Superbugs, also known as drug-resistant pathogens, are a major threat to the health of people around the world. Many of these superbugs are bacteria that have developed antibiotic resistance. This means that the antibiotics we use to treat bacterial infections are not working as well, making the infections tougher to treat.

Here at the Duke Center for Antimicrobial Stewardship and Infection Prevention, we work hard to prevent infections and slow the spread of superbugs. We conduct research, many times with collaborators from other major universities in the United States. We also work to improve patient care both here at Duke and in surrounding area hospitals.

But we can't stop superbugs alone. We need people around the globe to be working together to stop these germs. Even the simplest tasks, like washing your hands regularly and taking antibiotics only when necessary can have a major, positive impact.

We are proud to be hosting the #IStopSuperbugs campaign. From April 9-15, 2018, we posted information about how you can stop superbugs and sharing quotes from our peers about how they work to keep us all safe.

We also asked social media user to share their stories about how they stop superbugs using the #IStopSuperbugs hashtag on Twitter and Facebook. We provided some resources on a dedicated webpage to help promote the message that we all have a role to play in stopping superbugs.
We were especially fortunate to have the support of the Centers for Disease Control and Prevention in advertising for and posting throughout the campaign. In particular, Jennifer Mitchell from the National Center for Emerging and Zoonotic Infectious Diseases was instrumental to the success of the campaign.

#IStopSuperbugs webpage
The Center’s Participation

“The Center contributed to the #IStopSuperbugs campaign in several ways. Our goal was to engage the community in a conversation about how we all have a role in stopping superbugs. We did this in several ways, including:

1) Generating themed, freely available social media graphics that the public could then use to promote antimicrobial stewardship and infection prevention
2) Suggested social media posts with links to Center and CDC NCEZID content
3) Creation of a poster and desktop screensaver
4) Quotes from Center staff and faculty about how they stop superbugs
5) In-depth interviews with Center staff on the topic of stopping superbugs
6) Encouraged social media users throughout the campaign to tell us how they stop superbugs
7) Contributions from all social media accounts of the Center’s founding partners (Duke Antimicrobial Stewardship Outreach Network (DASON), Duke Infection Control Outreach Network (DICON), Duke University Antimicrobial Stewardship and Evaluation Team (ASET))

#IStopSuperbugs by being thoughtful of antimicrobial treatment durations.”

Rebekah Wrenn, PharmD
Duke University Antimicrobial Stewardship and Evaluation Team
Duke Center for Antimicrobial Stewardship and Infection Prevention
Some of the graphics used during the #IStopSuperbugs campaign 2018.

#IStopSuperbugs
Do You?
Taking antibiotics when you don’t need them can cause harmful side effects.

#IStopSuperbugs
Do You?
Vaccines can prevent infections and reduce antibiotic use.

#IStopSuperbugs
Antibiotics are used in livestock, too. Superbugs from livestock can spread to humans.

#IStopSuperbugs
Do You?
Preventing infections starts with handwashing. Soap and water are some of your best defenses!

#IStopSuperbugs
Do You?
Not all antibiotics are the same. Different types are meant to treat different bacterial infections.
Excerpt from #IStopSuperbugs Q&A with Kirk Huslage, Clinical Operations Director of Duke University Infection Prevention and Healthcare Epidemiology (part of the Duke Center for Antimicrobial Stewardship and Infection Prevention):

What are some of your top tips that people can use every day to prevent infections and slow the spread of superbugs?

There are several things that everyone can do to help prevent the spread of infections and the spread of superbugs:

- **Wash your hands often.** This is especially important before and after preparing food, before eating and after using the toilet.
- **Get vaccinated.** Immunization can drastically reduce your chances of contracting many diseases. Keep your recommended vaccinations up-to-date.
- **Use antibiotics sensibly.** Take antibiotics only when prescribed. Common infections, whether caused by bacteria or viruses, are often painful and can get in the way of our well-being and everyday lives. Many infections do not require antibiotics (like colds, sore throats, and bronchitis) and just require you to ride out the experience and allow your body to fight off the infection. The good news is there are actions you can take to lessen symptoms (like rest, hydration, decongestants, pain relievers) and make your illness more bearable.
- **Stay at home if you have signs and symptoms of an infection.** Don't go to work or class if you're vomiting, have diarrhea or are running a fever.
- **Be smart about food preparation.** Keep counters and other kitchen surfaces clean when preparing meals; promptly refrigerate leftovers; and don't let cooked foods remain at room temperature for an extended period of time. Bacteria grow best when food temperatures are in the danger zone between 40°F and 140°F.
- **Disinfect the 'hot zones' in your residence.** These include the kitchen and bathroom — two rooms that can have a high concentration of bacteria and other infectious agents.
- **Practice safe sex.** Use condoms. Get tested for sexually transmitted diseases (STDs), and have your partner(s) get tested.
- **Don't share personal items.** Use your own toothbrush, comb or razor blade. Avoid sharing drinking glasses or dining utensils.
- **Travel wisely.** Don't fly when you're ill. With so many people confined to such a small area, you may infect other passengers in the plane, and your trip won't be comfortable, either. Depending on where your travels take you, talk to your doctor about any special immunizations you may need.

See full interview here
Impact: Metrics and Results

Thunderclap: April 9, 2018

To begin the week, the Center hosted a Thunderclap campaign. Thunderclap is an online service that allows an individual, group or organization to craft a message that other users can then sign up to support through various social media outlets. At a specified time and date, all supporters will have the one-time message posted to their social media accounts, which can then be seen by all of their followers. By synchronizing the message posting, Thunderclap helps the host’s message create a large impact.

The Center’s message for the #IStopSuperbugs campaign included a call to action and simple ways that everyone can contribute to stopping the threat of antimicrobial resistance. It also included a link to campaign’s webpage.

Our goal was 100 supporters for the campaign. Thanks to support from the CDC’s NCEZID and many others, we met and exceeded this goal.
Major Influencers

We are thankful for the support we received from several major influencers in the fields of antimicrobial stewardship and infection prevention, including:

- CDC National Center for Emerging and Zoonotic Infectious Diseases (NCEZID)
- CDC Division of Healthcare Quality Promotion
- Duke University School of Medicine
- Duke University Division of Infectious Diseases
- Duke University Student Affairs
- Society for Healthcare Epidemiology of America (SHEA)
- Association for Professionals in Infection Control and Epidemiology (APIC)
- Society of Infectious Diseases Pharmacists (SIDP)
- Center for Infectious Disease Research and Policy (CIDRAP)
- Center for Disease Dynamics, Economics & Policy (CDDEP)
- University of Nebraska Medical Center, Infectious Diseases Division
- Antibiotic Action (Operated by British Society for Antimicrobial Chemotherapy)
- Antibiotic Resistance Action Center at the George Washington University

And many more

Thunderclap Results

The Thunderclap exceeded its goal of 100 supporters (108) in just 12 days. The post reached 180,000 people in 8 countries and 59 cities around the globe.
Overall Campaign Impact
Results may include posts promoting the #IStopSuperbugs campaign leading up to its kickoff on April 9, 2018.

Twitter: #IStopSuperbugs hashtag

Posts **359**
Users **120**

Reach\(^1\) **188,194**
Impressions\(^2\) **443,281**

The influencers of #IStopSuperbugs

<table>
<thead>
<tr>
<th>Top 10 by Mentions</th>
<th>Top 10 by Tweets</th>
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<tbody>
<tr>
<td>@DCASIP_duke 61</td>
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<td>@DISON_duke 37</td>
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<tr>
<td>@SOPPharm 8</td>
<td>@DrKhazzazCDC 2</td>
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</table>

Top #IStopSuperbugs Tweet

CDC NCEZID 3
@CDC_NCEZID

#IStopSuperbugs by knowing that 
#antibiotics aren’t needed for most cases of 
#bronchitis, many #sinus infections, and 
some ear #infections. go.usa.gov/xn4GP 
#BeAntibioticsAware

7:18 AM - 11 Apr 2018

32 Retweets 18 Likes

Keywords used in #IStopSuperbugs tweets

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\(^1\) Reach refers to the number of people who saw a post using the #IStopSuperbugs hashtag

\(^2\) Impressions refers to the number of views posts with the #IStopSuperbugs hashtag received
Although the Duke Center’s Facebook page is fairly small, we saw a significant increase in activity during #IStopSuperbugs week for the following metrics:

**Page Views** 21 *(increase of 75% over previous week)*  
**Page Likes** 7 *(increase of 40% over previous week)*  
**Reach** 890 *(increase of 324% over previous week)*  
**Post Engagements** 88 *(increase of 193% over previous week)*

### Top Facebook Post (Reach of 414)

Why are we hosting the #IStopSuperbugs campaign, and why now? Antimicrobial resistance is spreading rapidly, and we aren’t doing enough to stop it. But we can! We hope this campaign shows people that there are small steps that everyone can take to ensure antibiotics continue to work in the future. [https://www.npr.org/.../surge-in-antibiotics-is-a-boon-for-su...](https://www.npr.org/.../surge-in-antibiotics-is-a-boon-for-su...)

For questions or comments about this report or the Duke Center for Antimicrobial Stewardship’s social media outreach, please contact the Center’s Program Director:

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