Carbapenem-resistant *Enterobacteriaceae* Surveillance Report

Department of Public Health
CITY OF PHILADELPHIA

January - March, 2020

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 January-March 2020 (n=64) are displayed. 35 of the cases were lab-confirmed to be carbapenemase-producing CRE (CP-CRE), 10 were non-CP CRE and 19 were not tested. Available CP mechanisms are shown in the table below. Not all isolates were sent for mechanism testing. This is the first report that excludes the species in the Morganellaceae family such as *Morganella morganii*, *Providencia spp.* and *Proteus Spp.*, which were previously classified as *Enterobacteriaceae* but are now considered a separate family and therefore will no longer be included in the CRE report.

Carbapenemase-Producing (CP) Status of Confirmed Cases	
CP-CRE	35 (55%)
Non-CP CRE	10 (16%)
CP Status Pending/ Not Tested	19 (30%)
Total Confirmed CRE Cases	**64**

Though January had the highest number of CRE cases by month for the past year, the cases reported to PDPH sharply declined starting in February due to the surge of COVID-19 in Philadelphia

CRE Counts[1], by Genus Species and Mechanism (n=64)

Genus Species	Total CRE n (%)	Total CP-CRE	KPC	NDM	OXA-48	IMP	VIM
Klebsiella pneumoniae	31 (48.4)	21	19	2	.	.	.
Escherichia coli	10 (15.6)	6	2	4	.	.	.
Enterobacter cloacae	6 (9.4)	4	4	.	.	.	.
Other *Klebsiella Spp*	4 (6.3)	1	1	.	.	.	.
Other Enterobacteriaceae	4 (6.3)	0	.	.	.	.	.
Enterobacter aerogenes	3 (4.7)	1	1	.	.	.	.
Citrobacter koseri	1 (1.6)	0	.	.	.	.	.
Klebsiella oxytoca	1 (1.6)	1	1	1	.	.	.
Raoultella Spp.	1 (1.6)	1	1	.	.	.	.
Serratia marcescens	1 (1.6)	0	.	.	.	.	.
Other *Citrobacter Spp*	1 (1.6)	0	.	.	.	.	.
Unknown species	1 (1.6)	0	.	.	.	.	.
Total	**64**	**35**	**29**	**7**	**0**	**0**	**0**

[1]not all isolates sent for mechanism testing, some isolates have more than one mechanism

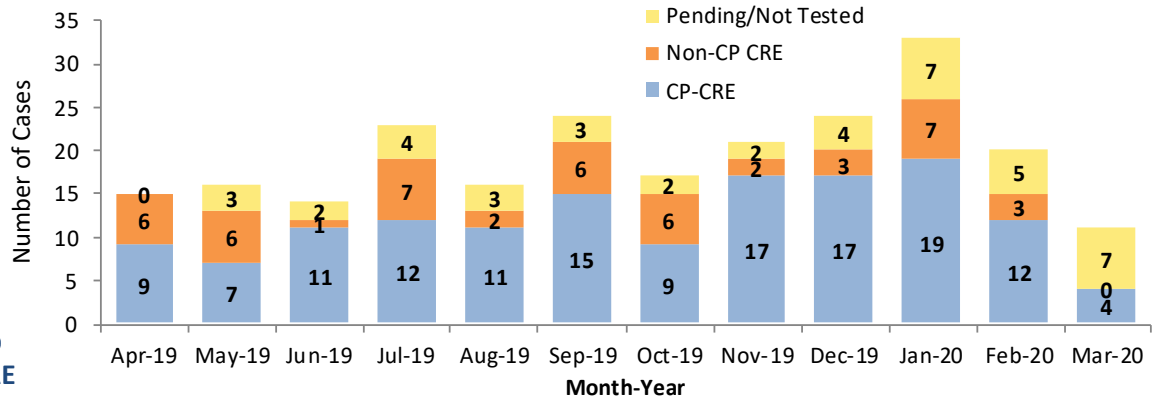
CRE Cases, by Carbapenemase-Producing (CP) Status: April 2019 – March 2020

234
CRE Cases

192 (68%)
Tested for CP Status

74%
CP-CRE

26%
Non-CP CRE



Report CRE cases using the CRE report form available at hip.phila.gov