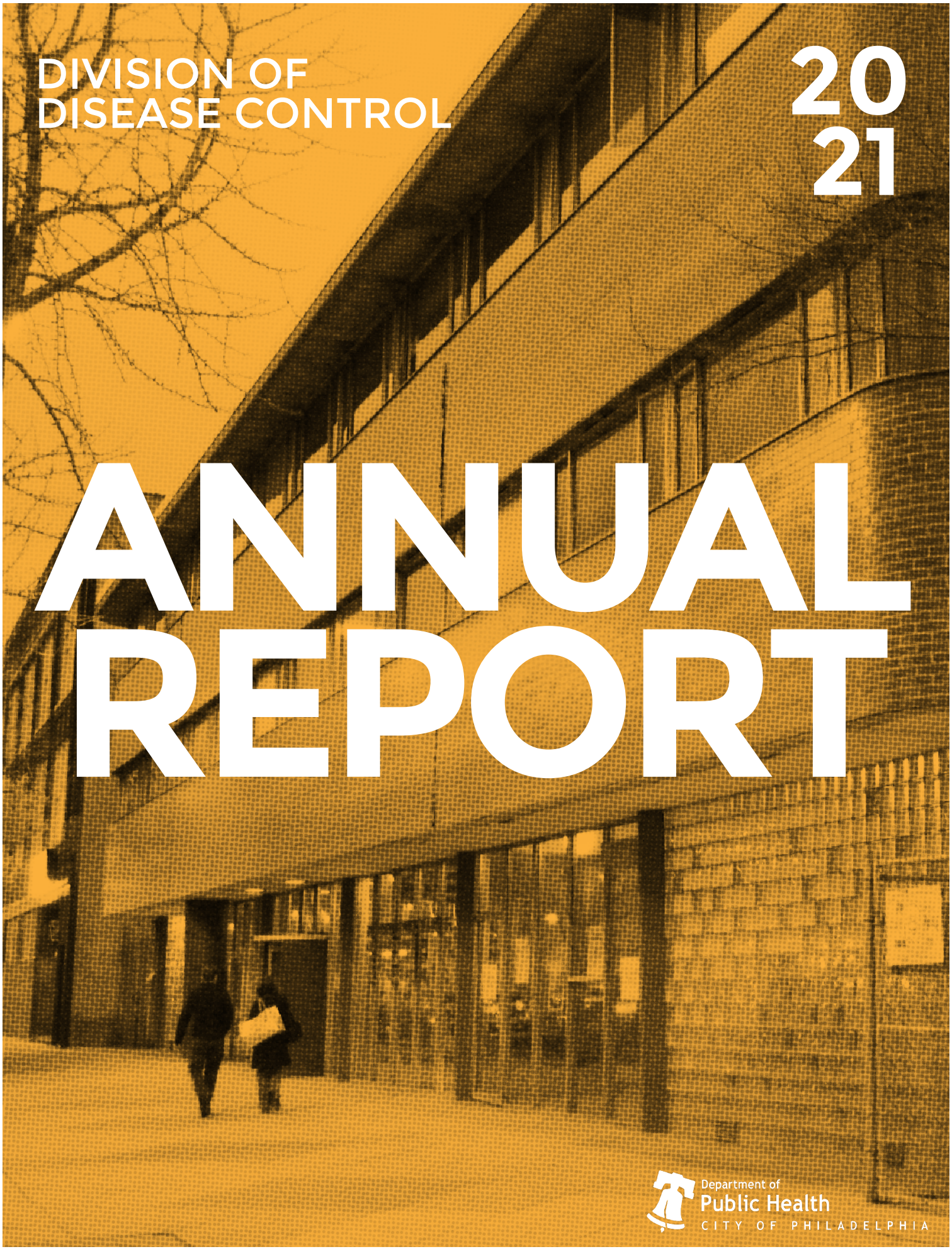


DIVISION OF
DISEASE CONTROL

2021

ANNUAL REPORT

Department of
Public Health
CITY OF PHILADELPHIA

INTRODUCTION

OVERVIEW

This annual report provides an epidemiologic summary of conditions for healthcare providers. These conditions were reported to the Philadelphia Department of Public Health (PDPH) Division of Disease Control (DDC) in 2021. There are currently 76 medical conditions that health care providers or laboratories must report to the DDC (see page 61). The report highlights the most commonly reported conditions and those of public health importance. Data regarding cases of HIV/AIDS are reported separately by the Division of HIV Health (DHH).

For additional information, please visit: https://hip.phila.gov/

CASE DEFINITION

A standard reporting case definition has been set for most reportable conditions by the Centers for Disease Control and Prevention (CDC) and the Council of State and Territorial Epidemiologists (CSTE). These case definitions may differ from the criteria used to make a clinical diagnosis.

Case definitions can be found at: https://www.cdc.gov/nndss/

HOW DDC CAN ASSIST HEALTH-CARE PROVIDERS

If you suspect a disease outbreak or that a patient is infected with a disease of urgent public health importance, DDC can facilitate diagnostic testing and assist with infection control and disease management. To speak with a medical specialist, please call 215-685-6748. For urgent after hours immediate reporting and consultation, please call 215-686-4514 and ask for the Division of Disease Control on-call staff.

LOCATION

STD testing and services at Health Center 1 and Tuberculosis Directly Observed Therapy (DOT) services at the Lawrence F. Flick Memorial Center are now both located at:

Constitution Health Plaza
1930 S Broad St
Philadelphia, PA 19145

INTRODUCTION

Through June 2021, the Philadelphia Department of Public Health continued to maintain several citywide, non-pharmaceutical interventions to mitigate the spread of COVID-19, including restrictions on non-essential, in-person businesses and activities, indoor capacity limits, and masking mandates. Although these local mitigation strategies along with measures implemented at the state and federal level aimed to limit transmission of COVID-19, the strategies also likely decreased community transmission of other communicable diseases. In addition, the impact of the COVID-19 pandemic on healthcare access for other acute illnesses and preventative care may also have decreased the identification and diagnosis of communicable diseases among City residents during 2021. Case counts could be lower as a result of COVID-19 mitigation strategies or access to healthcare when restrictions were in place.

TABLE OF CONTENTS

1 OVERVIEW

DISEASE REPORTING TRENDS
REGIONAL OVERVIEW

DISEASE REPORTING TRENDS

Reports of Communicable Diseases Per Year: Philadelphia, 2012-2021

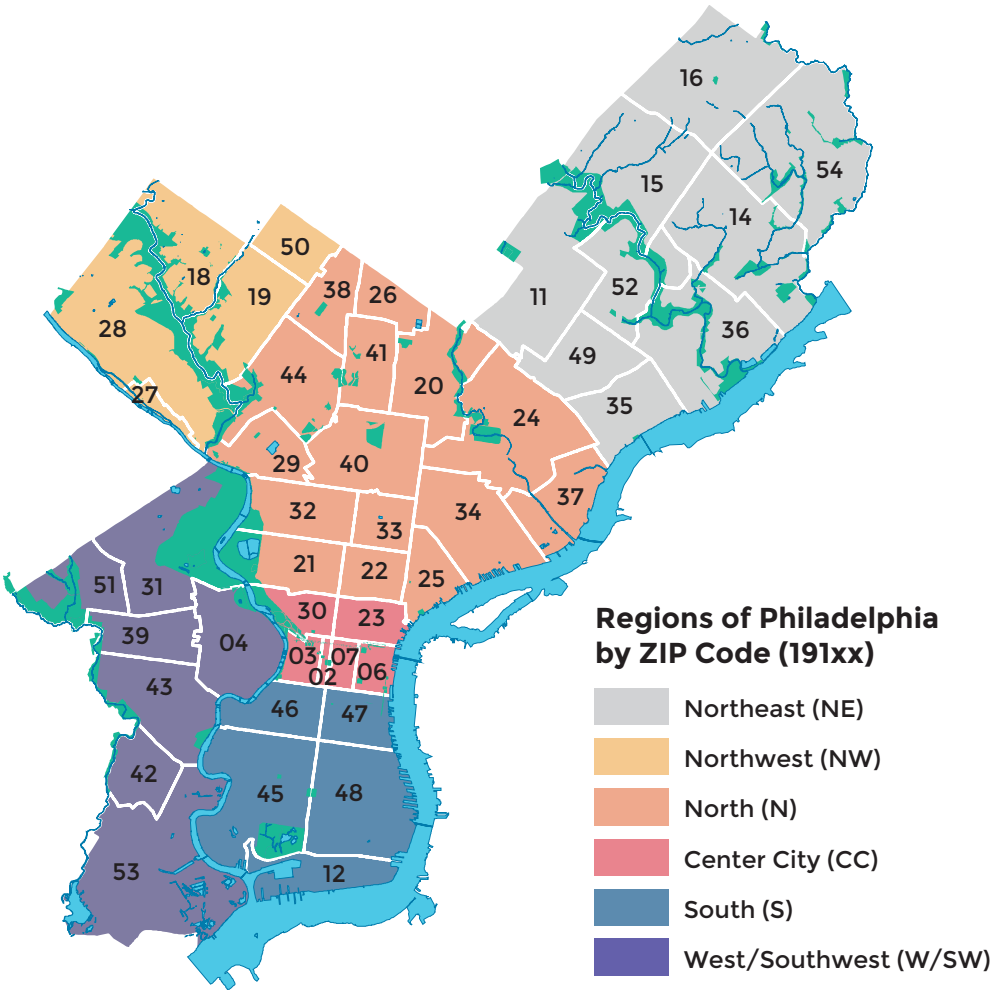
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Amebiasis	11	13	15	8	2	13	14	18	3	9
Animal Bites/Exposures	1,598	1,586	1,644	1,718	1,722	1,574	1,486	1,547	1,103	1,479
Anthrax	0	0	0	0	0	0	0	0	0	0
Babesiosis	0	1	1	3	2	5	4	4	3	3
Botulism	2	2	1	0	3	3	1	0	0	0
Brucellosis	1	1	0	1	0	1	0	0	1	0
Campylobacteriosis	182	103	167	211	203	233	270	274	197	261
Carbapenem-resistant *Enterobacteriaceae (CRE)*	-	-	-	-	-	-	308	234	234	151
Chlamydia trachomatis	20,803	19,570	18,935	19,169	19,959	21,119	20,206	20,354	15,834	17,165
Cholera	1	0	0	0	0	0	0	0	0	0
Cryptosporidiosis	18	58	30	26	48	51	38	31	24	35
Cyclosporiasis	1	0	1	3	4	3	0	3	2	6
Dengue Fever	1	11	0	5	3	0	1	13	1	0
Diphtheria	0	0	0	0	0	0	0	0	0	0
Escherichia coli, Shiga Toxin-Producing (STEC)	12	6	10	11	25	19	28	41	27	25
Giardiasis	60	76	65	61	58	66	59	75	47	55
Gonorrhea	7,293	6,303	5,961	6,260	6,957	7,288	7,205	7,043	7,302	7,824
Guillian-Barre Syndrome	0	1	1	4	3	7	0	1	1	1
Haemophilus influenzae [Type B]	39 [1]	26 [0]	23 [1]	24 [2]	36 [3]	49 [1]	27[0]	37 [1]	24[0]	35[0]
Hansen's Disease (Leprosy)	1	0	0	1	0	1	1	0	0	0
Hepatitis A	2	6	6	6	9	19	21	454	25	138
Hepatitis B, Acute	4	5	7	8	5	10	13	44	18	13
Hepatitis C, Acute	20	42	67	79	130	155	183	147	121	140
Histoplasmosis	1	0	0	2	1	3	2	1	2	4
Legionellosis	29	61	42	53	34	66	91	56	39	46
Leptospirosis	1	0	0	0	0	0	1	1	3	0
Listeriosis	6	10	3	2	2	0	8	2	4	8
Lyme Disease	191	189	140	252	236	264	260	181	143	124
Malaria	13	21	30	18	22	30	40	45	7	31
Measles	2	0	0	0	0	0	1	0	0	0
Meningitis, Aseptic	92	124	60	55	48	55	41	36	15	8
Meningitis, Bacterial	5	3	0	2	3	6	7	7	3	3
Meningococcal Infections	6	3	2	0	2	0	1	6	14	3

DISEASE REPORTING TRENDS (Cont.)

Reports of Communicable Diseases Per Year: Philadelphia, 2012-2021 (Cont.)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Mumps	4	3	0	1	5	8	24	259	5	3
Pertussis	268	86	127	111	101	107	72	93	32	16
Plague	0	0	0	0	0	0	0	0	0	0
Poliomyelitis	0	0	0	0	0	0	0	0	0	0
Rabies (Human)	0	0	0	0	0	0	0	0	0	0
Rickettsial Diseases, Including RMSF	12	8	10	8	5	7	3	8	1	5
Rubella, Including Congenital Rubella Syndrome	0	0	1	0	0	0	0	0	0	0
Salmonellosis, Excluding Typhoid	305	284	229	237	188	219	213	244	175	211
Shigellosis	48	66	66	90	311	91	92	86	78	91
Staphylococcus aureus, vancomycin insensitive	0	0	1	0	0	0	4	1	0	1
Streptococcus Pneumoniae, Invasive	103	149	101	119	136	161	157	197	123	127
Streptococcus, Invasive gp. A [TSS]	61 [0]	56 [0]	95 [0]	90 [0]	78 [1]	113 [0]	156[0]	181[0]	179[0]	263[0]
Syphilis-Primary & Secondary	269	278	308	314	428	459	408	470	511	586
Syphilis-Congenital	5	1	4	4	5	6	3	6	6	10
Syphilis-Total	798	962	894	916	927	1,256	1,214	1,262	1,374	1,834
Tetanus	0	0	0	0	0	0	0	0	0	0
Toxic Shock Syndrome, Staphylococcal	1	0	1	0	0	0	0	0	0	0
Tuberculosis	86	89	78	72	74	75	78	74	61	49
Tularemia	0	0	0	0	0	0	0	0	0	0
Typhoid Fever	2	1	5	3	1	3	1	1	4	0
Varicella (Chicken Pox only)	118	167	118	123	111	104	113	77	20	35
Vibrio SPP. Other	0	0	4	6	7	11	13	11	6	17
West Nile Virus	9	3	5	0	4	3	17	3	4	10
Yellow Fever	0	0	0	5	0	0	0	0	0	1

REGIONAL OVERVIEW



Total Population Count by Age and Region: Philadelphia, 2010*

Age	NE	NW	N	CC/S	W/SW	Total
0-4 Yrs	23,127	5,055	41,227	13,888	17,760	101,057
5-17 Yrs	56,820	12,189	103,578	26,046	44,165	242,798
18-34 Yrs	86,479	29,154	149,432	95,613	89,090	449,768
35-60 Yrs	122,363	34,069	171,370	81,045	81,124	489,971
>60 Yrs	67,760	20,906	69,859	43,269	40,698	242,492
Total	356,549	101,373	535,466	259,861	272,837	1,526,086

*Data according to the U.S. Census Bureau

REGIONAL OVERVIEW (Cont.)

**Counts of Disease With Sufficient Burden*:
Philadelphia, 2021**

	NE	NW	N	CC/S	W/SW	Missing	Total
	n	n	n	n	n	n	n
Campylobacteriosis	58	15	71	57	40	20	261
Carbapenem-resistant *Enterobacteriaceae*	36	7	42	20	46	78	151
Chlamydia	2,081	625	7,914	1,895	3,869	781	17,165
Giardiasis	8	5	14	13	12	3	55
Gonorrhea	719	257	3,635	1,002	1,875	336	7,824
Hepatitis C, Chronic (RNA +)	277	35	458	134	137	13	1,054
Influenza (Hospitalized)	44	5	51	18	12	8	138
Lyme Disease	43	17	24	27	7	6	124
Meningitis, Aseptic	1	2	1	0	3	1	8
Pertussis	5	2	2	2	5	0	16
Salmonellosis	27	11	75	26	59	13	211
Shigellosis	1	0	28	28	28	6	91
Streptococcus Pneumoniae, Invasive	17	8	51	17	22	12	127
Streptococcus, Invasive gp A	32	5	136	39	29	22	263
Syphilis-Early Latent	90	22	308	126	166	17	729
Syphilis-Primary & Secondary	55	17	253	118	130	13	586
Tuberculosis	11	1	22	9	6	0	49
Varicella (Chicken Pox)	5	0	20	3	7	0	35

*Public health deems that this reportable disease still poses a serious risk to the population by reason of their contagiousness, severity, or frequency.

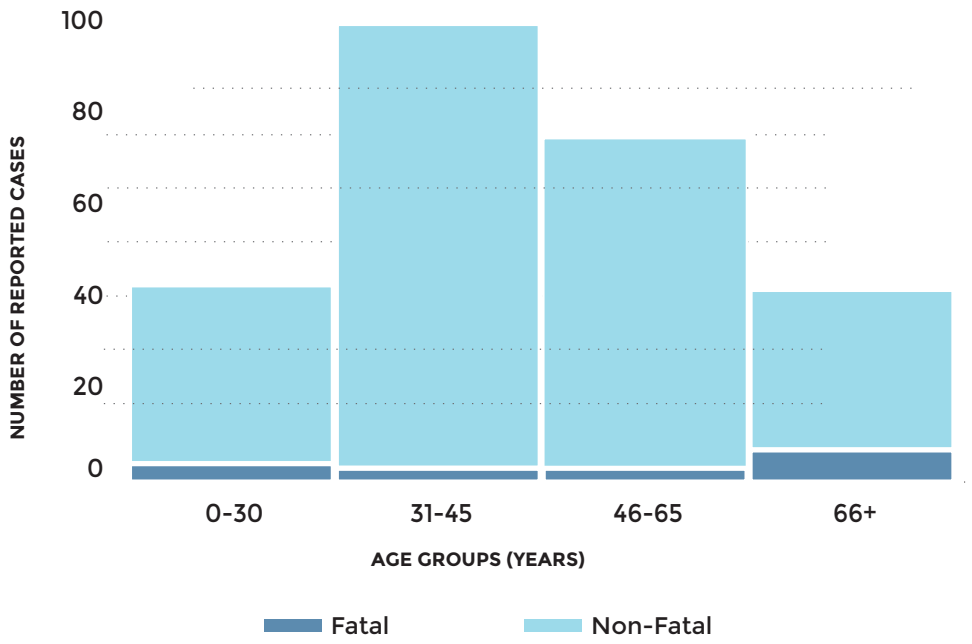
CENTRAL NERVOUS SYSTEM

INFECTIONS AND SEPSIS

GROUP A STREPTOCOCCUS
HAEMOPHILUS INFLUENZAE
LISTERIOSIS
STREPTOCOCCUS PNEUMONIAE

GROUP A *STREPTOCOCCUS*

Invasive Group A *Streptococcus* by Age Group and Outcome: Philadelphia, 2021



OF NOTE

PDPH identified 263 confirmed cases of invasive Group A Streptococcal (GAS) infection in 2021; 3 of which were associated with long term care facilities (LTCFs). PDPH worked with these facilities to enhance infection control precautions. In addition, the number of invasive (GAS) cases who reported recent injection drug use has greatly increased compared to previous years (160 in 2021 compared to an average of 65 from 2018-2020).

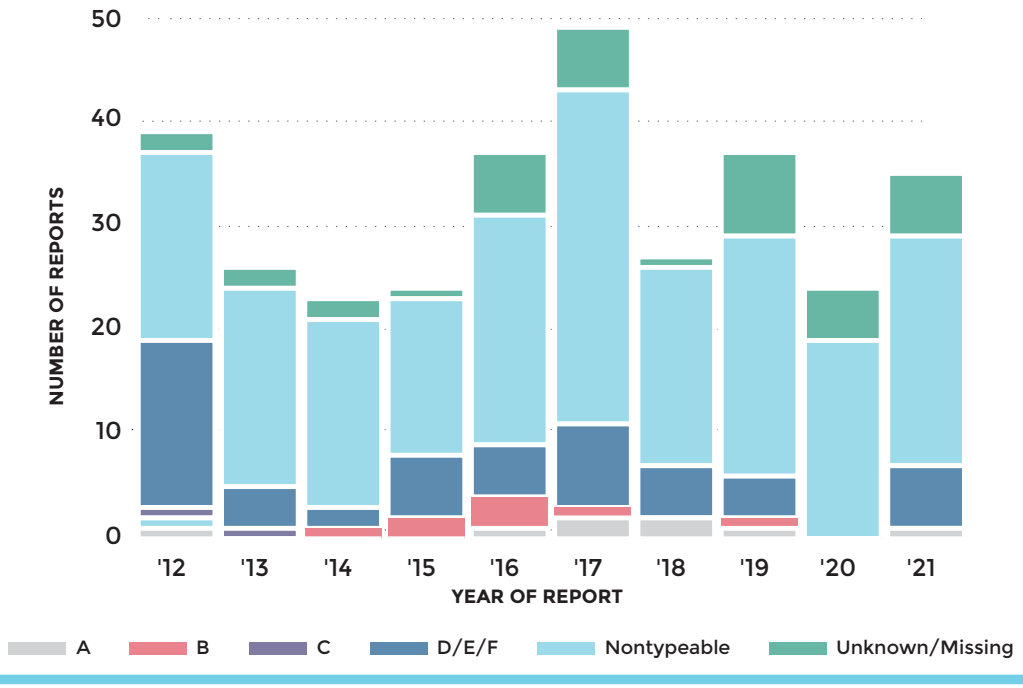
Number of Invasive *Group A Streptococcus* by Age and Gender: Philadelphia, 2021

	0-30 Years		31-45 Years		46-65 Years		66+ Years		Total*	
	n	%	n	%	n	%	n	%	n	%
Male	27	10.3	64	24.4	58	22.1	24	9.2	173	66.0
Female	16	6.1	37	14.1	18	6.9	18	6.9	89	34.0
Total	43	16.4	101	38.6	76	29.0	42	16.0	262	100

*Unknown=1

HAEMOPHILUS INFLUENZAE

Number of Invasive *Haemophilus influenza* by Serotype: Philadelphia, 2012-2021

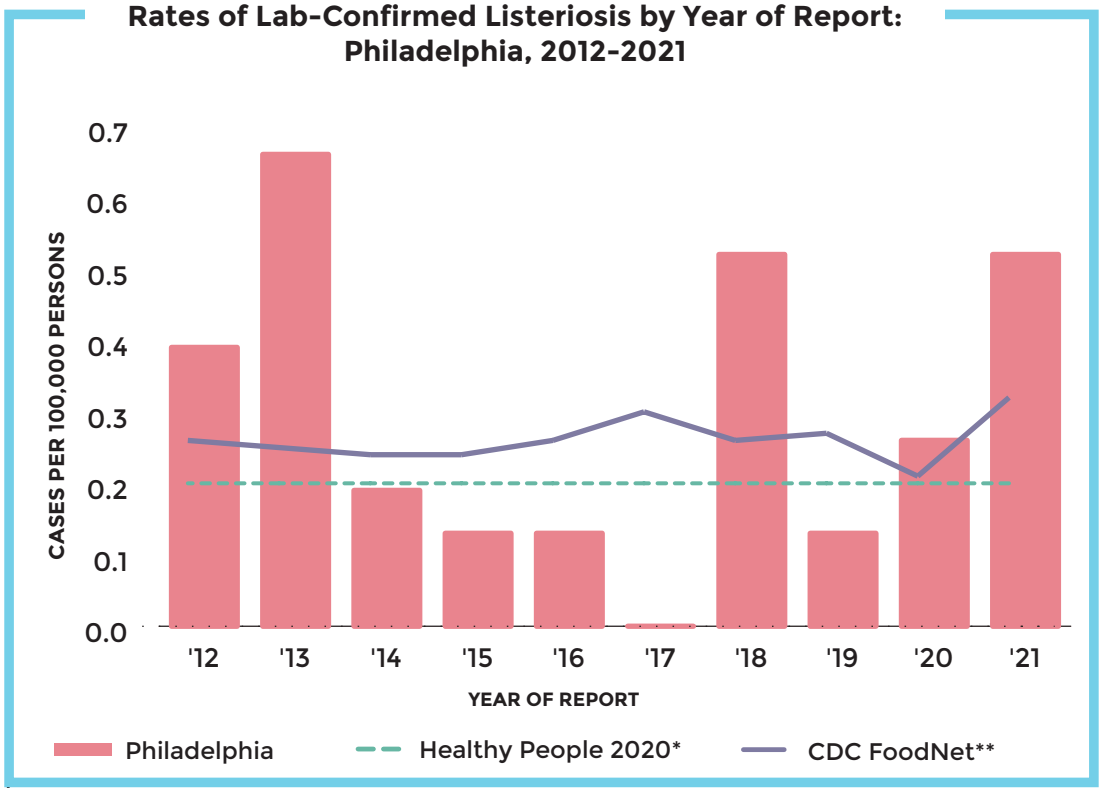


Number of Invasive *Haemophilus influenza* by Age: Philadelphia, 2021

	0-5 Years		6-49 Years		50-69 Years		70+ Years		Total*	
	n	%	n	%	n	%	n	%	n	%
Total	6	17.7	10	29.4	12	35.3	6	17.7	34	100

*Unknown=1

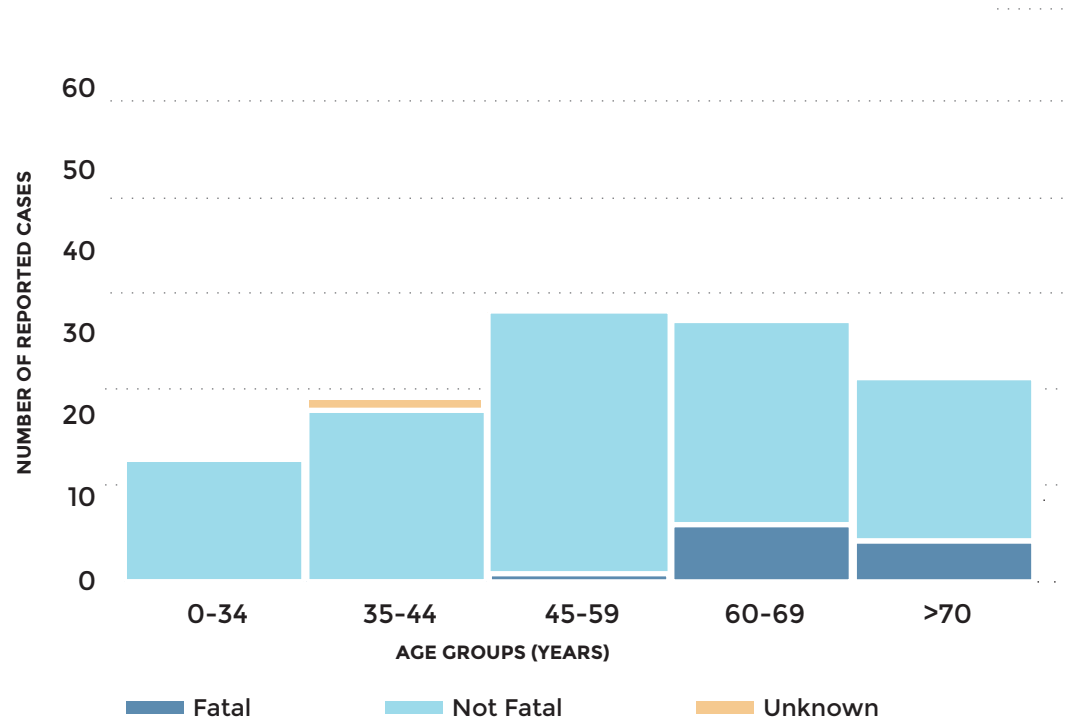
LISTERIOSIS
(Listeria monocytogenes)



* https://www.cdc.gov/nchs/healthy_people/hp2020.htm
**CDC FoodNet is the Foodborne Diseases Active Surveillance Network, utilizing sentinel data to monitor trends in foodborne diseases

STREPTOCOCCUS PNEUMONIAE

Invasive *Streptococcus pneumoniae* by Age Group and Outcome: Philadelphia, 2021



OF NOTE

Among five invasive pneumococcal cases 14 years and younger, 4 (80%) cases were up to date on the pneumococcal conjugate vaccine and 4 cases had serotyping completed. One of the pediatric cases was attributable to a serotype (19F) included in the vaccine product received (Pneumococcal Conjugate Vaccine 13). All other isolates were non-vaccine serotypes.

Among 127 cases in 2021, isolates from 121 cases had antibiotic resistance testing. Of which, 27 (21%) were fully or intermediately resistant to at least one antimicrobial agent currently approved for treatment pneumococcal infection.

Number of Invasive *Streptococcus pneumoniae* by Age and Gender: Philadelphia, 2021

	0-34 Years		35-44 Years		45-59 Years		60-69 Years		70+ Years		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Male	9	7.0	13	10.2	26	20.5	24	18.9	16	12.6	88	69.2
Female	6	4.7	9	7.0	7	5.5	8	6.3	9	7.1	39	30.7
Total	15	11.8	22	17.3	33	26.0	32	25.2	25	19.7	127	100

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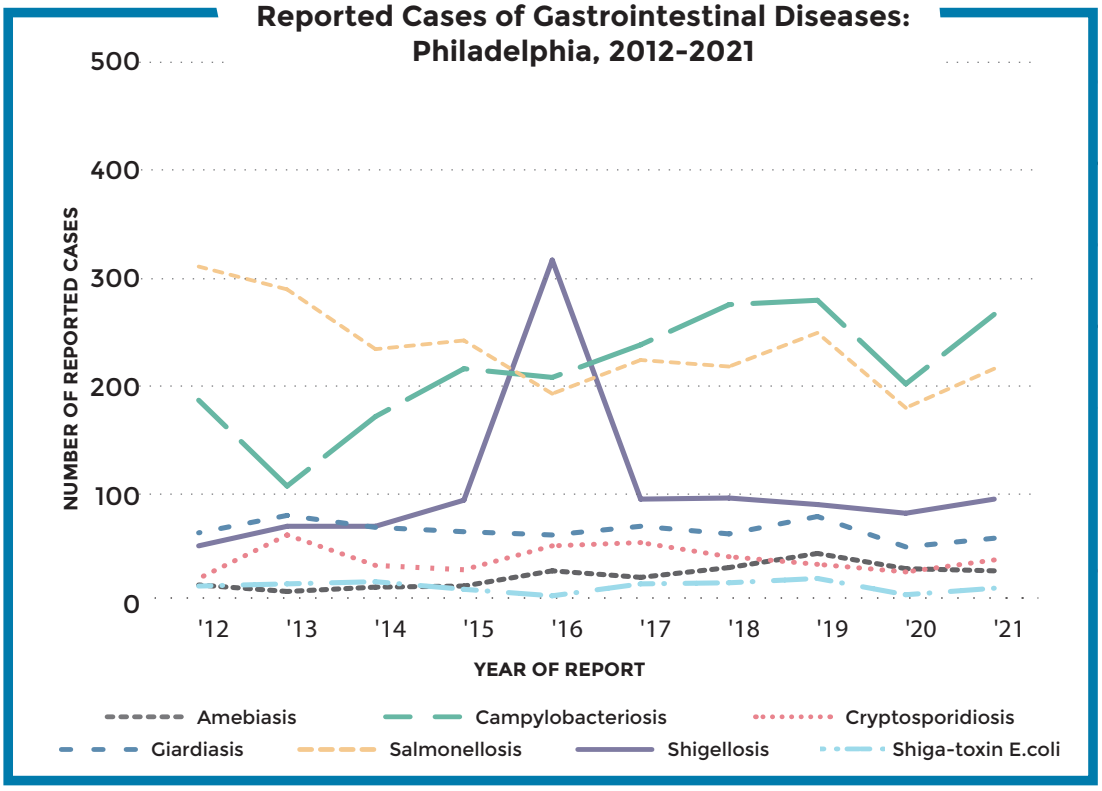
GASTRO-INTESTINAL INFECTIONS

OVERVIEW


Reported Cases of Gastrointestinal Diseases:
Philadelphia, 2012-2021
500
400
300
200
100
0
NUMBER OF REPORTED CASES
'12
'13
'14
'15
'16
'17
'18
'19
'20
'21
YEAR OF REPORT
Amebiasis
Campylobacteriosis
Cryptosporidiosis
Giardiasis
Salmonellosis
Shigellosis
Shiga-toxin E.coli

OVERVIEW (Cont.)

Antibiotic Resistance of Selected Enteric Pathogens: Philadelphia, 2021

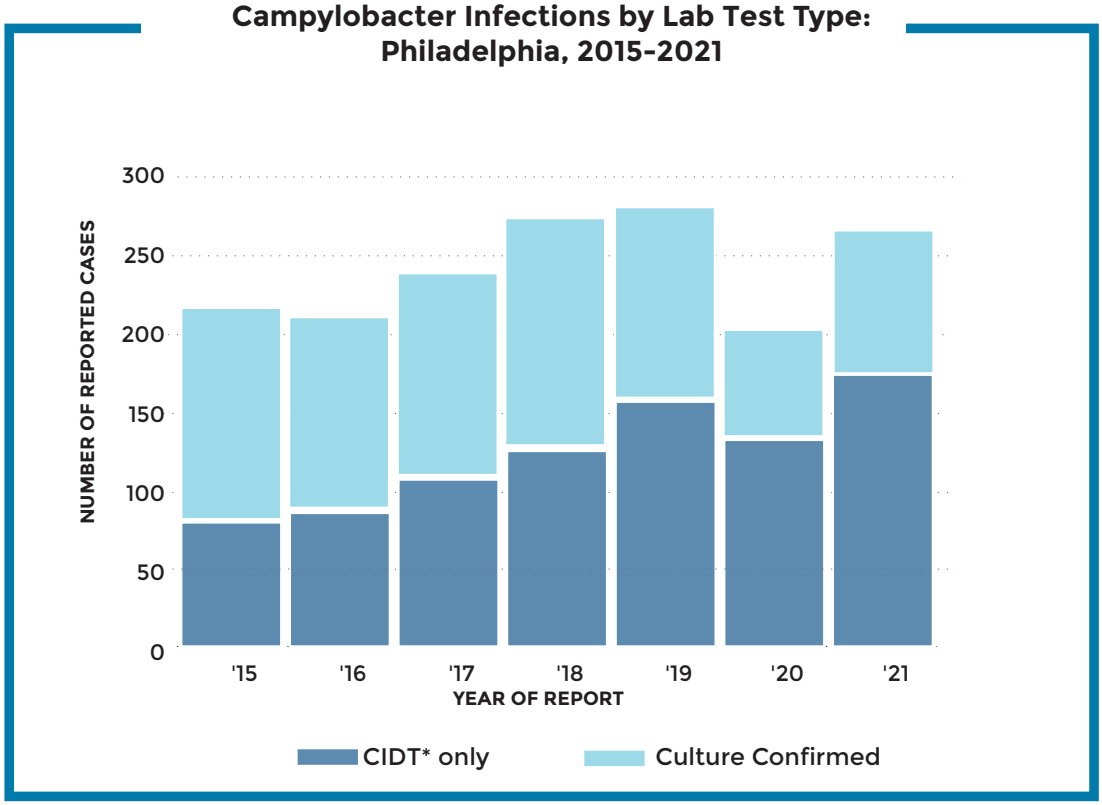
Pathogen	Antibiotics Tested	Total Patients Tested	Resistant		Intermediate	
			n	%	n	%
Campylobacter	Ciprofloxacin	22	5	23	0	0
	Erythromycin	22	2	9	0	0
Salmonella	Ampicillin	89	5	6	0	0
	Ceftriaxone	67	1	1	1	1
	Ciprofloxacin	56	1	2	7	13
	Levofloxacin	31	0	0	9	29
	Trimethoprim-Sulfamethoxazole	89	2	2	0	0
Shigella	Ampicillin	38	31	82	0	0
	Ceftriaxone	27	4	15	0	0
	Ciprofloxacin	38	6	16	2	5
	Gentamicin	20	11	55	0	0
	Levofloxacin	21	3	14	10	48
	Trimethoprim-Sulfamethoxazole	38	32	84	0	0

Results of antimicrobial susceptibility testing show if bacteria are susceptible (can be treated with the drug), intermediate (may be treatable with the drug, but may require adjusted dosage), or resistant (cannot be treated with drug). https://www.cdc.gov/narms/resources/glossary.html#:~:text=Results%20of%20antimicrobial%20susceptibility%20testing,cannot%20be%20treated%20with%20drug).

CAMPYLOBACTERIOSIS

(*Campylobacter spp.*)

Campylobacter Infections by Lab Test Type: Philadelphia, 2015-2021



*CIDT=Culture-Independent Diagnostic Testing

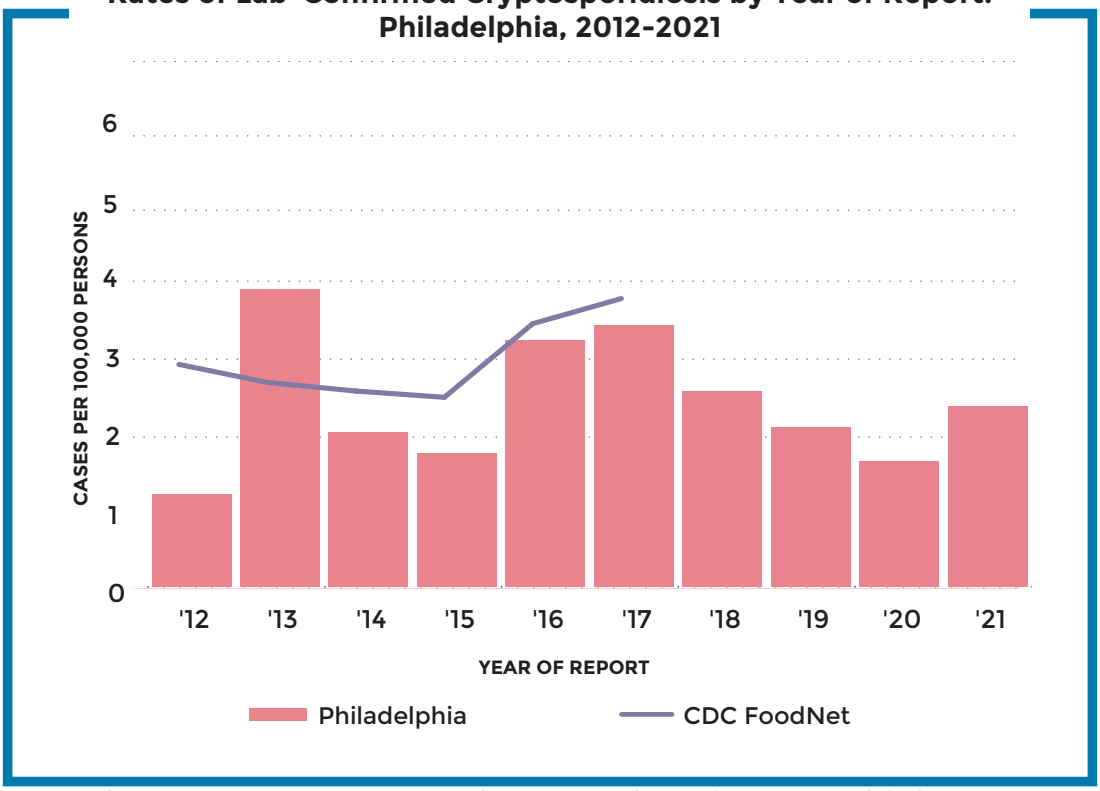
Number of Campylobacteriosis Reports by Age and Gender: Philadelphia, 2021

	0-4 Years		5-24 Years		25-49 Years		50-65 Years		66+ Years		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Male	27	10.3	22	8.4	46	17.6	25	9.6	20	7.6	140	53.6
Female	21	8.1	16	6.1	30	11.5	27	10.3	27	10.3	121	46.4
Total	48	18.4	38	14.6	76	29.1	52	19.9	47	18.0	261	100

CRYPTOSPORIDIOSIS

(*Cryptosporidium spp.*)

Rates of Lab-Confirmed Cryptosporidiosis by Year of Report: Philadelphia, 2012-2021



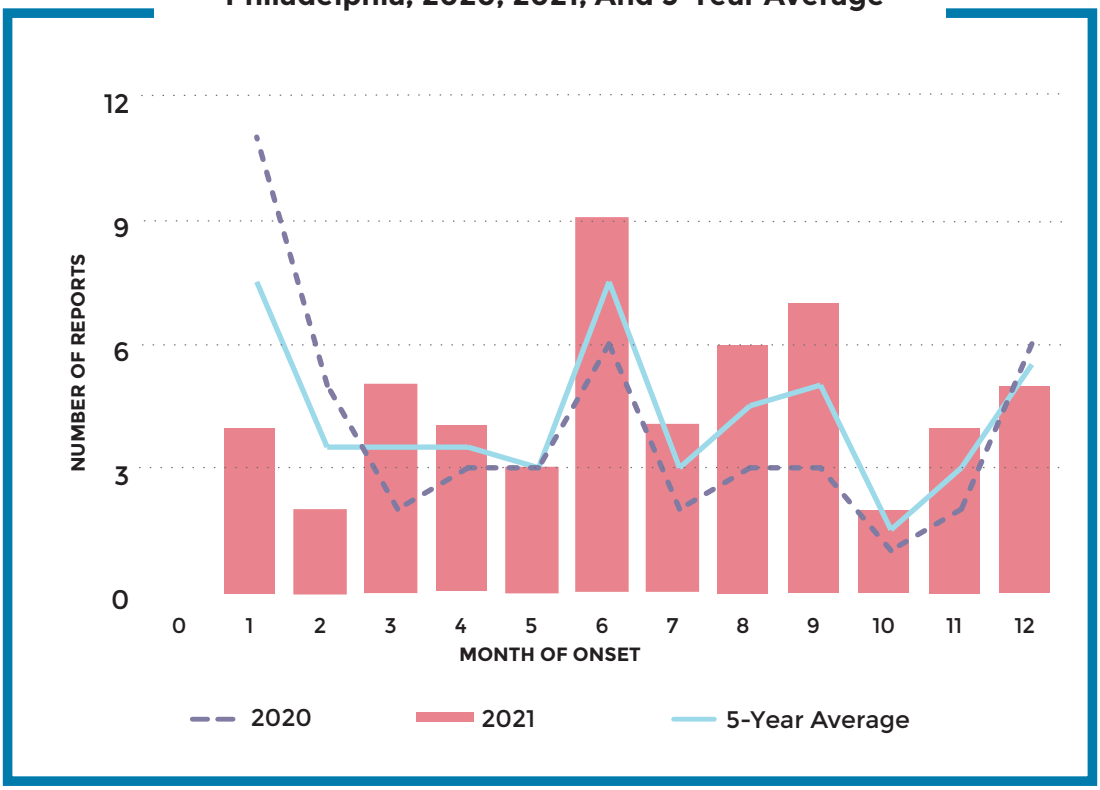
*Since 2017, CDC FoodNet no longer includes surveillance for Cryptosporidiosis.

Number of Cryptosporidiosis Reports by Age: Philadelphia, 2021

	0-18 Years		19-35 Years		36+ Years		Total Years	
	n	%	n	%	n	%	n	%
Total	11	31.4	11	31.4	13	37.1	35	100

GIARDIASIS
(*Giardia lamblia*)

Number of Giardiasis Reports by Week of Onset: Philadelphia, 2020, 2021, And 5-Year Average

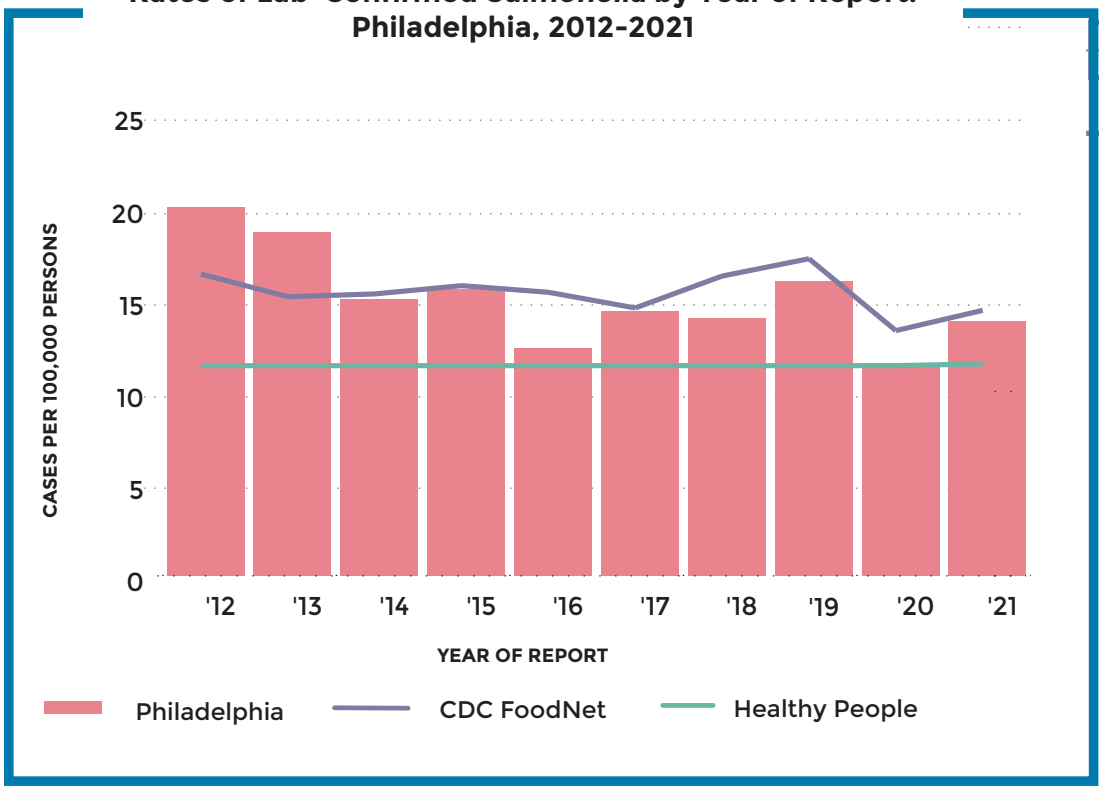


Number of Giardiasis Reports by Age: Philadelphia, 2021

	0-19 Years		20-34 Years		35-54 Years		55+ Years		Total	
	n	%	n	%	n	%	n	%	n	%
Total	12	21.8	21	38.2	11	20.0	11	20.0	55	100

SALMONELLOSIS
(*Salmonella spp.*)

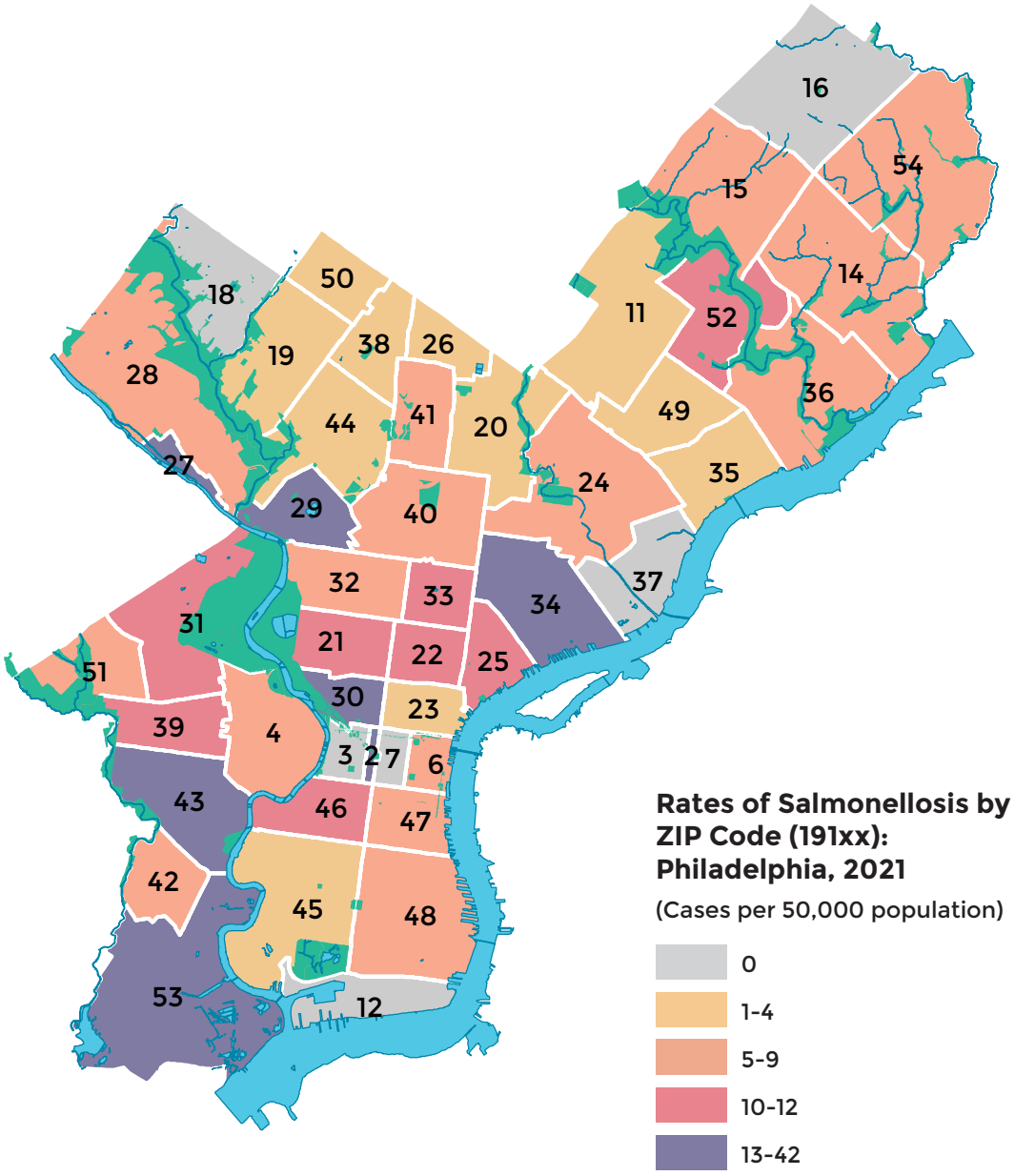
Rates of Lab-Confirmed *Salmonella* by Year of Report: Philadelphia, 2012-2021



Number of Salmonellosis Reports by Age and Gender: Philadelphia, 2021

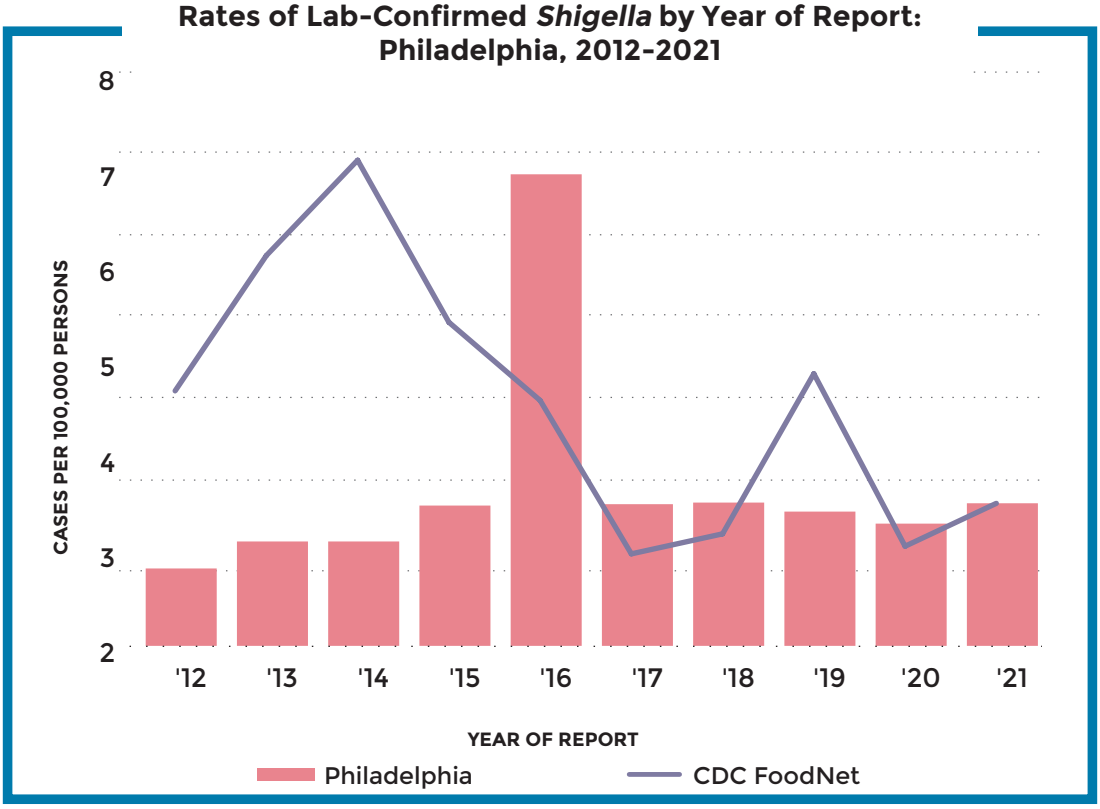
	0-4 Years		5-17 Years		18-34 Years		35-59 Years		60+ Years		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Male	30	14.2	16	7.6	9	4.3	27	12.8	21	9.6	103	48.8
Female	16	7.6	15	7.1	27	12.8	21	10.0	29	13.7	108	51.2
Total	46	21.8	31	14.7	36	17.1	48	22.8	50	23.7	211	100

SALMONELLOSIS (Cont.)



SHIGELLOSIS
(*Shigella spp.*)

Rates of Lab-Confirmed *Shigella* by Year of Report: Philadelphia, 2012-2021



Number of Shigellosis Reports by Age: Philadelphia, 2021

	0-15 Years		16-30 Years		31-45 Years		46-60 Years		61+ Years		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Total	15	16.5	14	15.4	38	41.8	16	17.6	8	8.8	91	100

HEALTHCARE-ASSOCIATED

INFECTIONS

CARBAPENEM-RESISTANT *ENTEROBACTERIACEAE*

OVERVIEW

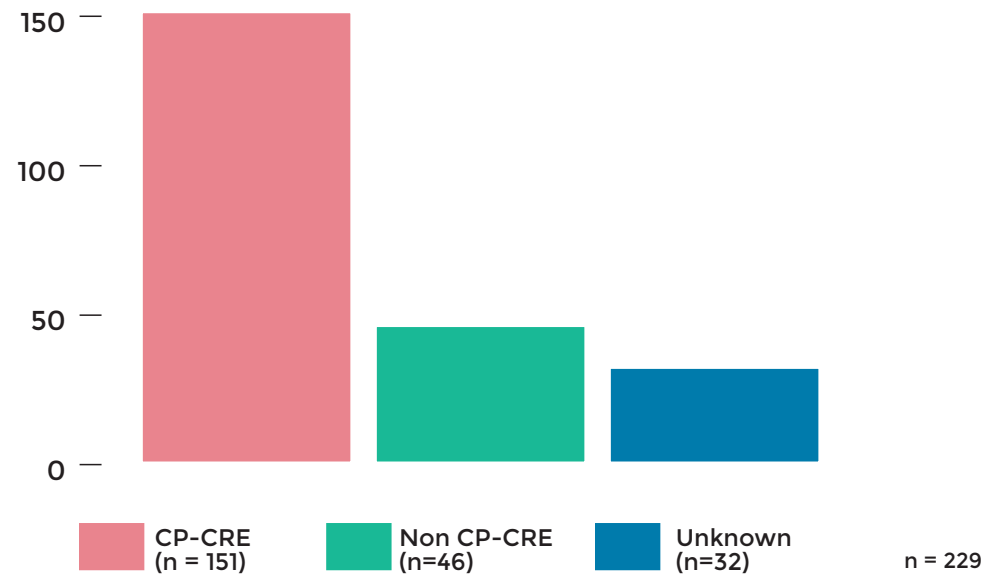
OF NOTE

The Healthcare-Associated Infections/Antimicrobial Resistance (HAI/AR Program), established in late 2016, is dedicated to the prevention and control of Healthcare-Associated Infections (HAIs) and Antimicrobial Resistance (AR). This Program serves as a resource to the Philadelphia healthcare community and public with the goal of improving healthcare safety and quality in the city of Philadelphia.

The HAI/AR Program, works on topics including, but not limited to: infections transmitted in healthcare settings and associated with healthcare; drug-resistant organism surveillance, prevention, and containment; infection prevention and control assessments and guidance in healthcare settings; healthcare worker (HCW) safety, including HCW exposures and immunization policies, and infection control education; antimicrobial stewardship in healthcare settings; antibiotic education for the general public.

CARBAPENEM-RESISTANT *ENTEROBACTERIACEAE* (CRE)

Reported Cases of CRE, by Carbapenemase-Producing (CP) Status: Philadelphia, 2021



CARBAPENEM-RESISTANT *ENTEROBACTERIACEAE* (CRE)

Genus Species	n (%)	Total CP-CRE	Mechanism of Resistance (n)				
			KPC*	NDM*	IMP*	VIM*	OXA-48*
Klebsiella pneumoniae	98 (43)	75	70	3	.	.	2
Enterbacter cloacae	39 (17)	19	17	2	.	.	.
Escherichia coli	40 (17)	25	14	11	.	.	1
Enterobacter aerogenes	12 (5)	2	2	.	.	.	.
Serratia marcesens	3 (1)	1	1	.	.	.	.
Citrobacter freundii	9 (4)	8	6	3	.	.	.
Klebsiella oxytoca	8 (3)	5	4	2	.	.	.
Citrobacter koseri	2 (1)	2	2	.	.	.	.
Other Citrobacter spp	2 (1)	1	1	.	.	.	.
Citrobacter amalonaticus	1 (0)	1	1	.	.	.	.
Other Enterobacteriaceae	2 (1)	1	1	.	.	.	.
Raoultella Spp.	3 (1)	2	1	1	.	.	.
Total	229	151	121	29	.	.	3

*KPC = *Klebsiella pneumoniae* carbapenemase
*NDM = New Delhi metallo-ß-lactamase
*IMP = Imipenemase metallo-ß-lactamase
*VIM = Verona integron-encoded metallo-ß-lactamase
*OXA-48 Like = Oxacillinase-48 like

5

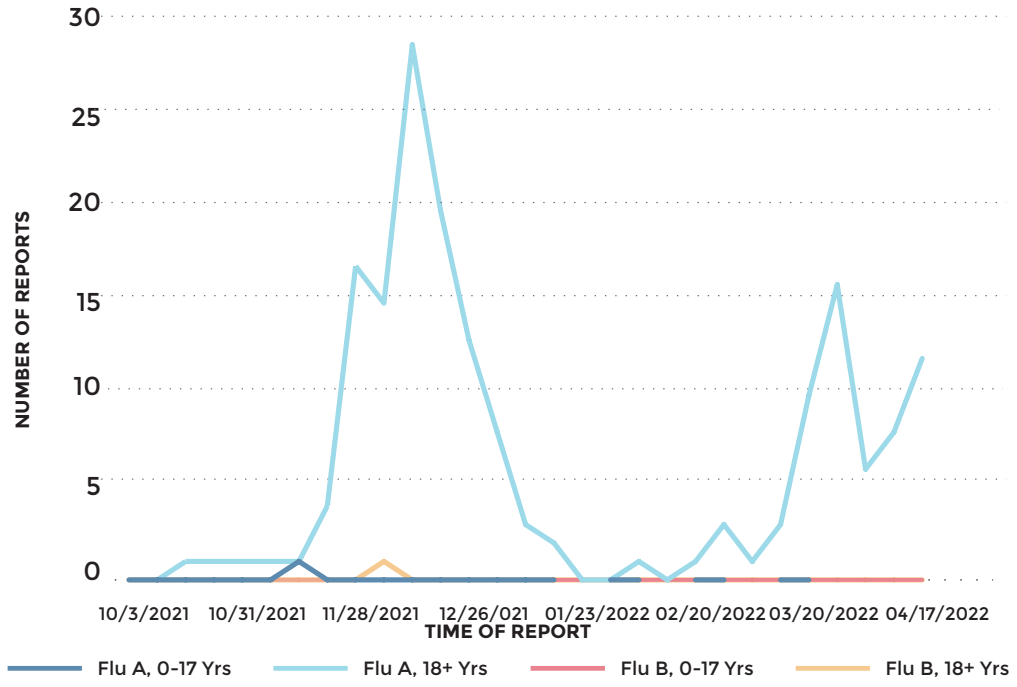
RESPIRATORY

INFECTIONS

INFLUENZA
LEGIONELLOSIS
TUBERCULOSIS

INFLUENZA

Number of Laboratory-Confirmed Influenza Reports by Week of Onset: Philadelphia, 2021-2022



Number of Hospitalized Influenza Reports by Age and Region: Philadelphia, 2020-2021

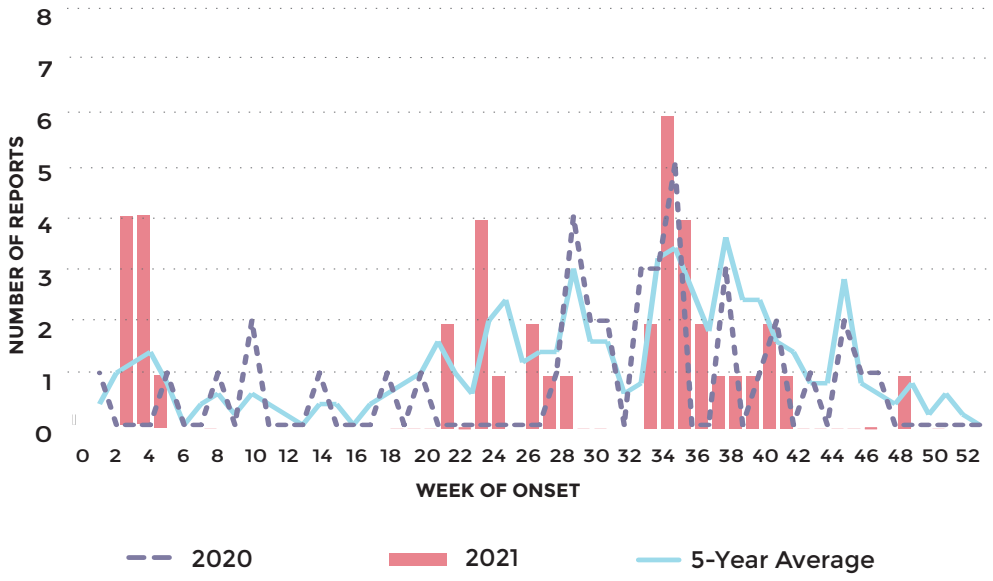
	NE		NW		N		CC		S		W/SW		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Age														
0-4 Yrs	<10	--	<10	--	<10	--	<10	--	<10	--	<10	--	25	3.0
5-17 Yrs	<10	--	<10	--	12	1.4	<10	--	<10	--	<10	--	31	3.7
18-44 Yrs	24	2.9	<10	--	74	8.8	<10	--	12	1.3	44	5.2	165	19.6
45-64 Yrs	42	5.0	11	1.3	118	14.0	14	1.7	22	2.6	81	9.6	288	34.2
65+ Yrs	80	9.5	16	1.9	90	10.7	15	1.8	31	3.7	101	22.0	333	39.6
Total	156	18.5	34	4.0	303	36.0	38	4.5	74	8.8	237	28.2	842	
Rate*	43.8		33.5		56.5		43.1		**		86.8			

*Rate per 100,000
**CC/S combined

LEGIONELLOSIS

(*Legionella pneumophila*)

Number of Legionellosis Reports by Week of Onset: Philadelphia, 2020, 2021, And 5-Year Average



OF NOTE

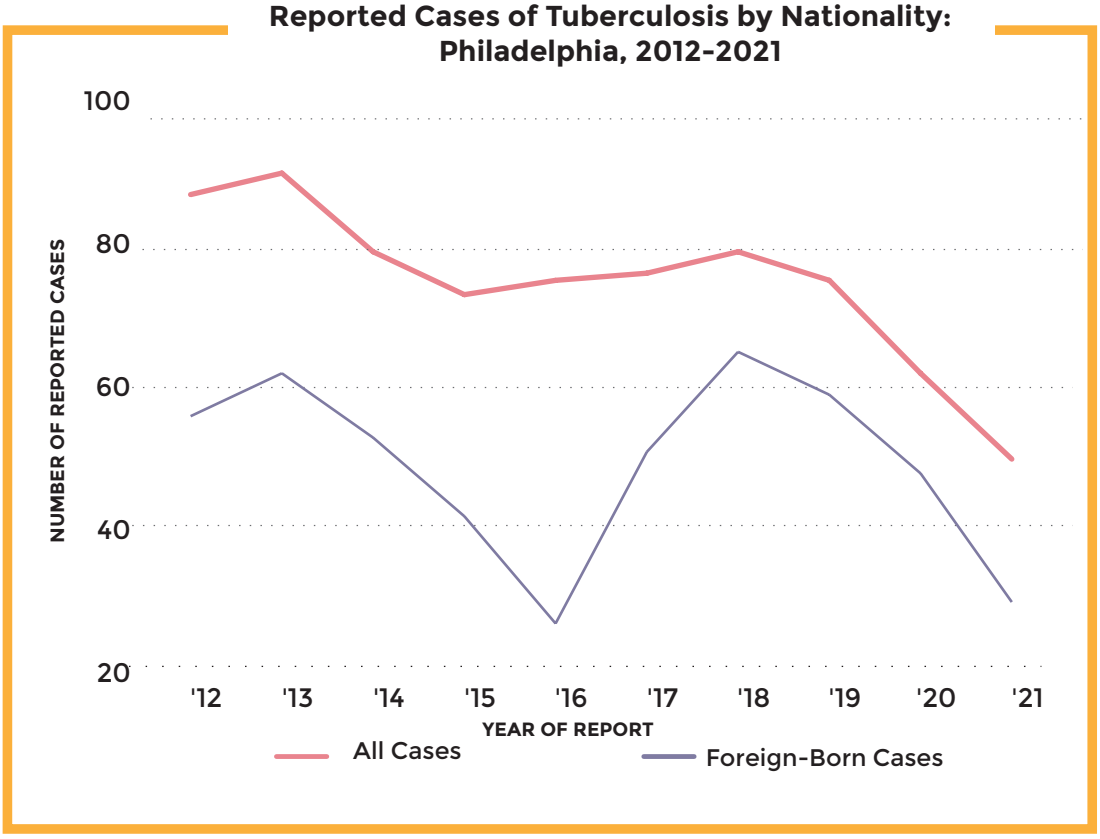
During January and February 2021, 7 Philadelphia residents were diagnosed with Legionnaires' disease, an unusually high number of reports to occur during the winter. Of the 7 cases, 3 occurred within the same zip code and were in close proximity, including 1 who lived in a group home. Of the 7 cases, 5 were interviewed and reported no risk factors such as travel or recreational water exposures. Four cases, including all 3 that occurred in the same zip code, reported building and construction near their home. PDPH performed field assessments of the homes within the same zip code, which confirmed ongoing construction. No cooling towers were identified near the homes. A facility assessment was performed for the group home but did not identify any ongoing potential sources of contamination. However, recent building work and a sewage leak had occurred prior to the case's onset.

Number of Legionellosis Reports by Age: Philadelphia, 2021

	0-50 Years		51-64 Years		65+ Years		Total	
	n	%	n	%	n	%	n	%
Total	12	26.1	23	50.0	11	23.9	46	100

TUBERCULOSIS
(*Mycobacterium tuberculosis*)

Reported Cases of Tuberculosis by Nationality: Philadelphia, 2012-2021



Number of Tuberculosis Reports by Age: Philadelphia, 2021

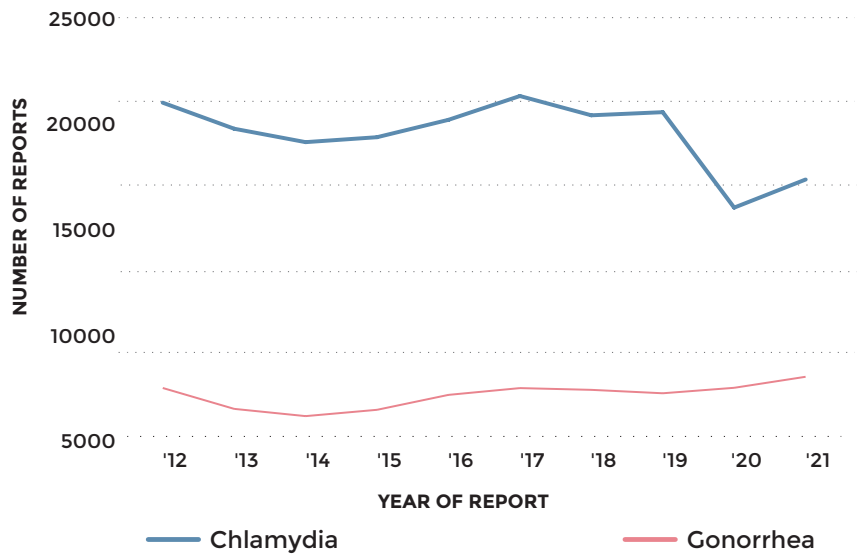
	0-44 Years		45-64 Years		65+ Years		Total	
	n	%	n	%	n	%	n	%
Total	17	34.7	18	36.7	14	28.6	49	100

6 SEXUALLY TRANSMITTED DISEASES

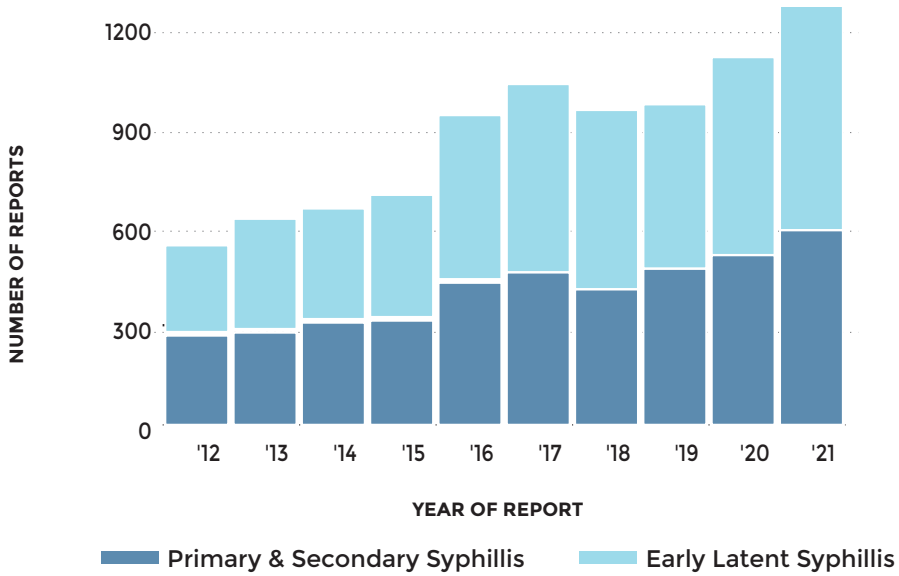
OVERVIEW
CHLAMYDIA
GONORRHEA
SYPHILIS-PRIMARY & SECONDARY
SYPHILIS-LATENT

OVERVIEW

Reported Chlamydia and Gonorrhea Cases: Philadelphia, 2012-2021

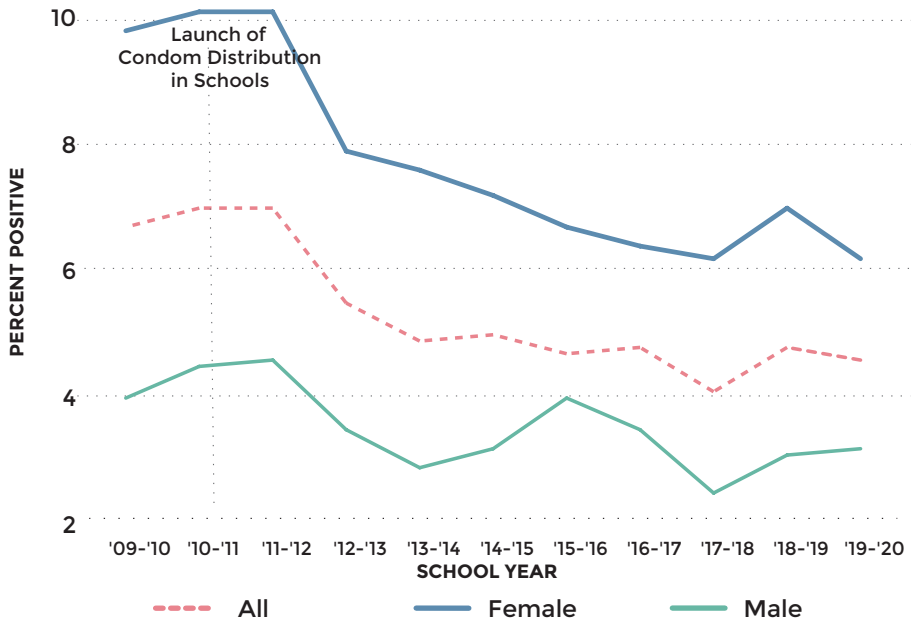


Primary & Secondary and Early Latent Syphilis: Philadelphia, 2012-2021



OVERVIEW (Cont.)

Percent of Philadelphia Public High School Students Testing Positive for Chlamydia and/or Gonorrhea: Philadelphia, by School Year 2009-2020



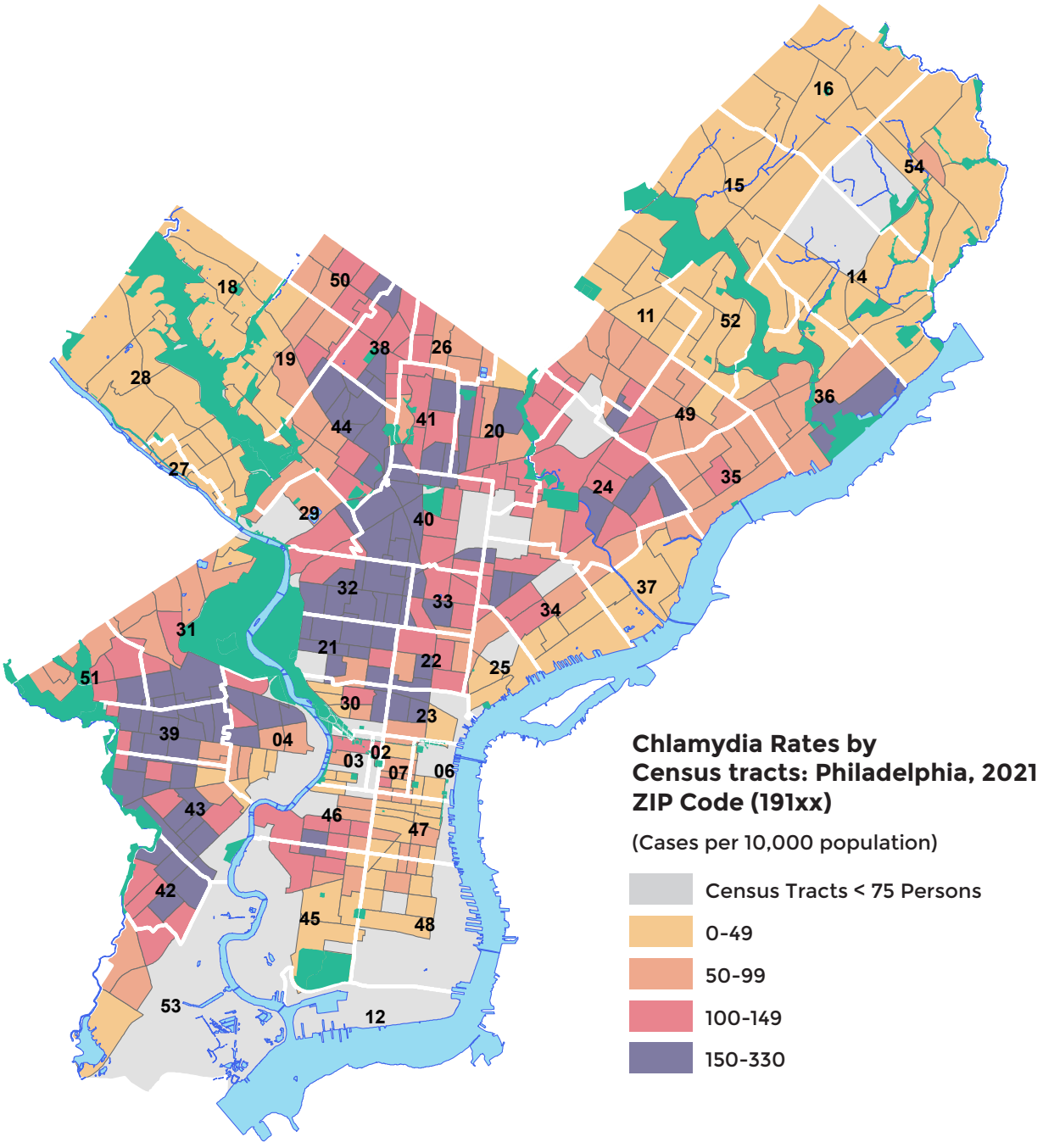
**2020 school year cut short by COVID shutdown*

Percent of Philadelphia Public High School Students Testing Positive for Chlamydia and/or Gonorrhea: Philadelphia, by School Year 2009-2020

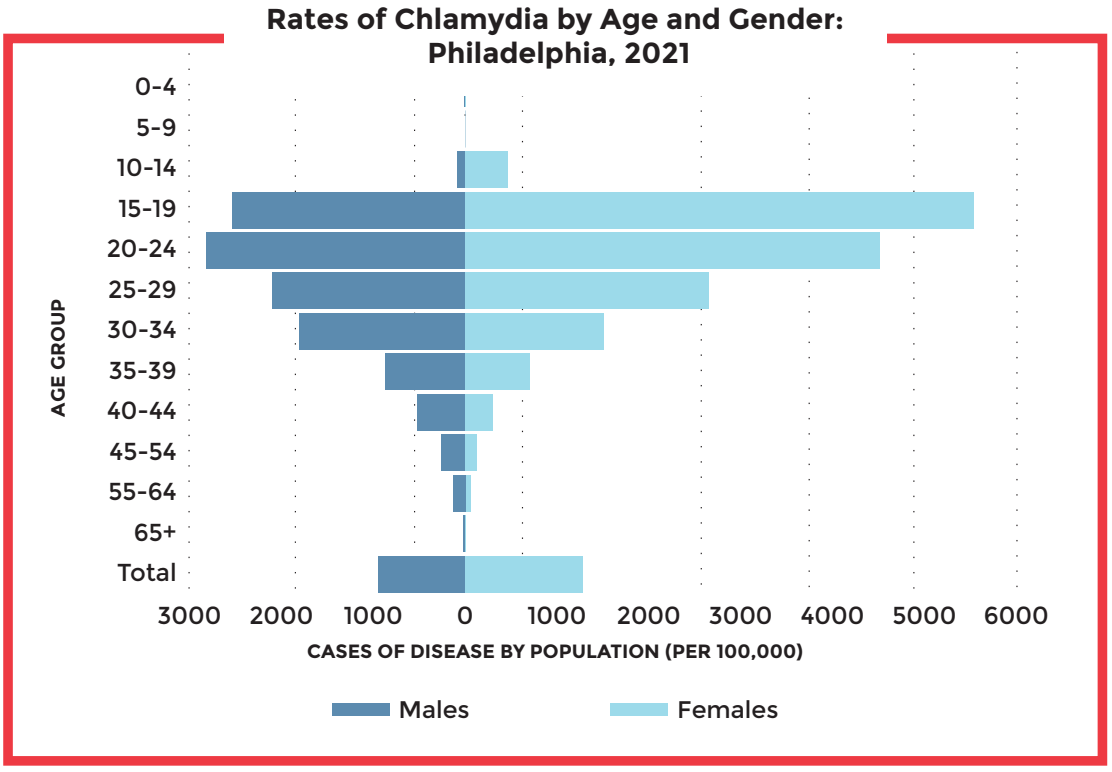
	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20
	%	%	%	%	%	%	%	%	%	%	%
Male	3.9	4.4	4.5	3.4	2.8	3.1	3.9	3.4	2.4	3.0	3.1
Female	9.7	10	10	7.8	7.5	7.1	6.6	6.3	6.1	6.9	6.1
Total	6.6	6.9	6.9	5.4	4.8	4.9	4.6	4.7	4.0	4.7	4.5

CHLAMYDIA

(*Chlamydia trachomatis*)



CHLAMYDIA (Cont.)



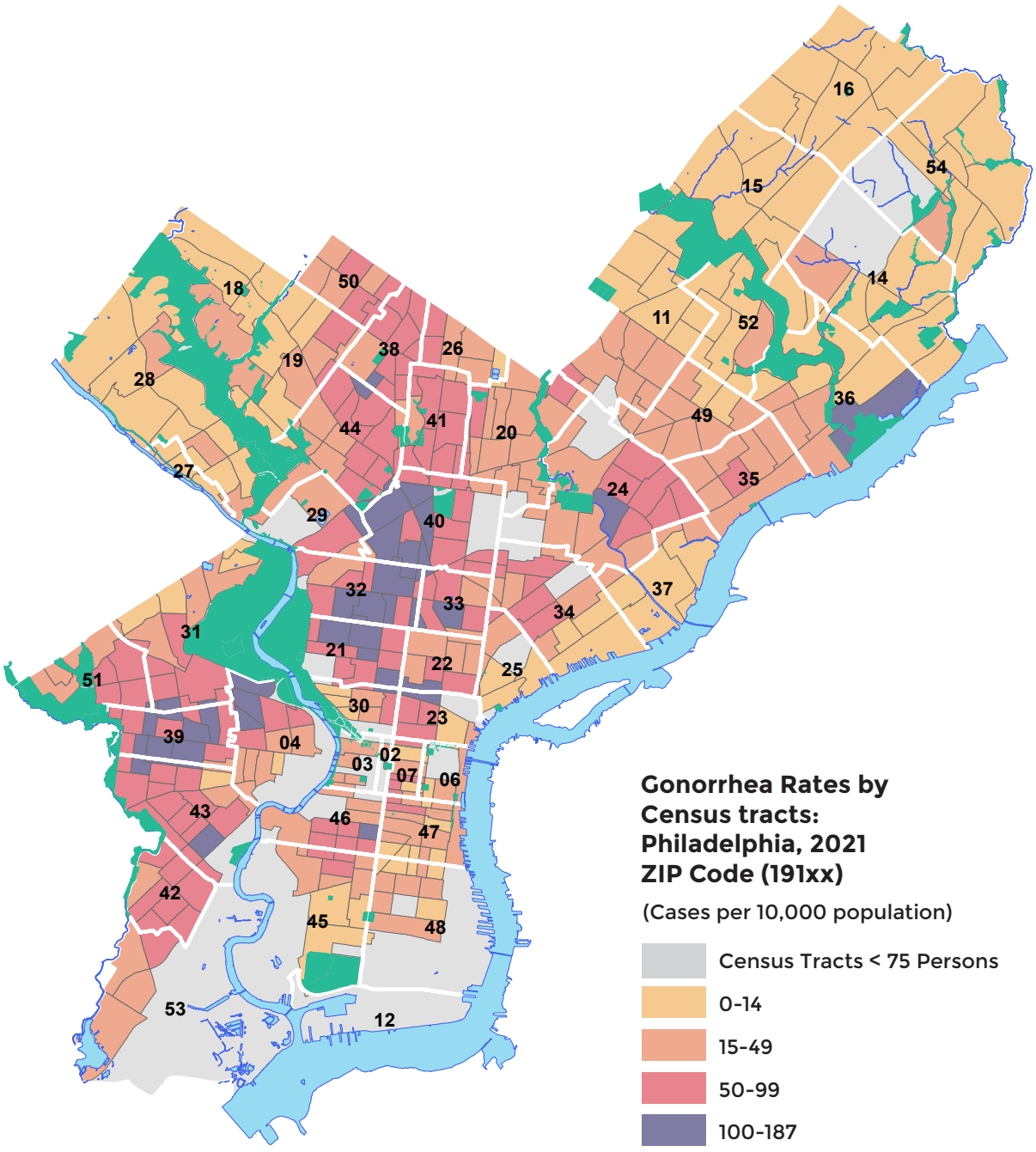
Number of Chlamydia Reports by Age, Gender, and Region: Philadelphia, 2021

	NE		NW		N		CC		S		W/SW		Total*	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Male														
0-14 Yrs	11	0	<10	--	15	0	<10	--	<10	--	19	0	47	1
15-19 Yrs	154	2	59	1	732	11	29	0	61	1	378	6	1,413	22
20-24 Yrs	297	5	78	1	859	13	59	1	124	2	433	7	1,850	29
25-34 Yrs	279	4	83	1	916	14	185	3	227	4	492	8	2,182	34
35+ Yrs	125	2	40	1	344	5	101	2	141	2	173	3	924	14
Female														
0-14 Yrs	22	0	<10	--	91	1	<10	--	19	0	52	1	193	2
15-19 Yrs	365	4	115	1	1,727	17	60	1	158	2	780	8	3,205	32
20-24 Yrs	379	4	116	1	1,655	17	196	1	200	2	813	8	3,269	33
25-34 Yrs	371	4	109	1	1,256	13	124	1	195	2	588	6	2,643	27
35+ Yrs	78	1	21	0	313	3	31	0	68	1	141	1	652	7
Grand Total	2,081	13	625	4	7,914	48	702	4	1,193	7	3,869	24	16,384	

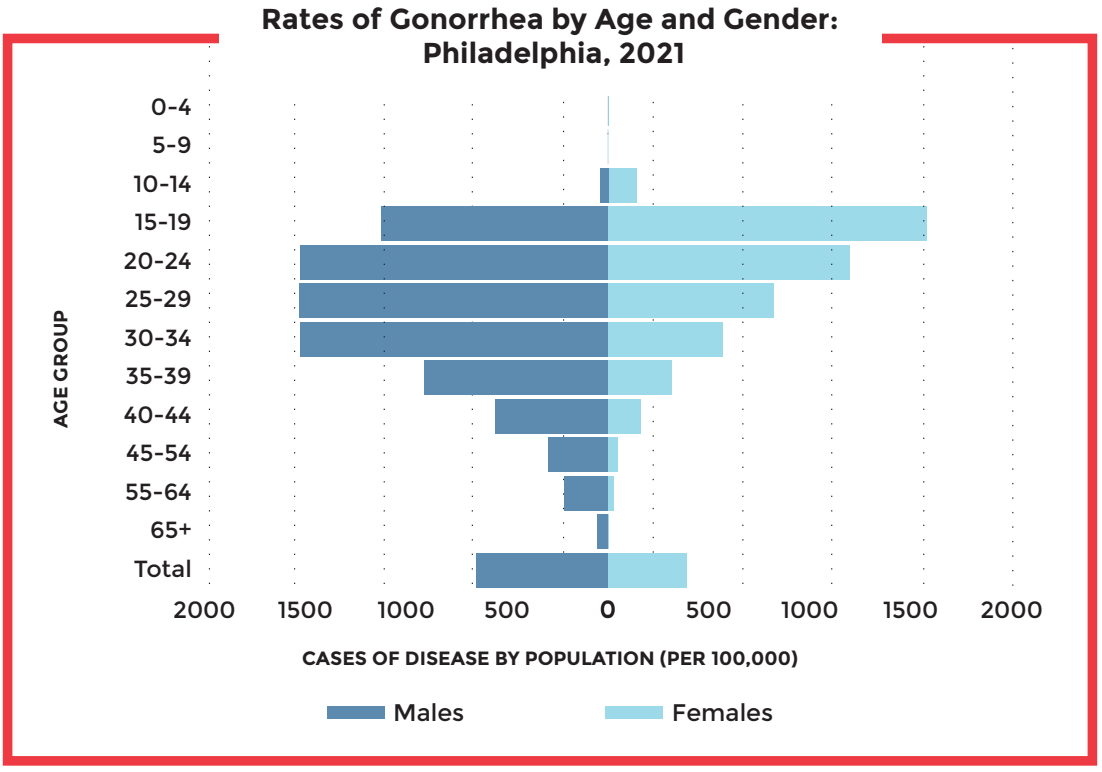
*unknown=781

GONORRHEA

(*Neisseria gonorrhoeae*)



GONORRHEA (Cont.)



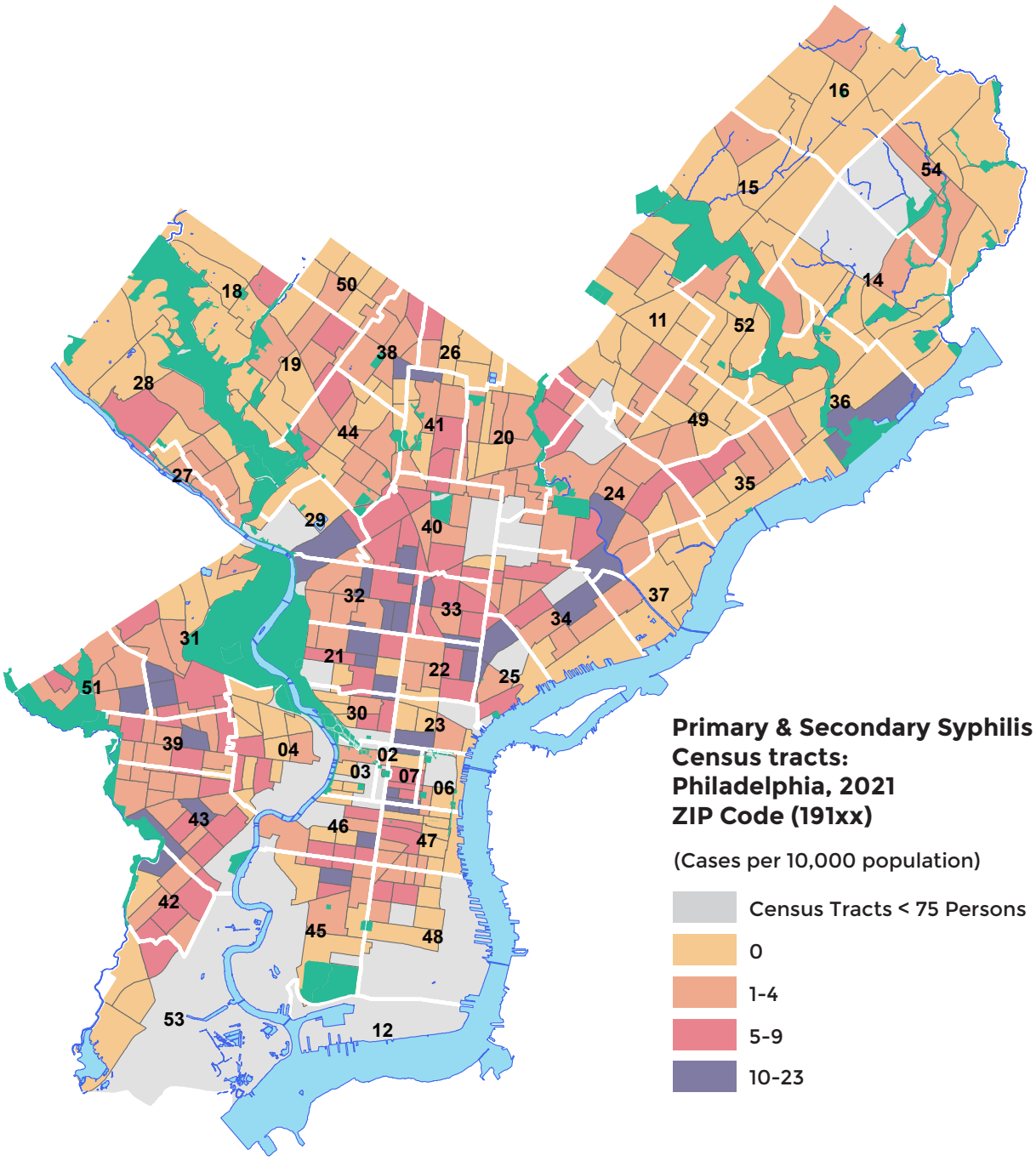
Number of Gonorrhea Reports by Age, Gender, and Region: Philadelphia, 2021

	NE		NW		N		CC		S		W/SW		Total*	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Male														
0-14 Yrs	<10	--	<10	--	13	0	<10	--	<10	--	<10	--	21	0
15-19 Yrs	54	1	26	1	317	7	16	0	39	1	182	4	634	14
20-24 Yrs	102	2	28	1	551	12	47	1	65	1	230	5	1,023	23
25-34 Yrs	151	3	59	1	697	16	140	3	219	5	436	10	1,702	38
35+ Yrs	111	2	49	1	445	10	116	3	130	3	225	5	1,076	24
Female														
0-14 Yrs	<10	--	<10	--	26	1	<10	--	<10	--	23	1	60	2
15-19 Yrs	80	3	31	1	527	17	19	1	40	1	226	7	923	30
20-24 Yrs	86	3	21	1	465	15	20	1	36	1	246	8	874	29
25-34 Yrs	87	3	32	1	460	15	26	1	53	2	217	7	875	29
35+ Yrs	40	1	11	0	133	4	13	0	18	1	82	3	297	10
Grand Total	719	10	257	3	3,635	49	398	5	604	8	1,875	25	7,488	100

*unknown=336

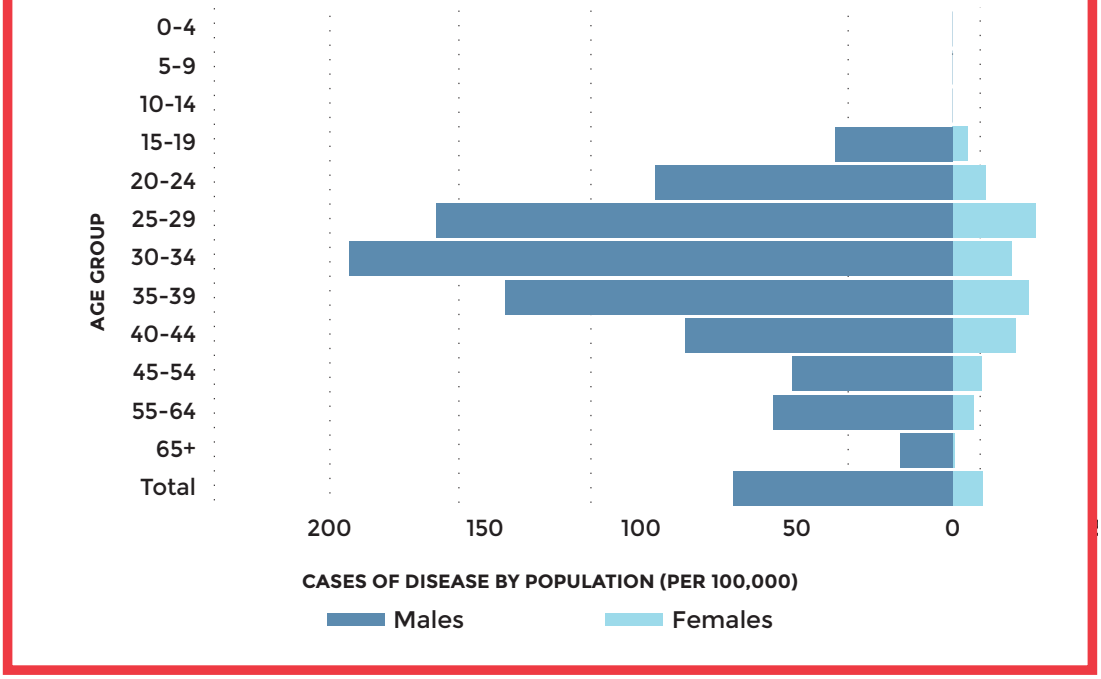
SYPHILIS–PRIMARY & SECONDARY

(*Treponema pallidum*)



SYPHILIS-PRIMARY & SECONDARY (Cont.)

Rates of Primary & Secondary Syphilis by Age and Gender: Philadelphia, 2021



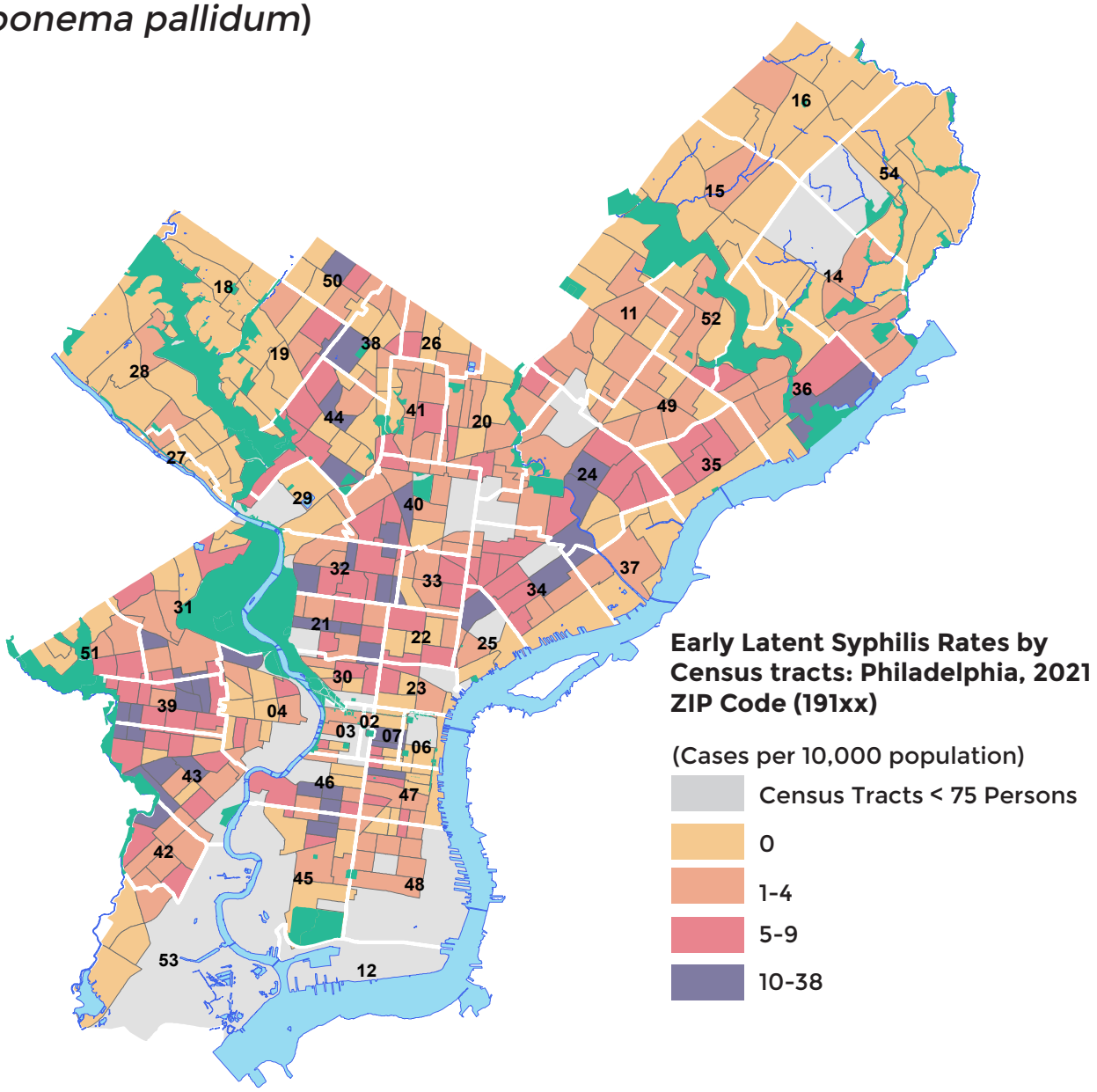
Number of Primary & Secondary Syphilis Reports by Age and Region: Philadelphia, 2021

	NE		NW		N		CC		S		W/SW		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Age														
0-24 Yrs	<10	--	<10	--	52	9	<10	--	<10	--	25	4	96	4
25-34 Yrs	24	4	11	2	92	16	19	3	29	5	59	10	234	41
35+ Yrs	22	4	<10	--	109	19	26	5	34	6	46	8	243	42
Total	55	10	17	3	253	44	47	8	71	12	130	23	573	100

*unknown=13

SYPHILIS-EARLY LATENT

(*Treponema pallidum*)



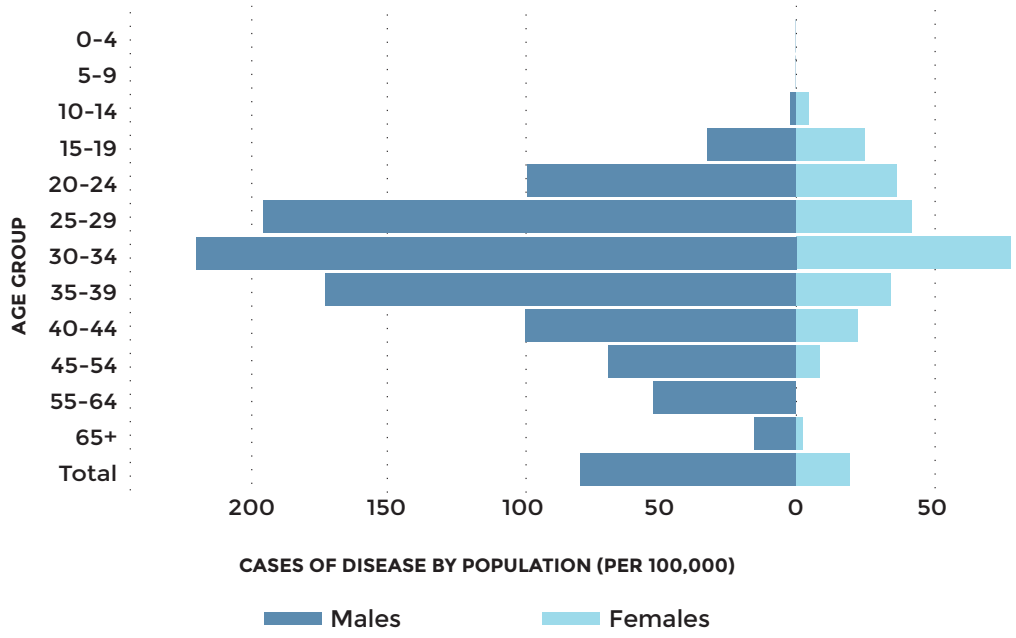
Number of Early Latent Syphilis Reports by Age and Region: Philadelphia, 2021

	NE		NW		N		CC		S		W/SW		Total*	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Age														
0-24 Yrs	15	2	<10	--	60	8	<10	--	11	2	36	5	130	18
25-34 Yrs	44	6	<10	--	130	18	<25	--	30	4	77	11	311	44
35+ Yrs	31	4	<10	--	118	17	22	3	38	5	53	7	271	38
Total	90	13	22	3	308	43	47	7	79	11	166	23	712	100

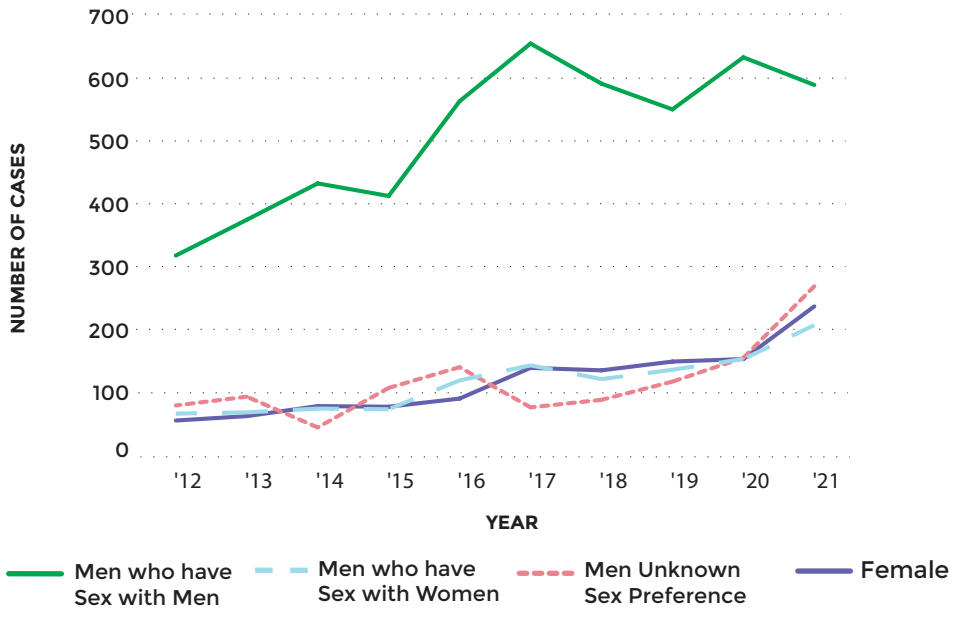
*unknown=17

SYPHILIS-EARLY LATENT (Cont.)

Rates of Early Latent Syphilis by Age and Gender: Philadelphia, 2021



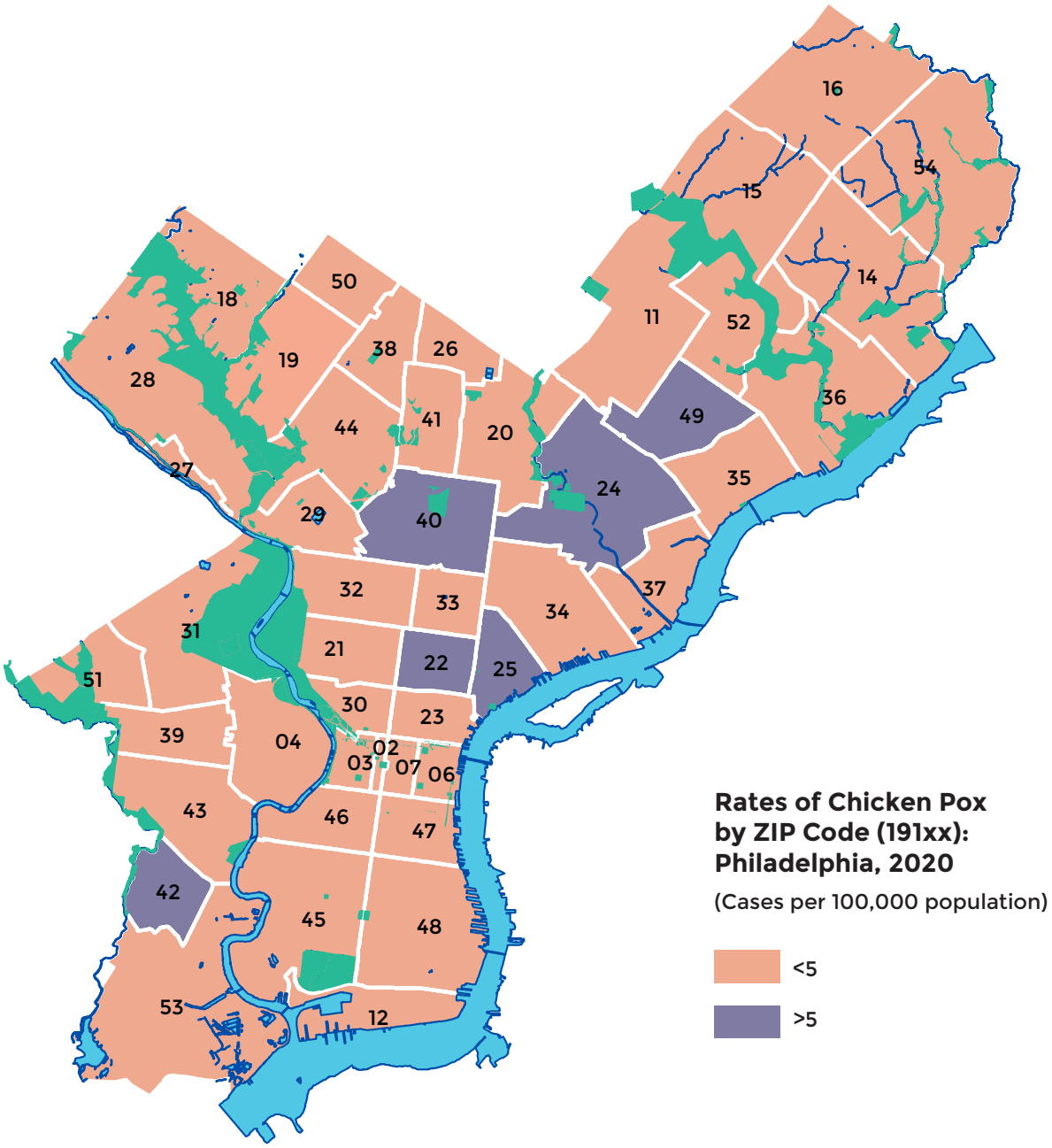
Primary & Secondary and Early Latent Syphilis Cases by Year and Risk Group: Philadelphia, 2012-2021



7 VACCINE-PREVENTABLE DISEASES

CHICKEN POX
MENINGOCOCCAL DISEASE
PERTUSSIS

CHICKEN POX
(Varicella zoster virus)



CHICKEN POX (Cont.)

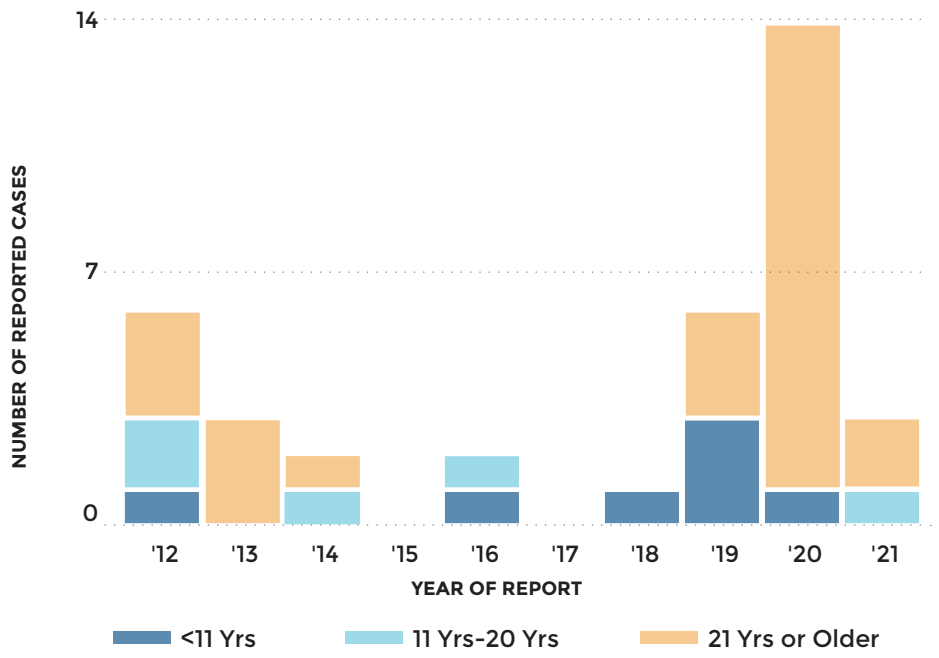
Number of Chicken Pox Reports by Age: Philadelphia, 2021

	0-9 Years		10-29 Years		30+ Years		Total	
	n	%	n	%	n	%	n	%
Total	13	37.14	11	31.43	11	31.43	35	100

MENINGOCOCCAL DISEASE

(*Neisseria meningitidis*)

Invasive Meningococcal Disease by Age Group: Philadelphia, 2012-2021



OF NOTE

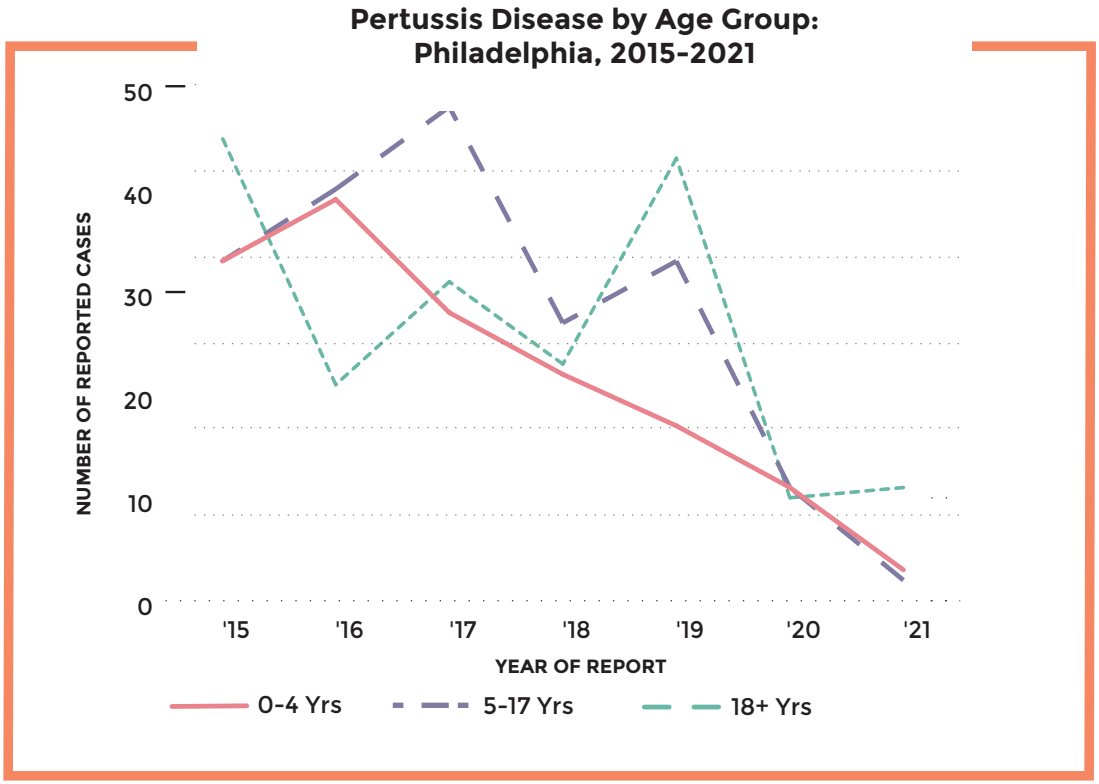
In 2021, 13,003 individuals aged 16-23 years from Philadelphia received ≥ 1 dose of meningococcal B vaccine, which provides short-term protection against most strains of serogroup B meningococcal disease. It should be noted that meningococcal B vaccine is administered following shared clinical decision making between the provider and the patient (Category B Recommendation).

PDPH identified a total of 4 cases of meningococcal disease (3 confirmed and 1 suspect) in 2021. Of note, all the cases were male with a mean age of 21 years (range: 0-54 years). Among two isolates viable for serogrouping, one was identified as non-typable N. meningitidis and the second was identified as N. meningitidis serogroup B. No ciprofloxacin-resistant, -lactamase-producing Neisseria meningitidis serogroup Y cases were identified in 2021.

Reports of Meningococcal Disease by Serogroup Per Year: Philadelphia, 2011-2021

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total N (%)
Serogroup												
B	1	2	0	1	0	1	0	0	3	1	1	10 (24%)
C	0	1	0	0	0	0	0	0	0	12	0	13 (32%)
W	0	0	0	0	0	0	0	0	0	0	0	0 (0%)
X	1	0	0	0	0	0	0	0	0	0	0	1 (2%)
Y	2	2	2	0	0	0	0	0	1	1	0	8 (20%)
Z	0	0	0	0	0	0	0	0	0	0	0	0 (0%)
Nontypeable	0	1	1	1	0	1	0	1	2	0	2	9 (22%)
Total	**4**	**6**	**3**	**2**	**0**	**2**	**0**	**1**	**6**	**14**	**3**	**41 (100%)**

PERTUSSIS
(*Bordetella pertussis*)

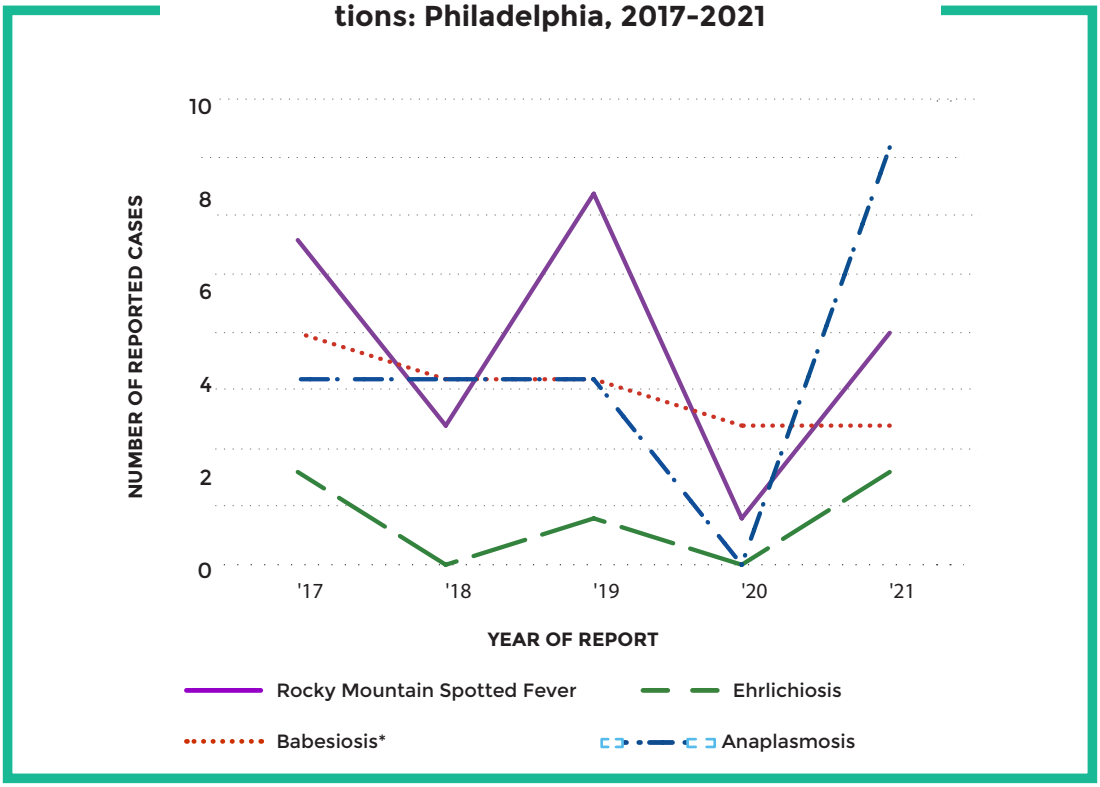


VECTOR-BORNE DISEASES

TICKBORNE INFECTIONS
ARBOVIRAL INFECTIONS
ZIKA VIRUS
LYME DISEASE
MALARIA
WEST NILE VIRUS

TICKBORNE INFECTIONS

Reported Cases of Non-Lyme Tickborne Infections: Philadelphia, 2017-2021



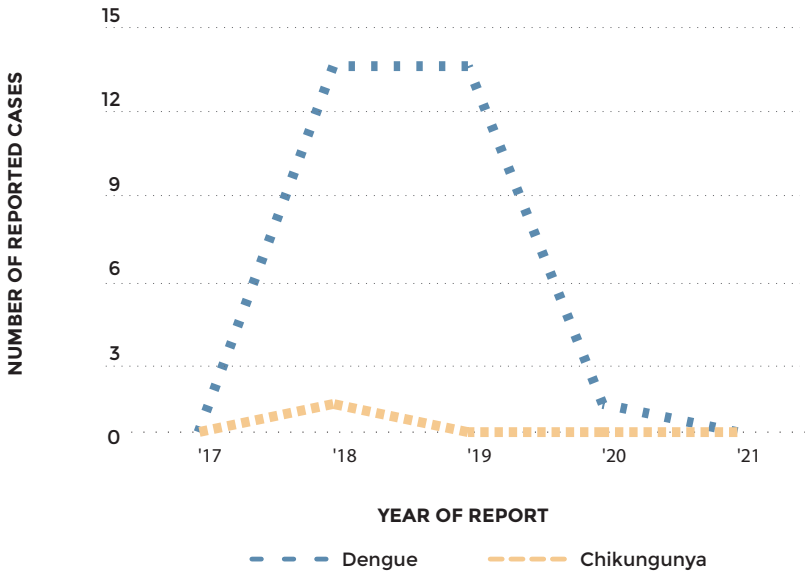
Reported Cases of Other Non-Lyme Tickborne Infections: Philadelphia, 2017-2021

	2017	2018	2019	2020	2021	Total
Anaplasmosis	4	4	4	0	9	21
Babesiosis*	5	4	4	3	3	19
Ehrlichiosis	2	0	1	0	2	5
Rocky Mountain Spotted Fever	7	3	8	1	5	24
Total	18	11	17	4	19	69

*All infection include locally-acquired and travel-associated infections. Babesiosis also includes transfusion-associated cases.

ARBOVIRAL INFECTIONS

Reported Cases of Travel-associated Arboviral Infections: Philadelphia, 2017-2021



Demographics of Travel Associated Arboviral Infections: Philadelphia, 2014-2021

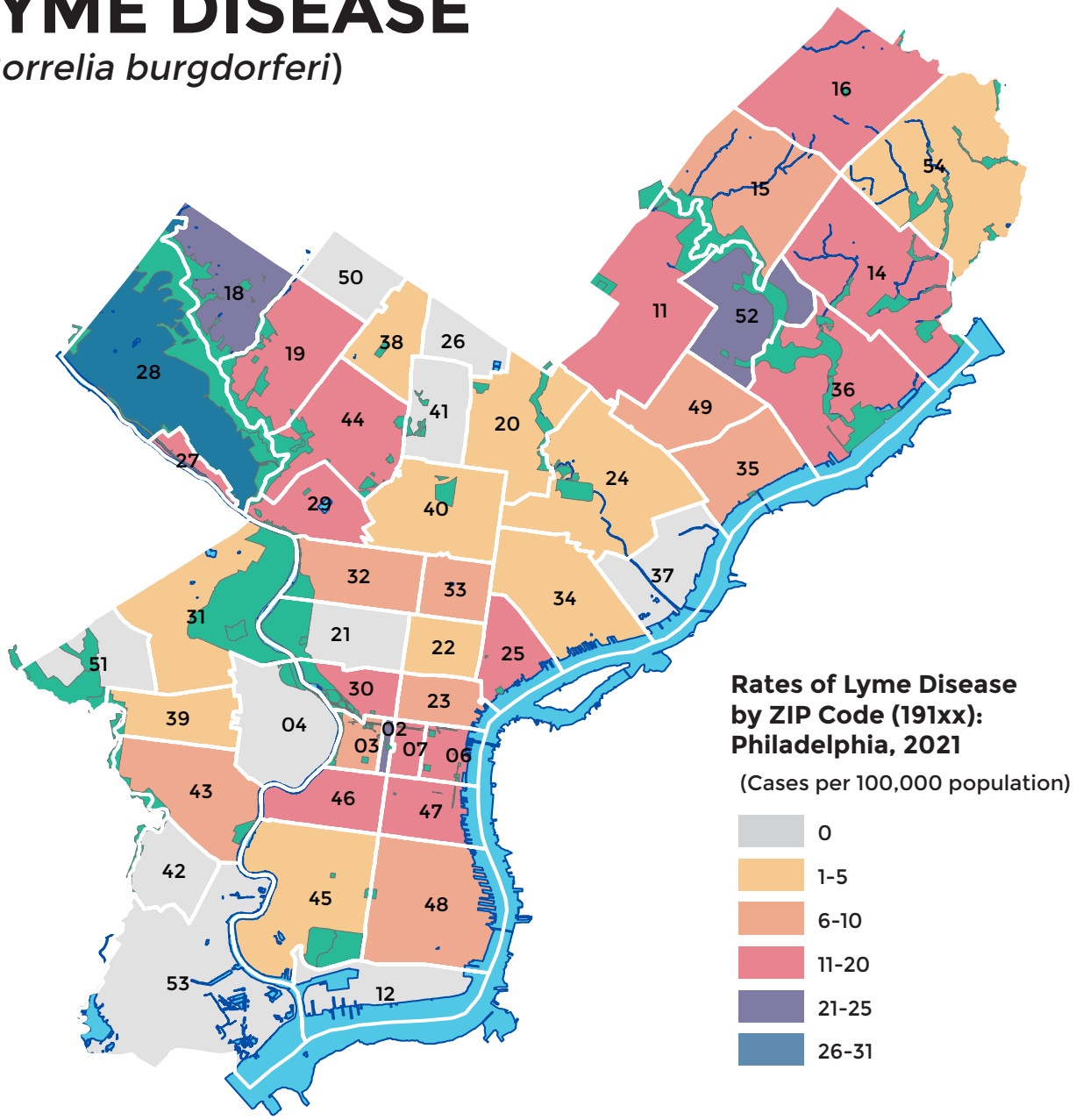
	Chikungunya		Dengue	
	n= 44	%	n= 36	%
Female	34	77	10	28
Foreign Born	31	70	8	23
Median Age (Range) Years	42.5	(5-78)	35.5	(5-64)

Outcomes of Travel-associated Arboviral Infections: Philadelphia, 2014-2021

	Chikungunya		Dengue	
	n= 44	%	n= 36	%
Hospitalized	9	20	13	37
Death	0	0	0	0

LYME DISEASE

(*Borrelia burgdorferi*)

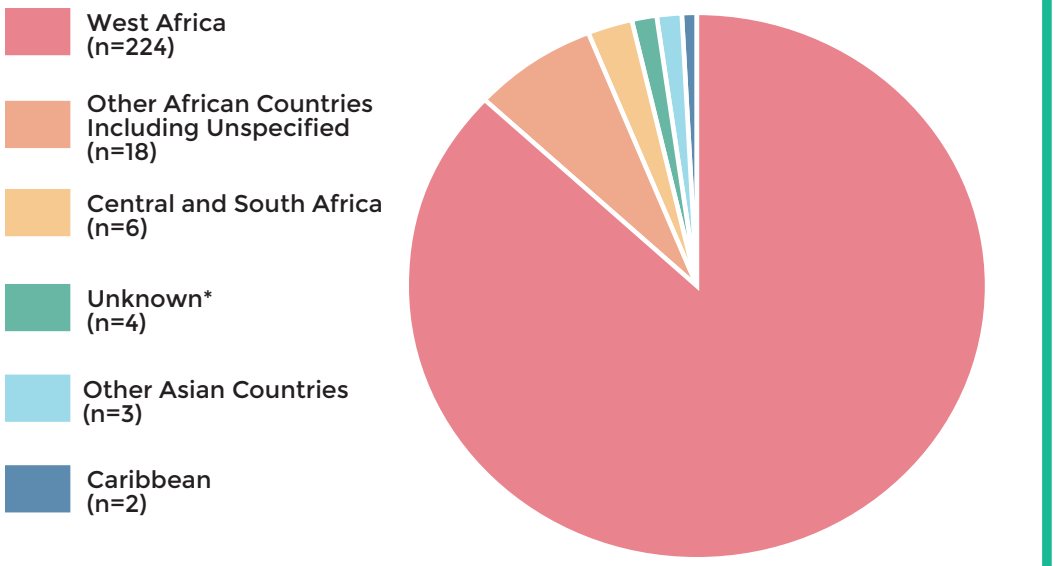


Number of Lyme Disease Reports by Age and Gender: Philadelphia, 2021

	0-34 Years		35-60 Years		61+ Years		Total	
	n	%	n	%	n	%	n	%
Male	34	47.9	24	19.4	13	10.5	71	57.3
Female	21	39.6	15	12.1	17	13.7	53	42.7
Total	55	44.4	39	31.5	30	24.2	124	100

MALARIA
(*Plasmodia spp.*)

Reported Cases of Malaria by Travel History: Philadelphia, 2012-2021



*Includes one cryptic case with unknown source of infection and one congenital case

WEST NILE VIRUS

OF NOTE

During 2021, PDPH identified 10 adult residents with West Nile virus (WNV) infection (8 neuro-invasive WNV and 2 WNV fever). Eight cases required hospitalization, and all were discharged in improved condition. Cumulative WNV positivity in mosquitoes collected during the 2021 season was higher than 2020 (36% vs 16%), and higher than the historic median rate (6%).

YELLOW FEVER

OF NOTE

During Fall 2021, CDC initiated a coordinated, multi-jurisdiction investigation of a cluster of Yellow Fever encephalitis cases among transplant recipients, which included a patient from Philadelphia. Three of four organ transplant recipients (heart, kidney, liver) experienced neurologic decline in October 2021 following transplants in late September 2021. A summary of the investigation is available at: https://www.sciencedirect.com/science/article/pii/S2666524723001702?via%3Dihub.

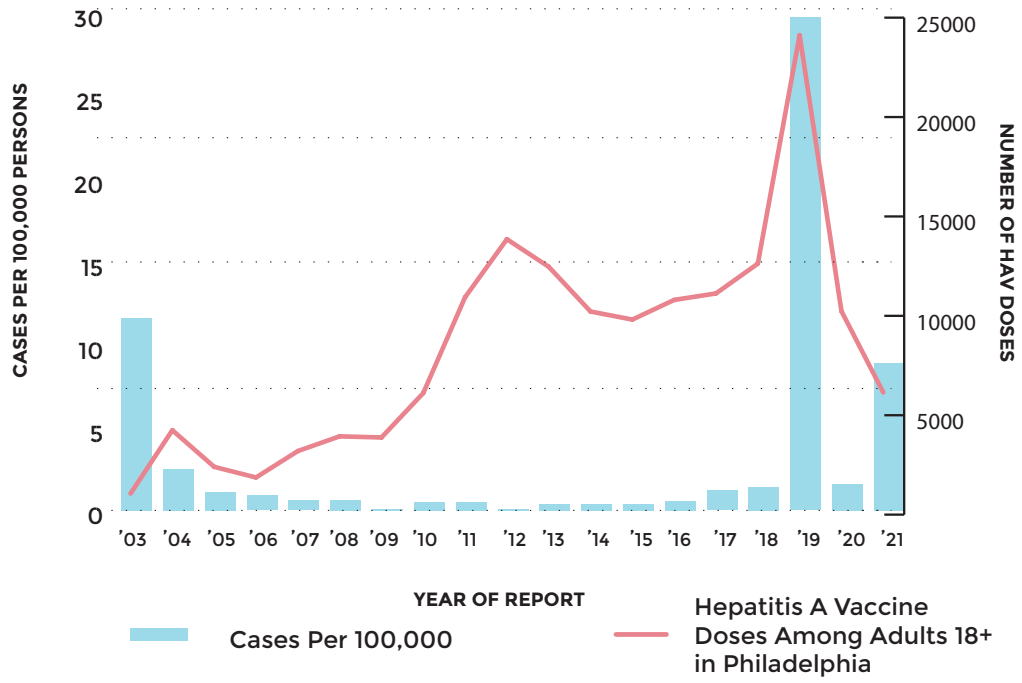
9 VIRAL HEPATITIS

INFECTIONS

HEPATITIS A
HEPATITIS B & C-ACUTE
HEPATITIS B-CHRONIC
HEPATITIS B & C-PERINATAL
HEPATITIS C-CHRONIC

HEPATITIS A
(Hepatitis A virus)

**Rates of Hepatitis A:
Philadelphia, 2003–2021**



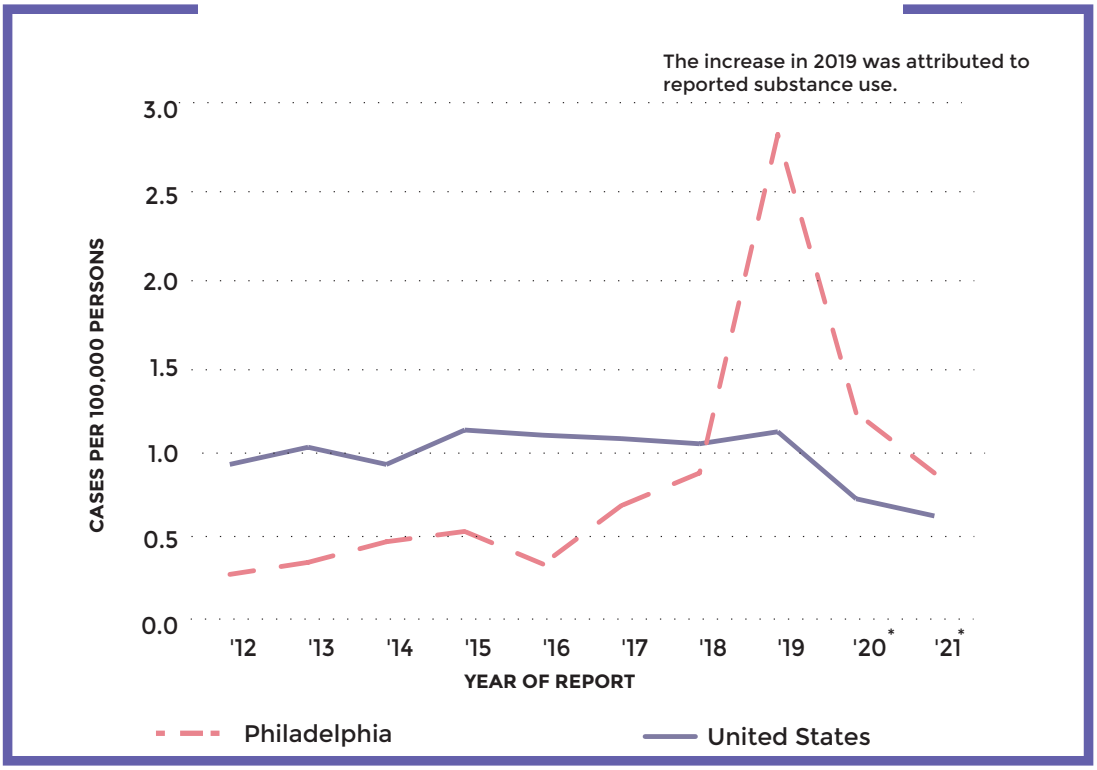
OF NOTE

During 2021, hepatitis A increases continued to occur nationally. In Philadelphia, PDPH identified 138 confirmed cases of hepatitis A in 2021, primarily among persons who use drugs and persons experiencing homelessness (81, 59%). Of those reporting current drug use, the majority reported opioid use (61, 82%). The majority of cases occurred in the second half of 2021 (130, 94%), with case counts peaking in October. Median age of the hepatitis A cases was 40 (range: 1 - 73 years). Most hepatitis A cases were hospitalized (122, 88%) and 1 (<1%) infection was fatal. Nine cases were linked epidemiologically*, resulting in 4 distinct clusters. Whole genome sequencing was performed on specimens from 3 cases. Results indicated circulation of a strain that differed from the predominant strain in Philadelphia from 2018-2020. Through targeted outreach and collaboration with partner agencies, PDPH reinitiated efforts to increase hepatitis A vaccination among persons at-risk for hepatitis A.

**Epidemiologically linked case: a case in which the patient has/has had contact with one or more persons who have/had the disease, and transmission of the agent by the usual modes of transmission is plausible. A case may be considered epidemiologically linked to a laboratory-confirmed case if at least one case in the chain of transmission is laboratory confirmed.*

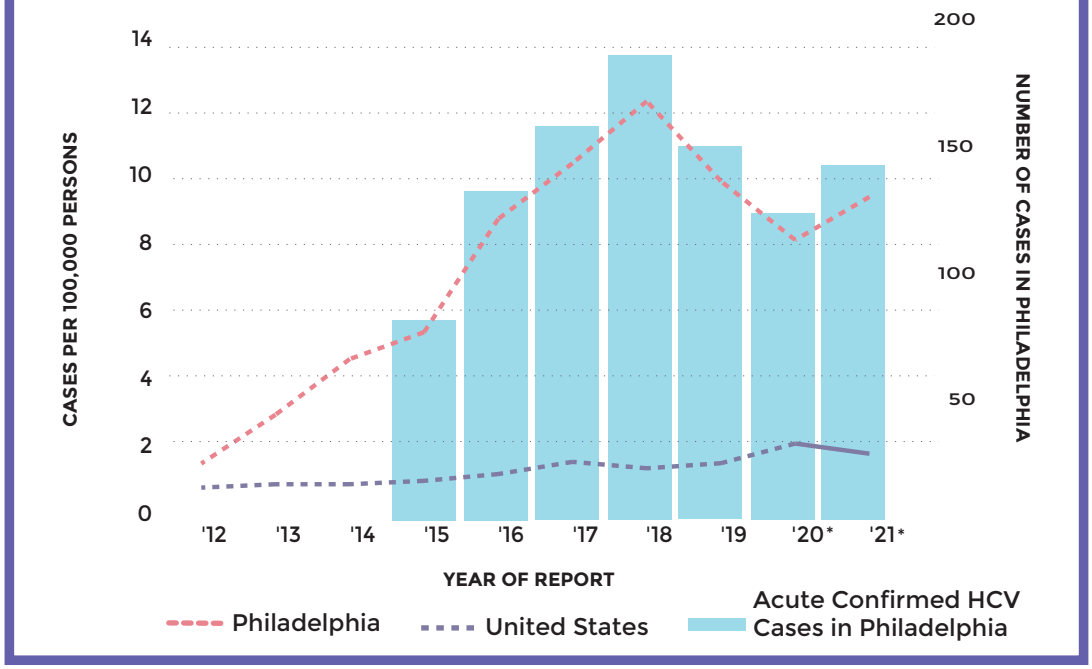
HEPATITIS-ACUTE
(Hepatitis B & C virus)

**Rates of Reported Acute Hepatitis B:
Philadelphia and United States, 2012-2021**



*Totals for 2020 and 2021 were likely to have been impacted by the COVID-19 pandemic.

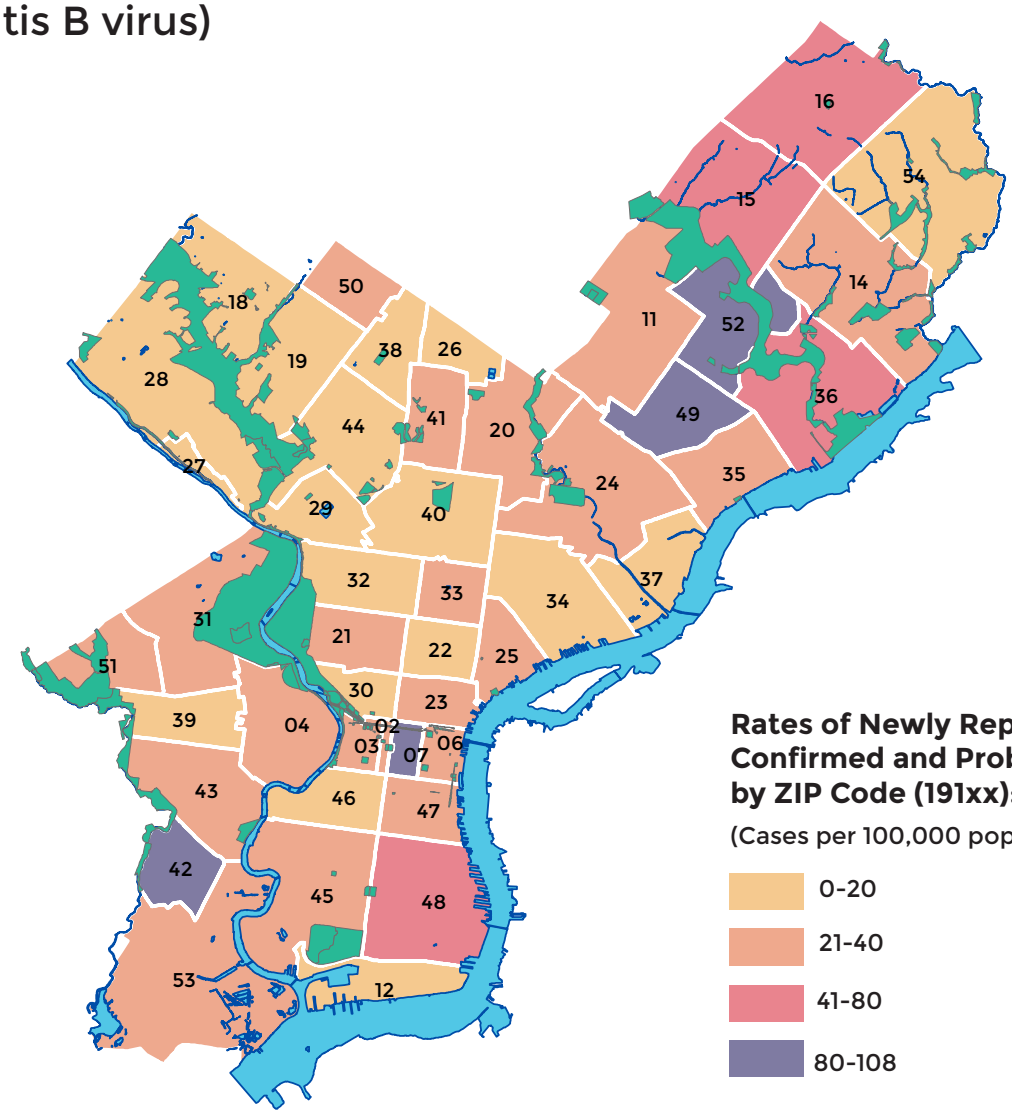
**Rates of Reported Acute Hepatitis C:
Philadelphia and United States, 2012-2021**



*Totals for 2020 and 2021 were likely to have been impacted by the COVID-19 pandemic.

HEPATITIS B-CHRONIC

(Hepatitis B virus)



Rates of Newly Reported Chronic Confirmed and Probable HBV Infection by ZIP Code (191xx): Philadelphia, 2021

(Cases per 100,000 population)

- 0-20
- 21-40
- 41-80
- 80-108

Number of Newly-reported Chronic Hepatitis B Reports by Age and Gender: Philadelphia, 2021

	0-30 Years		31-45 Years		46-65 Years		66+ Years		Total*	
	n	%	n	%	n	%	n	%	n	%
Male	33	6.2	131	24.4	111	20.7	37	6.9	312	58.1
Female	39	7.3	82	15.3	85	15.8	19	3.5	225	41.9
Total	72	13.4	213	39.7	196	36.5	56	10.4	537	100

*13 had missing age

HEPATITIS-PERINATAL
(Hepatitis B & C virus)

Comparison of Perinatal Hepatitis B: Philadelphia 2012-2020

	2012	2013	2014*	2015	2016	2017	2018	2019	2020
Total Birthing Person-Infant Pairs Followed	171	153	164	155	174	131	139	128	105
Total Children Receiving HBIG** Within One Calendar Day of Birth	154 (90%)	140 (92%)	23 (14%)	81 (52%)	157 (90%)	118 (90%)	135 (97%)	112 (88%)	103 (98%)
Total Children Receiving Birth HepB Vaccine Within One Calendar Day of Birth	167 (98%)	150 (98%)	22 (23%)	128 (83%)	163 (94%)	121 (92%)	139 (100%)	122 (95%)	103 (98%)
Total Children Receiving 3 HBV Vaccines in 1 Year	167 (98%)	134 (88%)	139 (85%)	120 (77%)	154 (89%)	121 (92%)	124 (92%)	112 (88%)	92 (88%)
Children HBsAg+*** at Screening (9-12 months old)	1 (<1%)	0	0	1 (<1%)	0	0	0	0	0

***HBIG: Hepatitis B Immunoglobulin*

****HBsAg+: Hepatitis B surface antigen positive*

OF NOTE

The Perinatal Hepatitis B Prevention Program offers education and case management services to any person who is pregnant/gives birth and has hepatitis B. This follow up extends to the infant until they are fully screened for hepatitis B infection and immunity.
*In 2014, the quality of HBIG and birth dose of hepatitis B vaccine data was insufficient and not accepted for many infants. However, PDPH does not expect there was a meaningful gap in services offered to infants that year.

Hepatitis C-positive Babies After Perinatal Exposure: Philadelphia, 2020

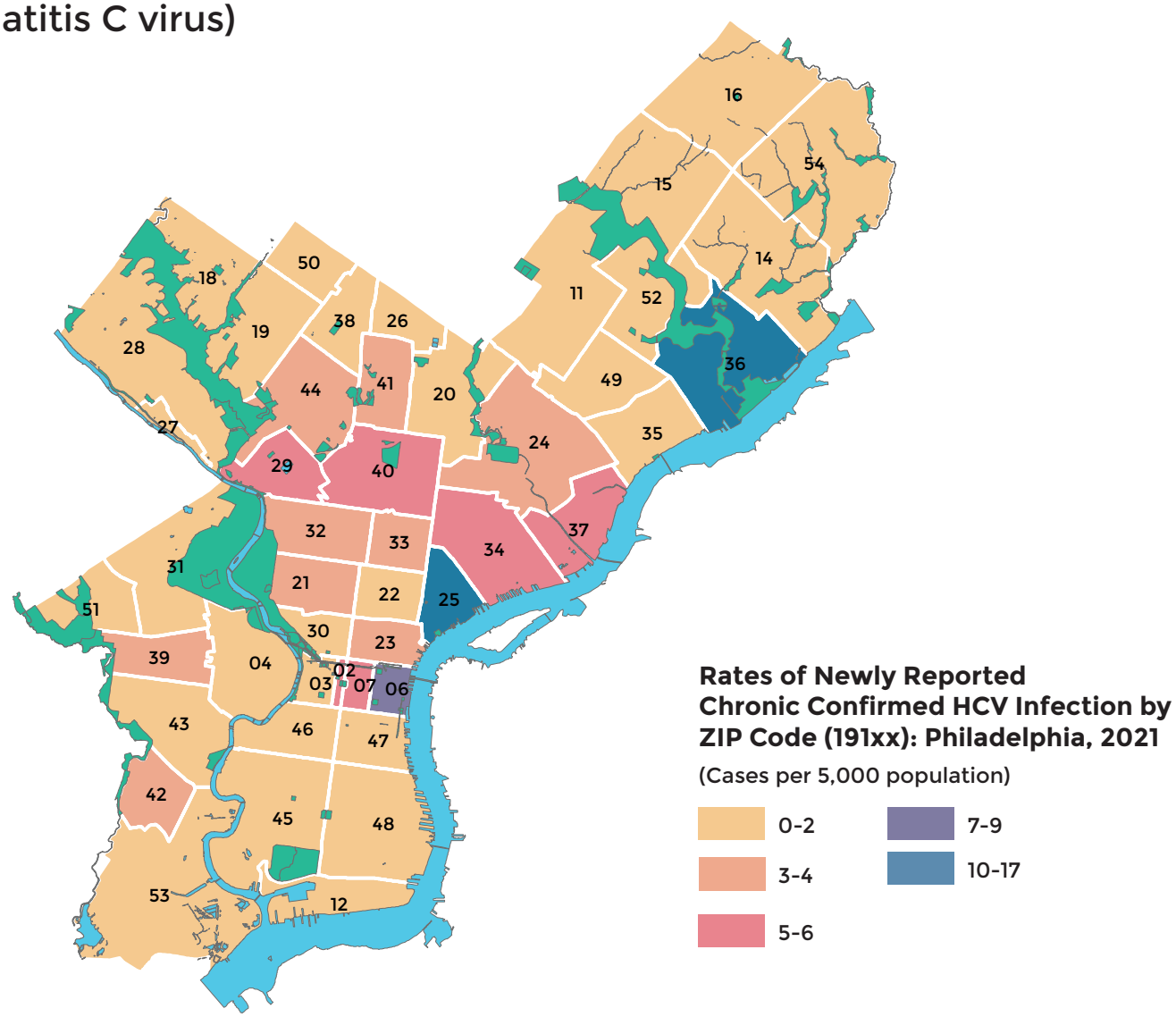
Year of Birth	Number Known Exposed	Infants with Completed Screening*	Infants Positive after Perinatal Exposure
2019	91	50	1
2020	94	40	2

OF NOTE

In 2016, PDPH formed the **nation's first Perinatal Hepatitis C Program.** The program aims to work with healthcare providers and birthing persons to: (1) identify hepatitis C-positive pregnant people, (2) encourage them to receive hepatitis C care, (3) work to ensure infants are tested appropriately for hepatitis C, (4) ensure hepatitis C-positive infants are linked to a specialist, and (5) characterize perinatal hepatitis C in Philadelphia.

HEPATITIS C-CHRONIC

(Hepatitis C virus)



Number of Newly-reported Chronic Hepatitis C Reports by Age and Gender: Philadelphia, 2021

	0-30 Years		31-45 Years		46-65 Years		66+ Years		Total*	
	n	%	n	%	n	%	n	%	n	%
Male	75	7.2	243	23.1	234	22.3	145	13.8	697	66.4
Female	58	5.5	115	11	107	10.2	72	6.9	352	33.6
Total	133	12.7	358	34.1	341	32.5	217	20.7	1,049	100

*21 had missing age

REPORTING DISEASES & CONDITIONS

NOTIFIABLE DISEASE LIST
REPORT FORM

Department of Public Health
CITY OF PHILADELPHIA

Division of Disease Control (DDC)

For more information, please visit: https://hip.phila.gov/

Call (215) 686-4514 for immediate reporting and consultation after hours, on weekends, and holidays.
Please note that you will need to **press 1 for Unified Dispatch** and ask to be connected with the Division of Disease Control on-call staff.

REPORTABLE DISEASES AND CONDITIONS

Acute flaccid myelitis*
Amebiasis
Animal bites (wild/stray/domestic)
Anthrax*
Arboviruses*
Babesiosis
Botulism*
Brucellosis*
Campylobacteriosis
Candida auris*
Carbapenem-resistant Enterobacteriaceae (CRE)
Chancroid
Chikungunya
Chlamydia trachomatis including lymphogranuloma venereum
Cholera*
Creutzfeldt-Jakob Disease
Cryptosporidiosis
Cyclosporiasis
Dengue
Diphtheria*
Ehrlichiosis/Anaplasmosis
Encephalitis*
Escherichia coli O157:H7 and Shiga toxin-producing bacteria*
Food poisoning*
Giardiasis
Gonococcal infections
Guillain-Barré Syndrome
Haemophilus influenzae, invasive disease*
Hantavirus Pulmonary Syndrome*
Hemorrhagic fever, all*
Hepatitis A
Hepatitis B, also including: pregnancy in a Hepatitis B infected woman
Hepatitis C, also including: pregnancy in a Hepatitis C infected woman
Hepatitis, other viral
Histoplasmosis
Human immunodeficiency virus (HIV/AIDS) ‡, also including:
- acute HIV infection*+
- birth of an infant to an HIV infected woman*^,
- new HIV positive result in a pregnant woman*^, and
- pregnancy in an HIV infected woman*^

Influenza (including novel influenza A*, pediatric deaths*, and institutional outbreaks*)
Lead poisoning †
Legionellosis
Leprosy (Hansen's disease)
Leptospirosis
Listeriosis
Lyme disease
Malaria
Measles (rubeola)*
Melioidosis*
Meningitis (viral, fungal, bacterial)
Meningococcal infections*
Mpox*
Multisystem Inflammatory Syndrome (MIS)
Mumps
Neonatal Abstinence Syndrome (NAS)
Novel coronaviruses (SARS, MERS-CoV, COVID-19 including infections in pregnant persons)*
Pandrug-resistant organism*•
Pertussis (whooping cough)
Plague*
Poliomyelitis*
Psittacosis (ornithosis)
Rabies*
Rickettsial diseases (including Rocky Mountain spotted fever, rickettsial pox, typhus fever)
Rubella (German Measles) & Congenital Rubella*
Salmonellosis
Shigellosis
Smallpox*
Staphylococcus aureus, vancomycin insensitive
Streptococcal disease, invasive group A Streptococcal disease, invasive group B (infants 0-89 days of age)
Streptococcus pneumoniae, invasive disease
Syphilis
Tetanus
Toxic Shock Syndrome
Trichinosis
Tuberculosis §
Tularemia*
Typhoid (Salmonella typhi and paratyphi)*
Varicella, including zoster
Vibriosis
West Nile Virus*
Yellow Fever*
Yersiniosis
Zika, including prenatal and postnatal birth defects associated with congenital Zika infection

*Mandatory reporting of **all** immunizations administered to **all individuals of all ages** in the City of Philadelphia to PhilaVax, the City-wide immunization information system, at vax.phila.gov.*

***Report suspected and confirmed cases within 24 hours.** All unusual disease clusters, disease outbreaks, and unusual disease occurrences should be reported immediately.*
†Report to Lead Poisoning Prevention at (215) 685-2788
§Report to TB Control Program at (215) 685-6873
‡+^Report to AIDS Activities Coordinating Office at ‡(215) 685-4789, +(215) 685-4781, or ^(215) 685-4766, based on result/event type
• Organism is pan-drug resistant if it exhibits non-susceptibility to all antibacterial or antifungal agents tested

Phone: (215) 685-6748
Fax: (215) 238-6947

To report a case to DDC, call, fax, or submit through PA-NEDSS the following information:
Patient Name | Condition | Age/DOB, Sex, Address & Phone | Clinician Name, Address & Phone | Laboratory Results

Effective: 08/2023

Notifiable Disease Case Report *(Confidential)*

Philadelphia Department of Public Health
Division of Disease Control
Acute Communicable Disease Program
1101 Market St, 12th Floor, Philadelphia, PA 19107

City of Philadelphia
LIFE • LIBERTY • AND YOU™

Patient Information

Report Date *(Mo., Day, Yr.)* ____/____/____

Name *(Last, First, M.I.)*

Parent or caretaker (if applicable)

Telephone
(Home) _____
(Cell) _____
(Work) _____

DOB *(Mo., Day, Yr.)* ___/___/___

Age

Sex ☐ Male ☐ Female

Occupation

Name of Employer or School

Employer/School Address (Number, Street, City, Zip Code)

Medical Information

Disease or Condition

Date of Onset *(Mo., Day, Yr.)* ____/____/____

Diagnosis
☐ Clinical
☐ Lab confirmed

Fatal (check one)
☐ No
☐ Yes
Date of Death _____

Chief Symptoms / Complaints
☐ cough ☐ nausea ☐ diarrhea ☐ headache ☐ joint pain
☐ coryza ☐ vomiting ☐ fever ☐ body aches ☐ rash

Suspected source(s) of Infection (if known)
☐ school/daycare ☐ home/relative ☐ park/outdoors
☐ work ☐ restaurant ☐ recreational water
☐ travel (where/dts:_____) ☐ other _____

If Case Hospitalized (Name of Hospital/Medical Provider)

Admission Date ____/____/____

Discharge Date ____/____/____

Laboratory Information If Pertinent *(attach copies if applicable)*

Name of Lab	Name of Test	Site Source	Result	Collection Date	Result Date
		☐ Blood ☐ Stool ☐ CSF ☐ Other _____			
		☐ Blood ☐ Stool ☐ CSF ☐ Other _____			
		☐ Blood ☐ Stool ☐ CSF ☐ Other _____			

Antibiotic Sensitivities (if applicable)

Antibiotic	Resistant	Intermediate	Susceptible
Ampicillin	☐	☐	☐
Ceftriaxone	☐	☐	☐
Ciprofloxacin	☐	☐	☐
Levofloxacin	☐	☐	☐
Penicillin	☐	☐	☐
Trimethoprim/ Sulfamethoxazole (Bactrim)	☐	☐	☐

Notes

Reporter Information

Facility Name

Reporter Name

Reporter Phone #

Reporter
☐ ICP ☐ ED ☐ School Nurse
☐ Lab ☐ Other _____

DO NOT WRITE IN AREA BELOW - FOR DEPARTMENT USE

Name *(Person Receiving Report)*

Method of reporting
☐ Phone ☐ Fax ☐ Mail ☐ Other _____

Any unusual illness, disease clusters or possible outbreaks should be reported *immediately* by telephone. Please fax all completed reports to 215-238-6947 or call 215-685-6748 to report by phone.

Revised 06/14/2018

If reporting influenza, animal exposure, TB, please use specific form.