening GAS infections such as flesh-eating disease and streptococcal toxic shock syndrome. Increasing resistance to erythromycin and other macrolides, and to clindamycin complicates the treatment of both strep throat and severe invasive infections. Vaccines are in development, but it will be some time before one is available for use.

# INFECTIONS OVER TIME

#### ERYTHROMYCIN AND CLINDAMYCIN RESISTANCE

More than one in five invasive GAS infections are caused by erythromycin- and clindamycin-resistant strains, limiting the patient's treatment options.





## **ONLINE RESOURCES**

About Erythromycin-resistant Group A *Streptococcus* www.cdc.gov/GroupAStrep/Index.html

Bact Facts Interactive: Data from Active Bacterial Core Surveillance wwwn.cdc.gov/BactFacts/Index.html

This fact sheet is part of CDC's 2019 Antibiotic Resistance Threats Report. The full report, including data sources, is available at <u>www.cdc.gov/DrugResistance/Biggest-Threats.html</u>.