

Healthcare Happenings

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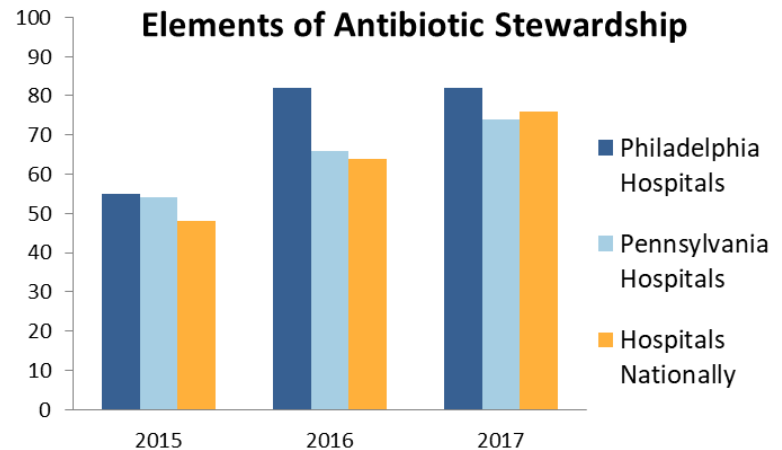
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The 7 Core Elements of Hospital Antibiotic Stewardship Programs

In 2014, The CDC recommended that all acute care hospitals implement antibiotic stewardship programs and published the [Core Elements of Hospital Antibiotic Stewardship Programs](#). Since then, hospitals in Philadelphia and across the US have tracked whether they have met each of the seven core elements. These Elements are:

- **Leadership Commitment:** Dedicating necessary human, financial and information technology resources.
- **Accountability:** Appointing a single leader responsible for program outcomes. Experience with successful programs show that a physician leader is effective.
- **Drug Expertise:** Appointing a single pharmacist leader responsible for working to improve antibiotic use.
- **Action:** Implementing at least one recommended action, such as systemic evaluation of ongoing treatment need after a set period of initial treatment (i.e. “antibiotic time out” after 48 hours).
- **Tracking:** Monitoring antibiotic prescribing and resistance patterns.
- **Reporting:** Regular reporting information on antibiotic use and resistance to doctors, nurses and relevant staff.
- **Education:** Educating clinicians about resistance and optimal prescribing.

Percent of hospitals meeting all 7 Core Elements of Antibiotic Stewardship



Adherence to the core elements in Philadelphia has been higher than in Pennsylvania and the rest of the US. In 2015, **55%** of hospitals in Philadelphia and **48%** of hospitals in the US as a whole had stewardship programs that met all seven core elements. By 2017, **82%** of hospitals in Philadelphia and **76%** of hospitals nationally met all core elements. (Data source: [NHSN](#) and [CDC’s Patient Safety Atlas](#))

You can find out more about the CDC antibiotic prescribing guidelines and find resources for healthcare facilities, healthcare professionals, and patients at: <https://www.cdc.gov/antibiotic-use/>

Upcoming Webinar: Easy to Use Tools for Displaying Hand Hygiene and Outbreak Surveillance Data

Tuesday, December 10, 2019 at 2 PM

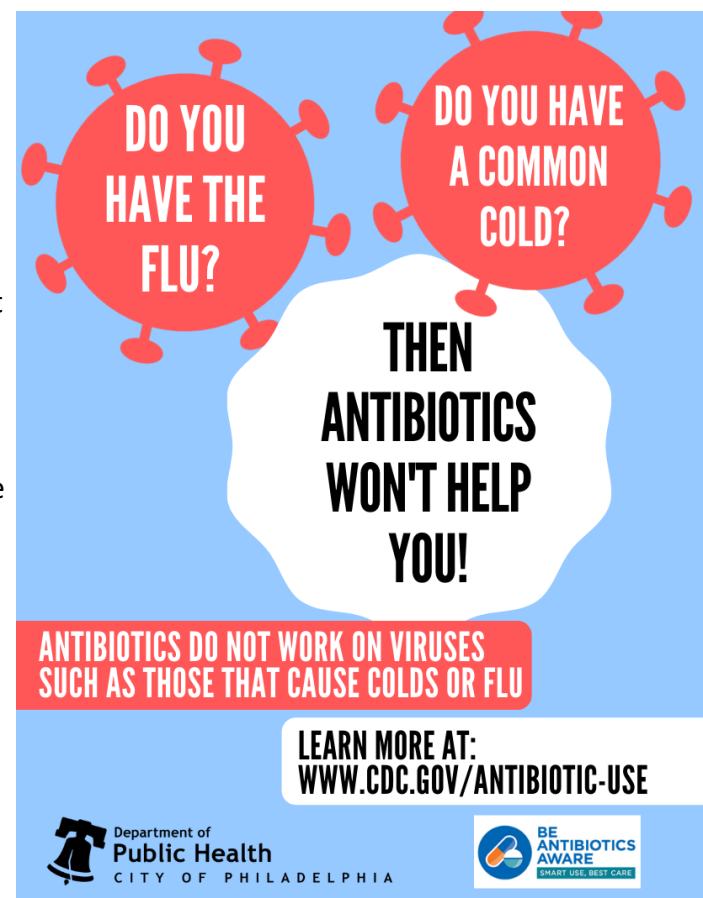
[Register for the webinar](#) to learn about new electronic tools for tracking hand hygiene compliance and outbreaks in your facility.

Antibiotic Stewardship Posters

Get your posters for the U.S. Antibiotic Awareness Week, November 18-24!

Although antibiotics save lives, unnecessary prescribing or misuse of antibiotics is relatively common and continues to contribute to antibiotic resistance. The Centers for Disease Control and Prevention (CDC) states at least 30% of antibiotic prescriptions are unnecessary in their [2018 Update on Antibiotic Use in the United States](#).


To promote proper antibiotic use, The Philadelphia Department of Public Health created a **Stewardship Poster for the General Public** (right) to be displayed around the city in November. Be sure to spot this in venues around the city and get involved in antibiotic stewardship this month! Let us know if you would like to display a copy in your institution by contacting us at HAI.PDPH@phila.gov.



DO YOU HAVE THE FLU?
 DO YOU HAVE A COMMON COLD?
THEN ANTIBIOTICS WON'T HELP YOU!
ANTIBIOTICS DO NOT WORK ON VIRUSES SUCH AS THOSE THAT CAUSE COLDS OR FLU
LEARN MORE AT: WWW.CDC.GOV/ANTIBIOTIC-USE
 Department of Public Health CITY OF PHILADELPHIA
 BE ANTIBIOTICS AWARE SMART USE. BEST CARE.

Antibiotics

- Only fight infections caused by bacteria
- Will NOT help you feel better if you have a viral infection such as:
 - A cold or runny nose
 - Bronchitis or a chest cold
 - Flu
- Can cause more harm than good, if you take them when you don't really need them:
 - You can get diarrhea, rashes or yeast infections
 - You might get an infection later that is harder to treat because it is resistant to antibiotics



As your health care providers, we are dedicated to prescribing antibiotics...



Steven Alles, MD, MS

John Hamner



Susan Coffin, MD, MPH

John Hamner



Jane Gould, MD

John Hamner

...only when you need them

PDPH provides other antibiotic stewardship resources to partners. One of these resources is the **Antibiotic Stewardship Commitment Poster** (left) to be put in clinics and offices, reaffirming prescribers' commitment to responsible antibiotic use. **PDPH can provide both PDF as well as laminated posters to prescribers who are interested in displaying this poster.** If you would like a copy of the commitment poster with the picture and name of a prescriber with your organization, **please contact us at HAI.PDPH@phila.gov.**

Carbapenem-resistant *Enterobacteriaceae* Surveillance Report

July - September, 2019

Carbapenem-resistant *Enterobacteriaceae* (CRE) are a family of bacteria with high levels of resistance to antibiotics. Data from reported, confirmed CRE cases, to the Philadelphia Department of Public Health, occurring in July-September, 2019 (n=69) are displayed. Thirty-six of the cases were lab-confirmed to be carbapenemase-producing CRE (CP-CRE), 28 were non-CP CRE and 5 were pending testing or not tested. Available CP mechanisms are shown in the table below. Not all isolates were sent for mechanism testing.

Carbapenemase-Producing (CP) Status of Confirmed Cases	
CP-CRE	36 (52%)
Non-CP CRE	28 (41%)
CP Status Pending/ Not Tested	5 (7%)
Total Confirmed CRE Cases	69

MORE
NDM+ organisms found this quarter than ever before

CRE Counts ¹ , by Genus Species and Mechanism (n=69)								
Genus Species	Total CRE n (%)	KPC	NDM	OXA-48	IMP	VIM	Mech. Not Tested	Total CP-CRE
<i>Klebsiella pneumoniae</i>	34 (49.3)	21	2	.	.	.	1	24
<i>Enterobacter cloacae</i>	9 (13.0)	3	.	.	.	.	.	3
<i>Escherichia coli</i>	7 (10.1)	2	2	.	.	.	.	4
<i>Proteus mirabilis</i>	3 (4.3)	.	.	.	.	.	.	0
<i>Serratia marcescens</i>	3 (4.3)	.	.	.	.	.	.	0
<i>Morganella morganii</i>	2 (2.9)	.	.	.	.	.	.	0
Other <i>Citrobacter Spp</i>	2 (2.9)	1	.	.	.	.	.	1
Other <i>Enterobacteriaceae</i>	7 (11.6)	1	.	1	1	.	.	3
Unknown species	1 (1.4)	1	.	.	.	.	.	1
Total	69	29	4	1	1	0	1	36

¹not all isolates sent for mechanism testing.

Epidemiological Characteristics of CRE Cases (n=65)

Characteristics	Yes	No	Unknown
Philadelphia Resident	49 (75.4)	16 (24.6)	0 (0.0)
LTCF Resident	21 (32.3)	13 (20.0)	31 (47.7)
Invasive Device(s)	21 (32.3)	11 (16.9)	33 (50.8)
History of CRE	3 (4.6)	17 (26.2)	45 (69.2)

Action Steps

- Report CRE cases to the Philadelphia Dept. of Public Health within **5 days**
- Include Antimicrobial Susceptibility Testing results with CRE report

CRE Cases, by Carbapenemase-Producing (CP) Status: October 2018 – September 2019

301
CRE Cases

229 (76%)
Tested for CP Status

64%
CP-CRE

36%
Non-CP CRE

