Carbapenem-resistant Enterobacteriaceae Surveillance Report

April - June, 2019

Department of Public Health
CITY OF PHILADELPHIA

Carbapenem-resistant *Enterobacteriaceae* (CRE) are a family of bacteria with high levels of resistance to antibiotics. Data from reported, confirmed CRE cases occurring in April-June, 2019 (n=56) are displayed. Twenty-nine of the cases were lab-confirmed to be carbapenemase-producing CRE (CP-CRE), 16 were non-CP CRE and 11 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	29				
Non-CP CRE	16				
CP Status Pending/ Not Tested	11				
Total Confirmed CRE Cases	56				

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OXA-48 found in an isolate since surveillance began

CRE Counts ¹ , by Genus Species and Mechanism (n=56)								
Genus Species	Total CRE n (%)	КРС	NDM	IMP	OXA-48	VIM	Mech. Not Tested	Total CP-CRE
Klebsiella pneumoniae	22 (39.3)	15	1		1			17
Enterobacter cloacae	7 (12.5)	2						2
Morganella morganii	6 (10.7)	1					1	2
Enterobacter aerogenes	4 (7.1)	•						
Escherichia coli	4 (7.1)	2	1					3
Proteus mirabilis	3 (5.4)	•						
Other Klebsiella spp.	3 (5.4)	3						3
Other Citrobacter spp.	2 (3.6)	2						2
Other Enterobacteriaceae	5 (8.9)	•	·					
Total	56	25	2	0	1	0	1	29

¹not all isolates sent for mechanism testing,

Epidemiological Characteristics of CRE Cases (n	=56)
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Characteristics	Yes	No	Unknown
Philadelphia Resident	44 (78.6)	12 (21.4)	0 (0.0)
LTCF Resident	21 (37.5)	7 (12.5)	28 (50.0)
History of CRE	5 (8.9)	17 (30.4)	34 (60.7)
Fatal	1 (1.8)	15 (26.8)	40 (71.4)

Action Steps

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

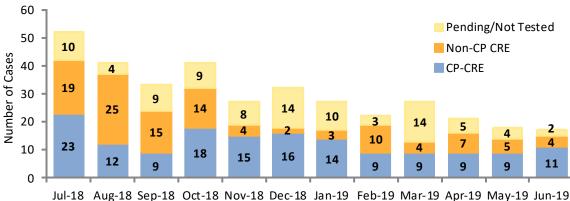
CRE Cases, by Carbapenemase-Producing (CP) Status: July 2018 – June 2019

358 CRE Cases

43% CP-CRE

31% Non-CP CRE

26% Pending/Not Tested



Jui-18 Aug-18 56b-18 Oct-18 Mov-18 Dec-18 Jain-19 Feb-19 Mai-19 Abi-19 May-19 Juin-19