

DIVISION OF  
DISEASE CONTROL

20  
17

# ANNUAL REPORT



Department of  
Public Health  
CITY OF PHILADELPHIA

# INTRODUCTION

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## **OVERVIEW**

This annual report provides an epidemiologic summary of conditions reported to the Philadelphia Department of Public Health (PDPH) Division of Disease Control (DDC) in 2017. There are currently 70 medical conditions that health care providers or laboratories must report to the DDC (see page 58). 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 AIDS Activities Coordinating Office.

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://wwwn.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.

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# 1 OVERVIEW

DISEASE REPORTING TRENDS  
REGIONAL OVERVIEW

# DISEASE REPORTING TRENDS

Reports of Communicable Diseases Per Year:  
Philadelphia, 2008-2017

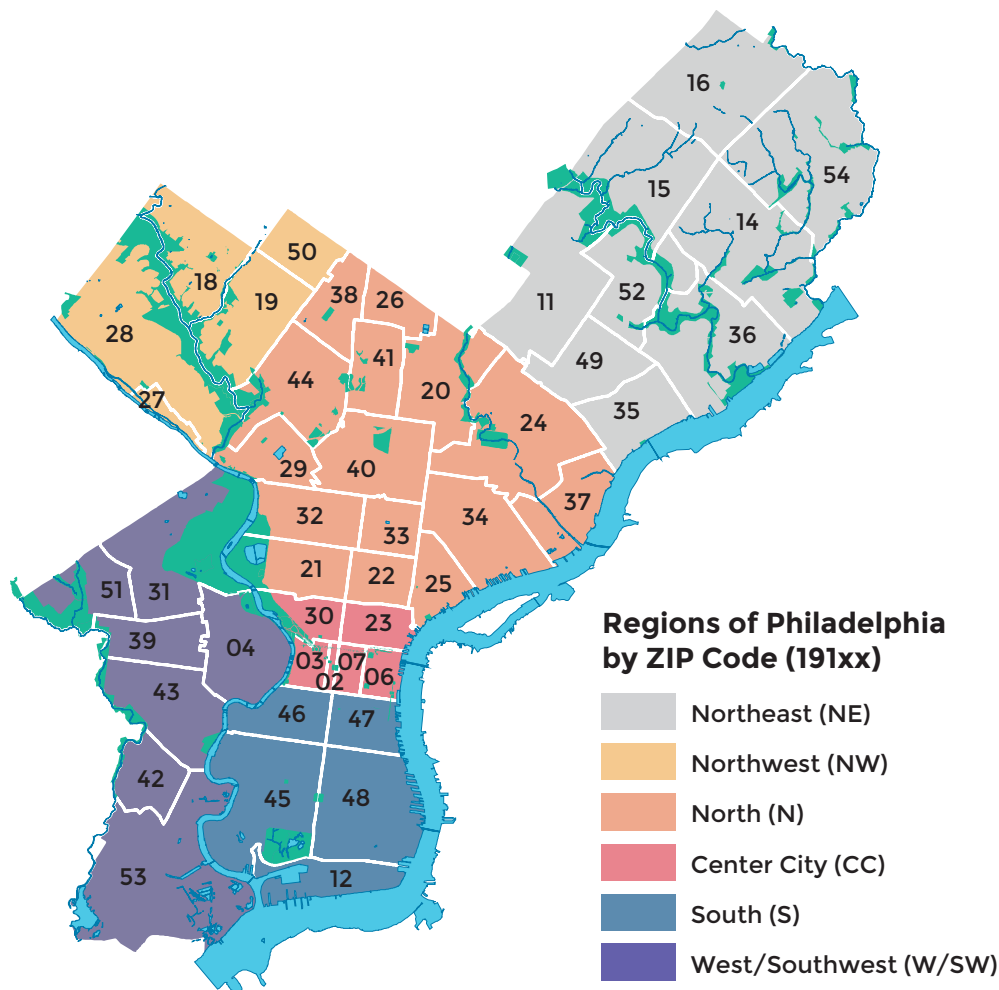
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Amebiasis	14	13	4	9	11	13	15	8	2	13
Animal Bites/Exposures	1641	1768	1624	1513	1598	1586	1644	1718	1722	1574
Anthrax	0	0	0	0	0	0	0	0	0	0
Babesiosis	0	0	0	1	0	1	1	3	2	5
Botulism	1	0	1	2	2	2	1	0	3	3
Brucellosis	0	0	0	0	1	1	0	1	0	1
Campylobacteriosis	118	117	121	141	182	103	167	211	203	233
<i>Chlamydia trachomatis</i>	17012	18104	19428	20471	20803	19570	18935	19169	19959	21119
Cholera	0	1	0	0	1	0	0	0	0	0
Cryptosporidiosis	23	38	17	14	18	58	30	26	48	51
Cyclosporiasis	1	3	0	0	1	0	1	3	4	3
Dengue Fever	1	0	3	1	1	11	0	5	3	0
Diphtheria	0	0	0	0	0	0	0	0	0	0
<i>Escherichia coli</i> , Shiga Toxin-Producing (STEC)	8	10	14	9	12	6	10	11	25	19
Giardiasis	99	106	122	43	60	76	65	61	58	66
Gonorrhea	4950	4823	6533	6761	7293	6303	5961	6260	6957	7288
Guillian-Barre Syndrome	3	1	0	0	0	1	1	4	3	7
Haemophilus influenzae [Type B]	11 [1]	30 [7]	28 [1]	22 [2]	39 [1]	26 [0]	23 [1]	24 [2]	36 [3]	49 [1]
Hansen's Disease (Leprosy)	0	0	1	0	1	0	0	1	0	1
Hepatitis A	10	2	13	8	2	6	6	6	9	19
Hepatitis B, Acute	21	9	5	7	4	5	7	8	5	10
Hepatitis C, Acute	0	0	1	0	20	42	67	79	130	155
Histoplasmosis	0	1	2	0	1	0	0	2	1	3
Legionellosis	26	60	33	64	29	61	42	53	34	66
Leptospirosis	0	0	1	0	1	0	0	0	0	0
Listeriosis	5	5	8	2	6	10	3	2	2	0
Lyme Disease	281	363	238	301	191	189	140	252	236	264
Malaria	19	16	22	19	13	21	30	18	22	30
Measles	0	1	0	0	2	0	0	0	0	0
Meningitis, Aseptic	79	68	84	104	92	124	60	55	48	55
Meningitis, Bacterial	4	6	12	12	5	3	0	2	3	6
Meningococcal Infections	5	12	5	4	6	3	2	0	2	0
Mumps	1	0	54	21	4	3	0	1	5	8

# DISEASE REPORTING TRENDS (Cont.)

Reports of Communicable Diseases Per Year:  
Philadelphia, 2008-2017 (Cont.)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Pertussis	54	65	74	49	268	86	127	111	101	107
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	3	0	9	4	12	8	10	8	5	7
Rubella, Including Congenital Rubella Syndrome	0	0	0	0	0	0	1	0	0	0
Salmonellosis, Excluding Typhoid	420	396	395	301	305	284	229	237	188	219
Shigellosis	206	1051	141	41	48	66	66	90	311	91
<i>Strep Pneumoniae</i> , Invasive	165	198	154	158	103	149	101	119	136	161
<i>Streptococcus</i> , Invasive gp. A [TSS]	75 [0]	49 [1]	66 [0]	73 [0]	61 [0]	56 [0]	95 [0]	90 [0]	78 [1]	113 [0]
Syphilis-Primary & Secondary	150	218	238	207	269	278	308	314	428	459
Syphilis-Congenital	7	4	1	4	5	1	4	4	5	6
Syphilis-Total	526	704	667	698	798	962	894	916	927	1256
Tetanus	0	0	0	0	0	0	0	0	0	0
Toxic Shock Syndrome, Staphylococcal	0	0	0	0	1	0	1	0	0	0
Tuberculosis	162	98	96	101	86	89	78	72	74	75
Tularemia	0	0	0	0	0	0	0	0	0	0
Typhoid Fever	6	2	2	3	2	1	5	3	1	3
Varicella (Chicken Pox only)	349	326	261	262	118	167	118	123	111	104
<i>Vibrio</i> SPP. Other	3	3	0	1	0	0	4	6	7	11
West Nile Virus	8	0	13	1	9	3	5	0	4	3
Yellow Fever	0	0	0	0	0	0	0	5	0	0

# REGIONAL OVERVIEW



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

	NE	NW	N	CC/S	W/SW	Total
<b>Age</b>						
0-4 Yrs	23127	5055	41227	13888	17760	101057
5-17 Yrs	56820	12189	103578	26046	44165	242798
18-34 Yrs	86479	29154	149432	95613	89090	449768
35-60 Yrs	122363	34069	171370	81045	81124	489971
>60 Yrs	67760	20906	69859	43269	40698	242492
<b>Total</b>	356549	101373	535466	259861	272837	1526086

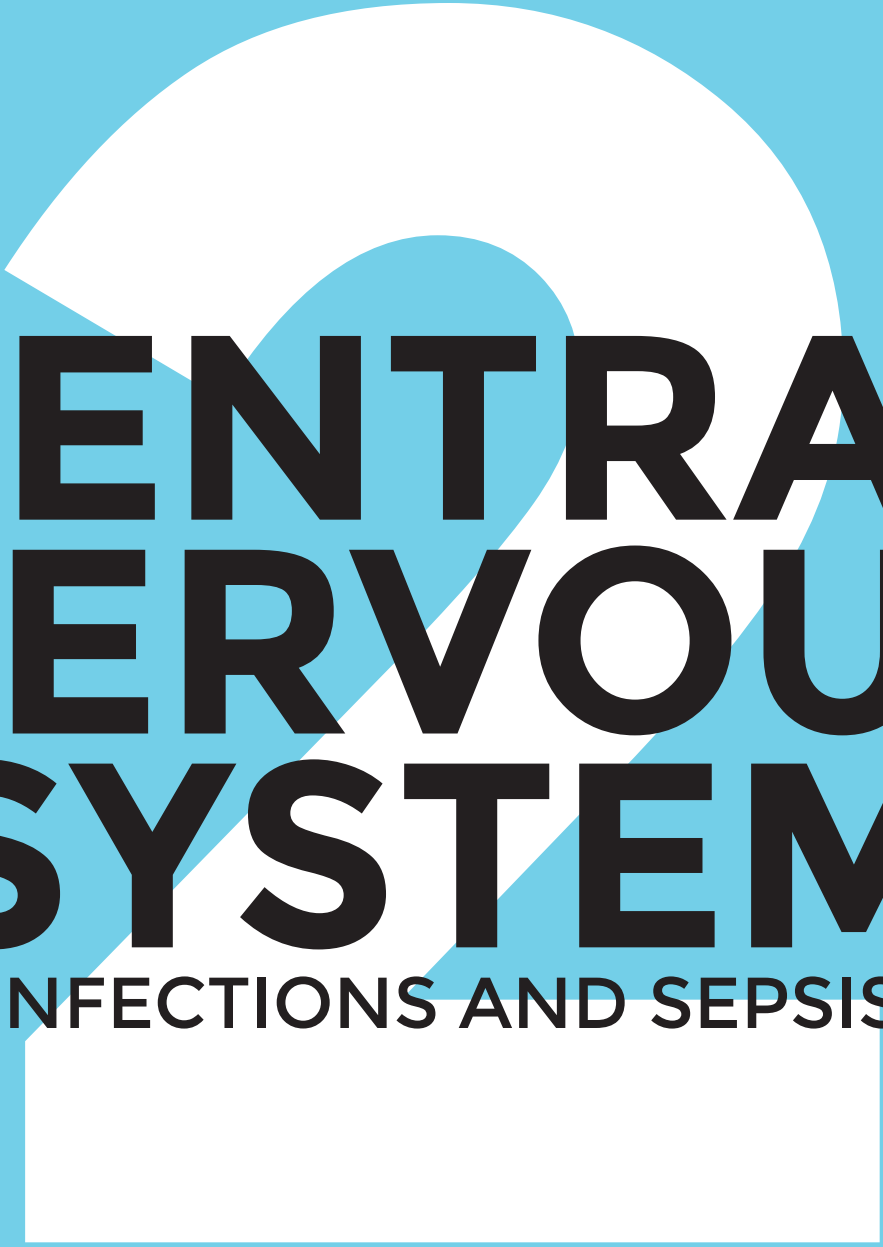
\*Data according to the U.S. Census Bureau

# REGIONAL OVERVIEW (Cont.)

Counts of Disease With Sufficient Burden:  
Philadelphia, 2017

	NE	NW	N	CC/S	W/SW	Missing	Total
	n	n	n	n	n	n	n
<b>Disease</b>							
Campylobacteriosis	52	7	58	69	45	2	233
Chlamydia	2095	785	10309	2594	5283	53	21119
Giardiasis	9	7	11	23	15	0	66
Gonorrhea	641	240	3476	1124	1794	13	7288
Hepatitis C, Chronic (RNA +)	553	132	1314	407	399	336	3141
Influenza (Hospitalized)	196	94	444	363	427	3	1527
Lyme Disease	99	57	48	40	19	1	264
Meningitis, Aseptic	18	<6	21	10	<6	0	55
Pertussis	21	<6	<20	39	25	0	107
Salmonellosis	39	7	69	44	60	0	219
Shigellosis	<10	<6	28	29	22	3	91
Strep Pneumoniae	<30	<6	73	34	27	1	161
Streptococcus, Invasive gp A	28	<6	58	11	<20	3	113
Syphilis-Early Latent	51	20	240	133	123	0	567
Syphilis-Primary & Secondary	30	15	201	91	121	1	459
Tuberculosis	20	<6	24	21	<10	0	75
Varicella (Chicken Pox)	26	<6	34	25	<20	0	104



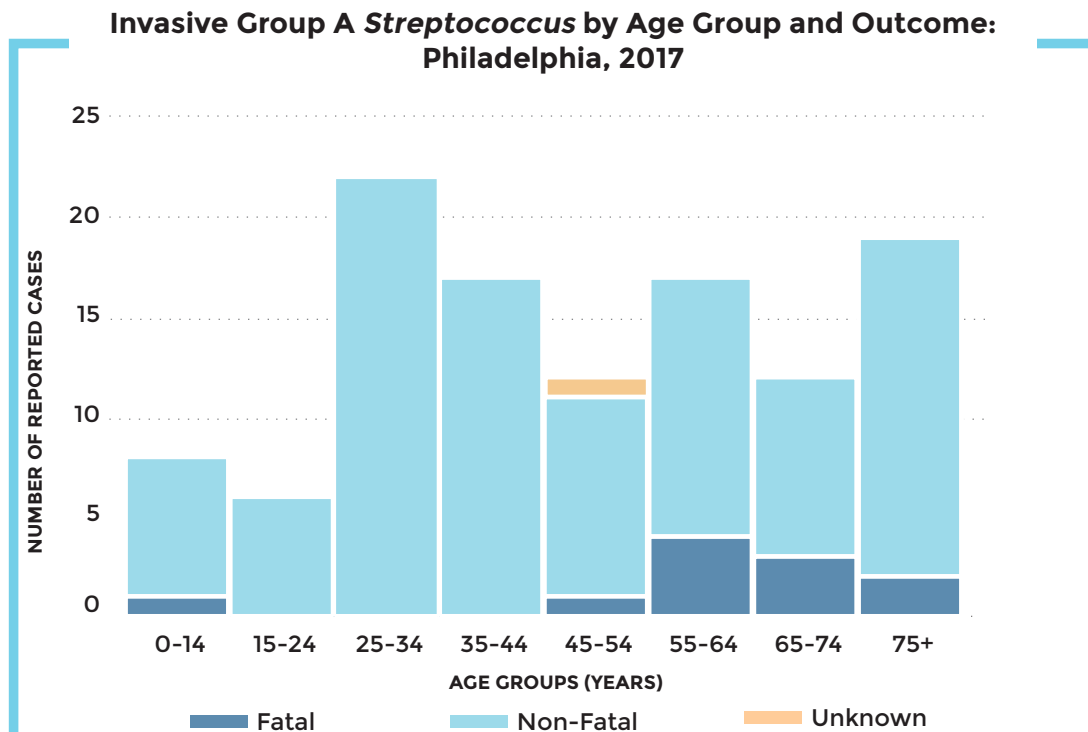
A stylized graphic of a brain, composed of a large white semi-circle at the top and a white rectangle at the bottom, set against a light blue background. The text is overlaid on this graphic.

# CENTRAL NERVOUS SYSTEM

INFECTIONS AND SEPSIS

*GROUP A STREPTOCOCCUS*  
*HAEMOPHILUS INFLUENZAE*  
LISTERIOSIS  
MENINGITIS, ASEPTIC  
*STREPTOCOCCUS PNEUMONIAE*

# GROUP A *STREPTOCOCCUS*



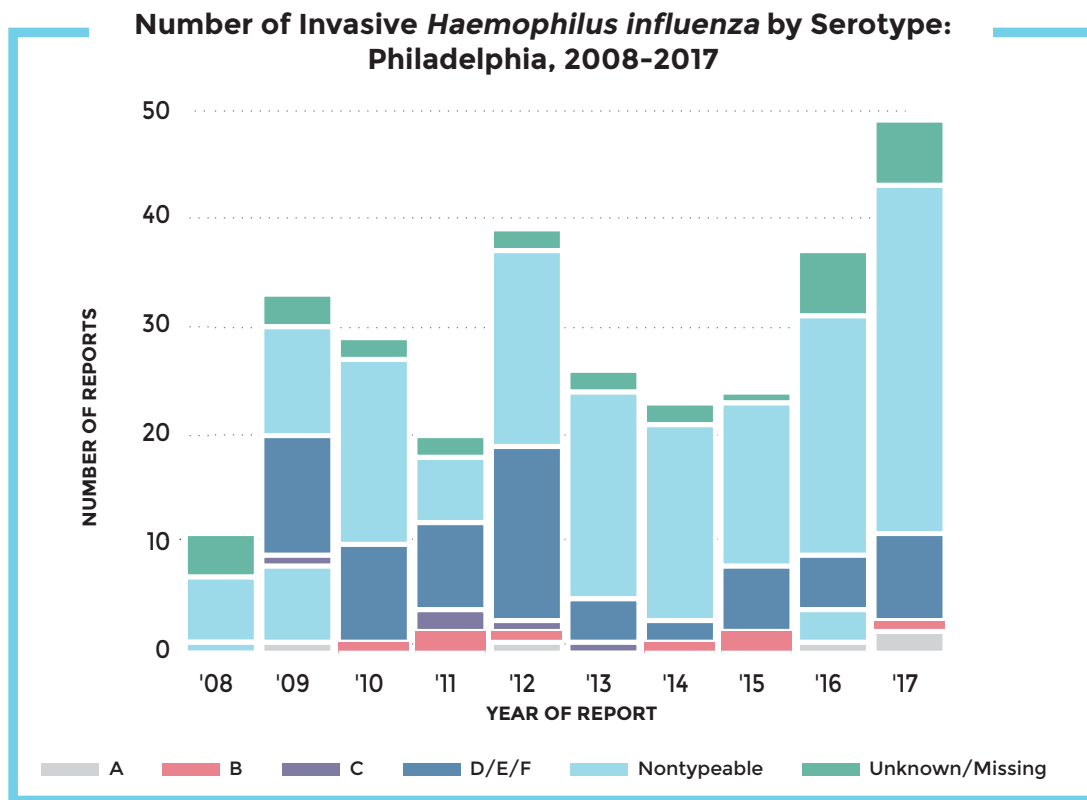
## OF NOTE

**Two invasive Group A *Streptococcal* (GAS) cases** were associated with two different long term care facilities (LTCFs) in 2017. **Both individuals had bacteremia and septic infections; neither was fatal.** PDPH worked with these LTCFs to enhance infection control precautions. In addition, twenty-eight GAS cases (24.5%) reported recent injection drug use prior to symptom onset.

**Number of Invasive *Group A Streptococcus* by Age and Gender: Philadelphia, 2017**

	0-17 Years		18-44 Years		45+ Years		Total	
	n	%	n	%	n	%	n	%
Male	10	8.8	12	10.6	29	25.7	51	45.1
Female	12	10.6	20	17.7	30	26.5	62	54.9
Total	22	19.5	32	28.3	59	25.5	113	100

# HAEMOPHILUS INFLUENZAE



## OF NOTE

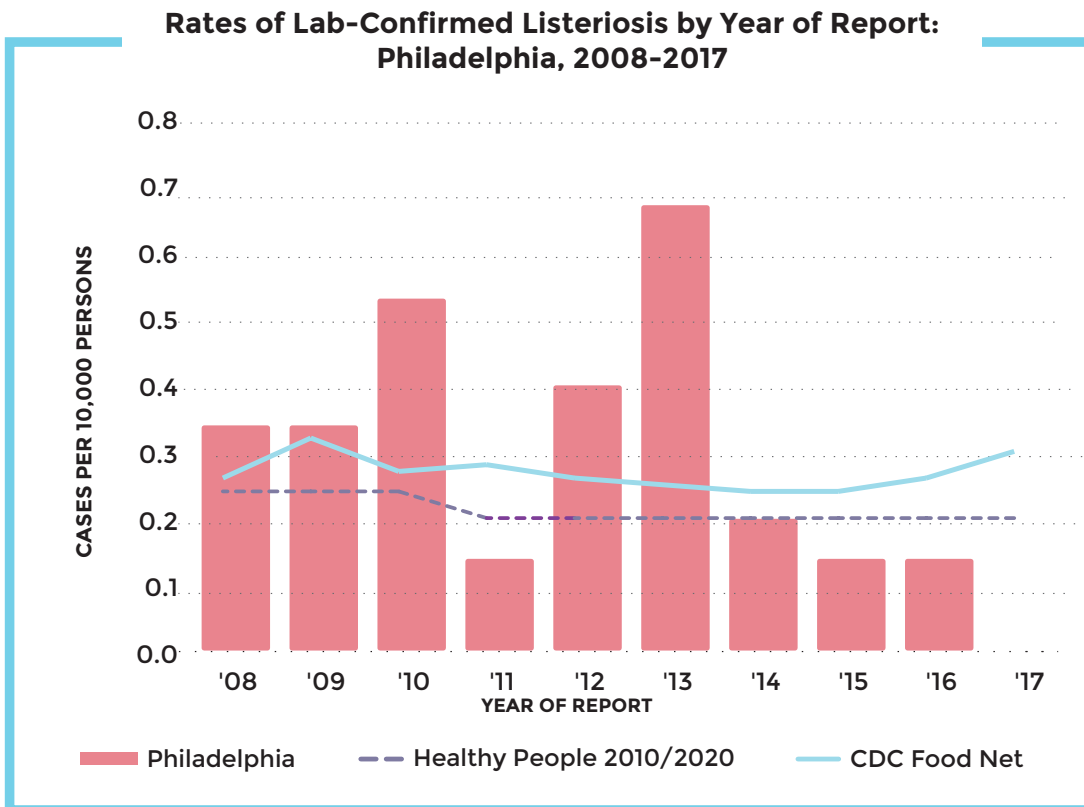
Of the 49 cases of invasive *Haemophilus influenzae* in 2017, one case was serotype b (2%). The age of the individual was over 50 years old.

**Number of Invasive *Haemophilus influenzae* by Age: Philadelphia, 2017**

	0-5 Years		6-49 Years		50+ Years		Total	
	n	%	n	%	n	%	n	%
Total	10	20.4	14	28.6	25	51.0	49	100

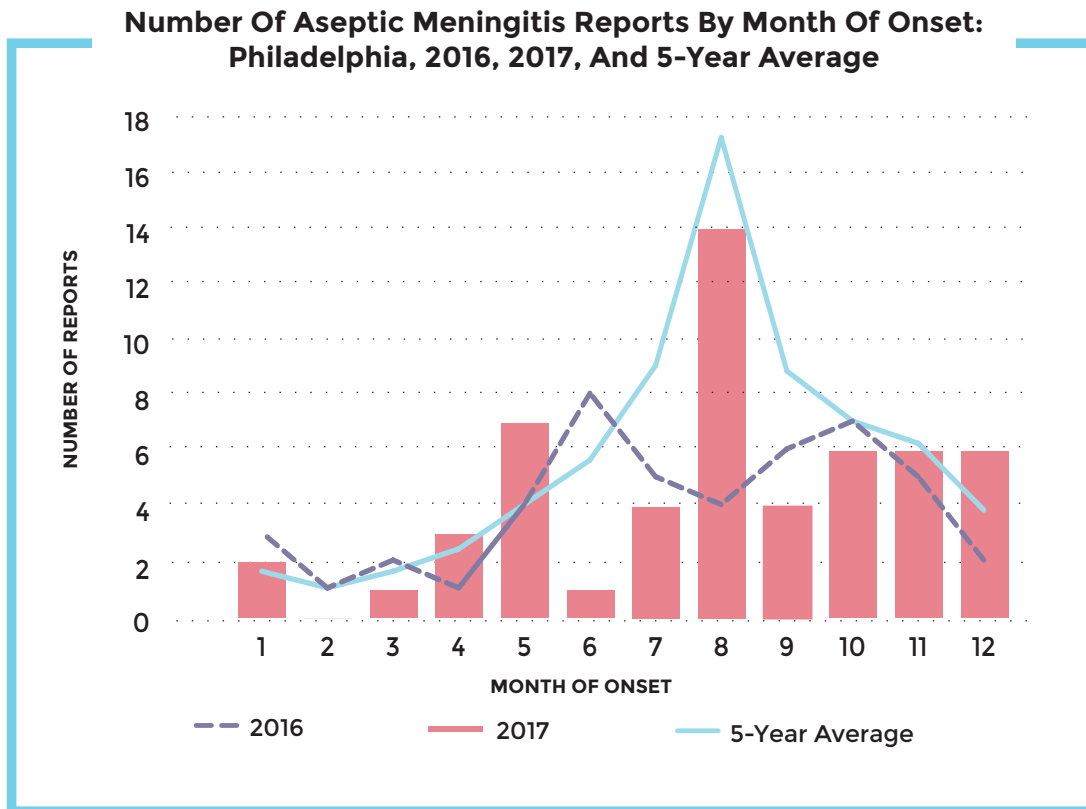
# LISTERIOSIS

(*Listeria monocytogenes*)



# MENINGITIS, ASEPTIC

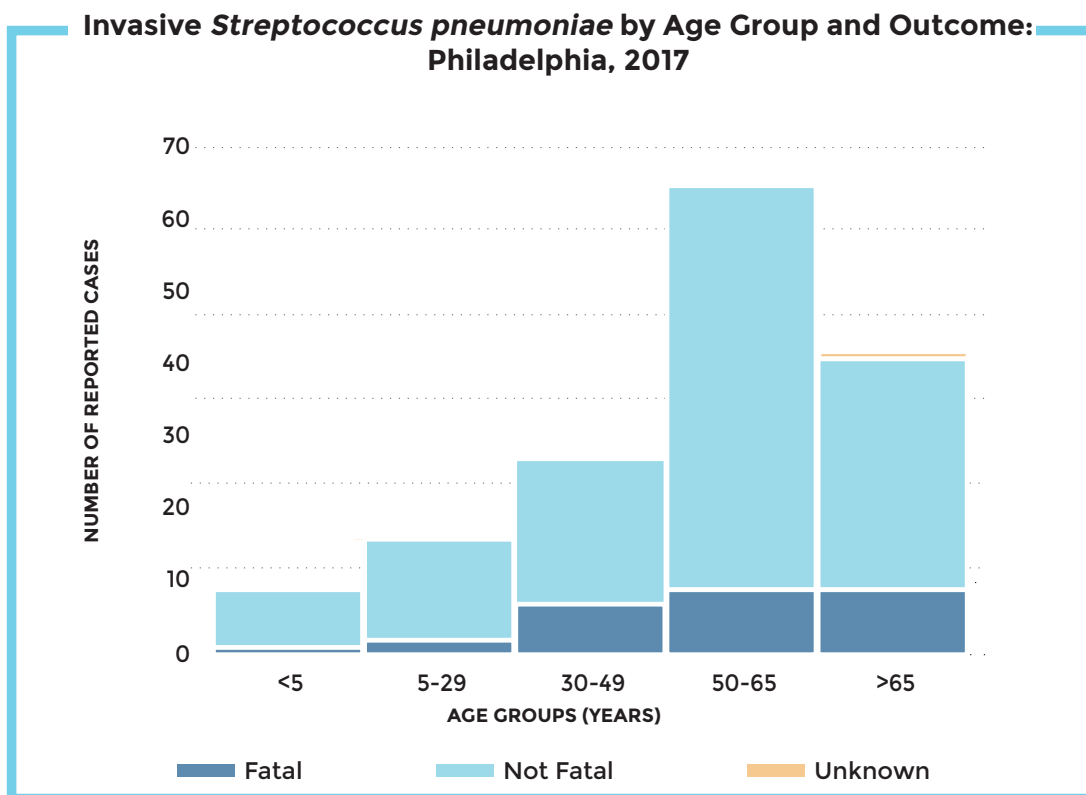
(Pleocytosis in cerebrospinal fluid and no organism on culture)



**Number of Aseptic Meningitis Reports by Age and Gender: Philadelphia, 2017**

	0-14 Years		15-30 Years		31+ Years		Total	
	n	%	n	%	n	%	n	%
<b>Male</b>	13	23.6	6	10.9	10	18.2	29	52.7
<b>Female</b>	6	10.9	7	12.7	13	23.6	26	47.3
<b>Total</b>	19	34.5	13	23.6	23	41.8	55	100

# STREPTOCOCCUS *PNEUMONIAE*



**Number of Invasive *Streptococcus pneumoniae* by Age and Gender: Philadelphia, 2017**

	0-20 Years		21-50 Years		51-64 Years		65+ Years		Total	
	n	%	n	%	n	%	n	%	n	%
Male	8	5.0	19	11.8	25	15.5	22	13.7	74	46.0
Female	7	4.3	22	13.7	33	20.5	25	15.5	87	54.0
Total	15	9.3	41	25.5	58	36.0	47	29.2	161	100

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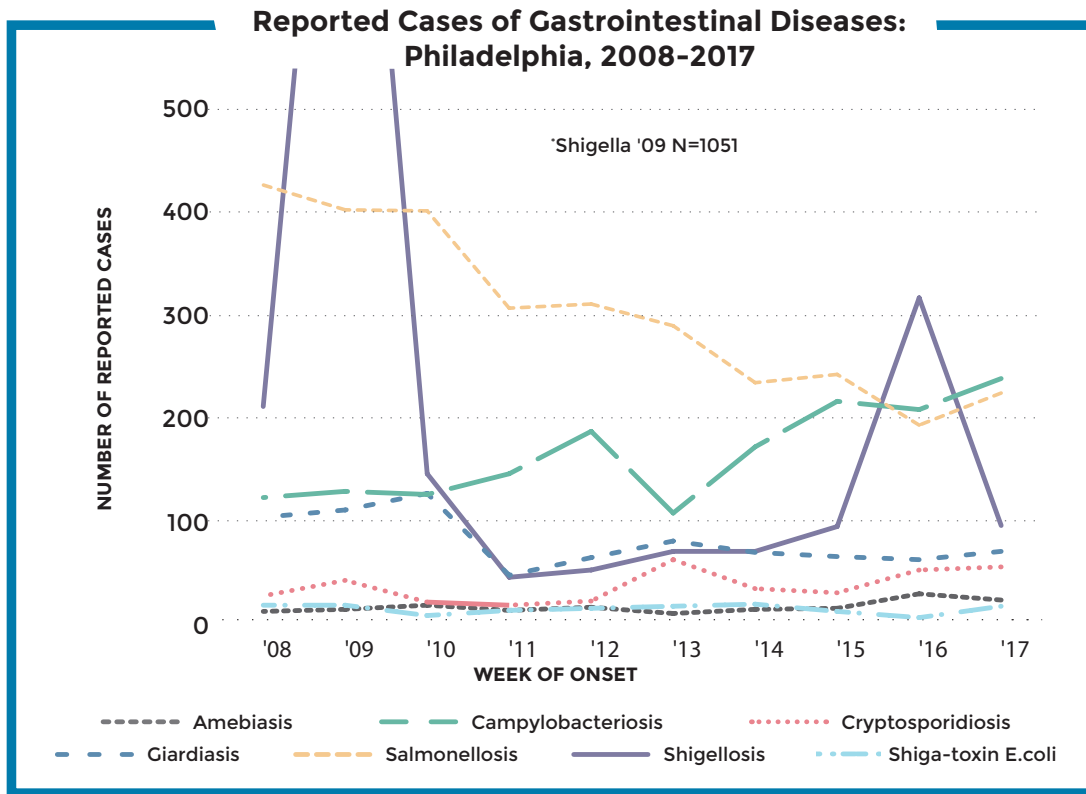
# **GASTRO- INTESTINAL**

**INFECTIONS**

OVERVIEW  
CAMPYLOBACTERIOSIS  
CRYPTOSPORIDIOSIS  
GIARDIASIS  
SALMONELLOSIS  
SHIGELLOSIS



# OVERVIEW



## OF NOTE

In 2017, PDPH responded to a number of GI illness outbreaks. One event, a **funeral luncheon with 40 attendees**, was investigated in September 2017 as a potential foodborne disease outbreak. **Twenty attendees reported onset of diarrhea, vomiting, and abdominal cramps 1-2 days after the luncheon.** No pathogen was identified, and no food item or vehicle was implicated as the source of the illness.

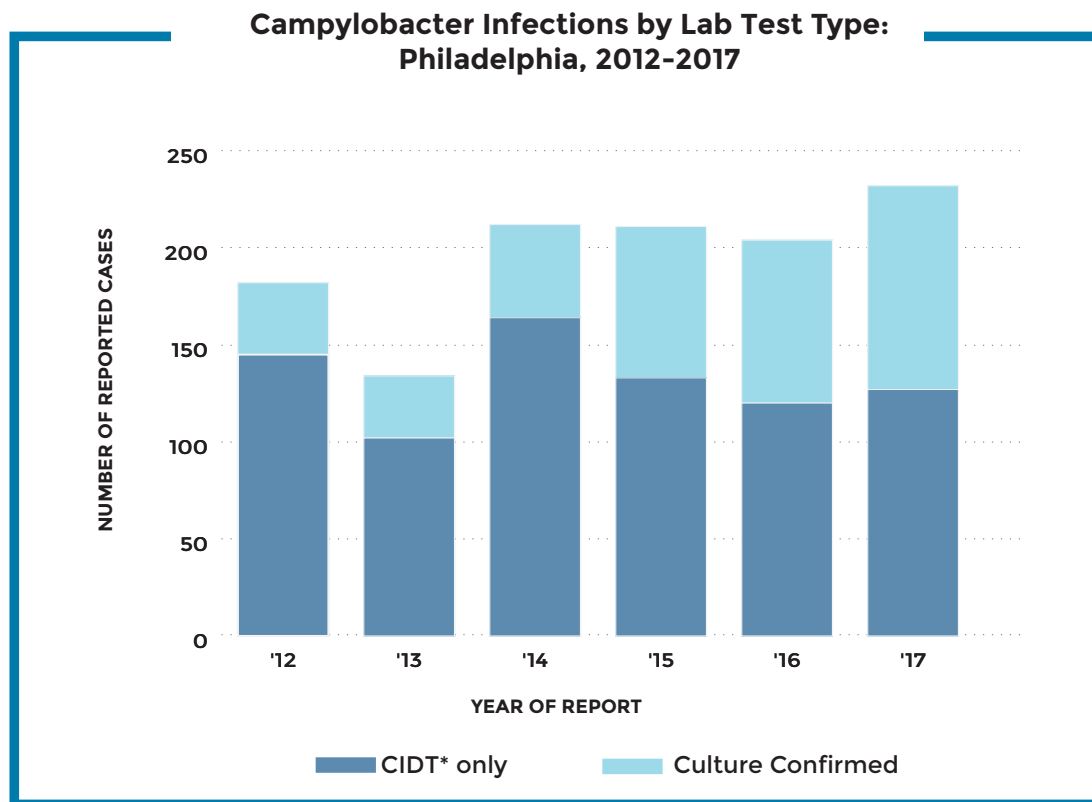
Additionally, **11 norovirus outbreaks** in institutional settings (**8 long-term care facilities, 1 hospital unit, and 2 other residential facilities**) were investigated.

**OVERVIEW** (Cont.)**Antibiotic Resistance of Selected Enteric Pathogens:  
Philadelphia, 2017**

Pathogen	Antibiotics Tested	Total Tested	Resistant		Intermediate	
			n	%	n	%
Campylobacter	Ciprofloxacin	33	8	24	0	0
	Erythromycin	34	1	3	0	0
Salmonella	Ampicillin	156	11	7	0	0
	Ceftriaxone	76	3	4	0	0
	Ciprofloxacin	116	0	0	2	2
	Levofloxacin	39	0	0	3	8
	Trimethoprim-Sulfamethoxazole	148	5	3	0	0
Shigella	Ampicillin	61	53	87	0	0
	Ceftriaxone	25	2	8	0	0
	Ciprofloxacin	47	5	11	0	0
	Levofloxacin	15	3	20	0	0
	Trimethoprim-Sulfamethoxazole	57	32	56	0	0

# CAMPYLOBACTERIOSIS

(*Campylobacter spp.*)



\*CIDT=Culture-Independent Diagnostic Testing

**Number of Campylobacteriosis Reports by Age and Gender:  
Philadelphia, 2017**

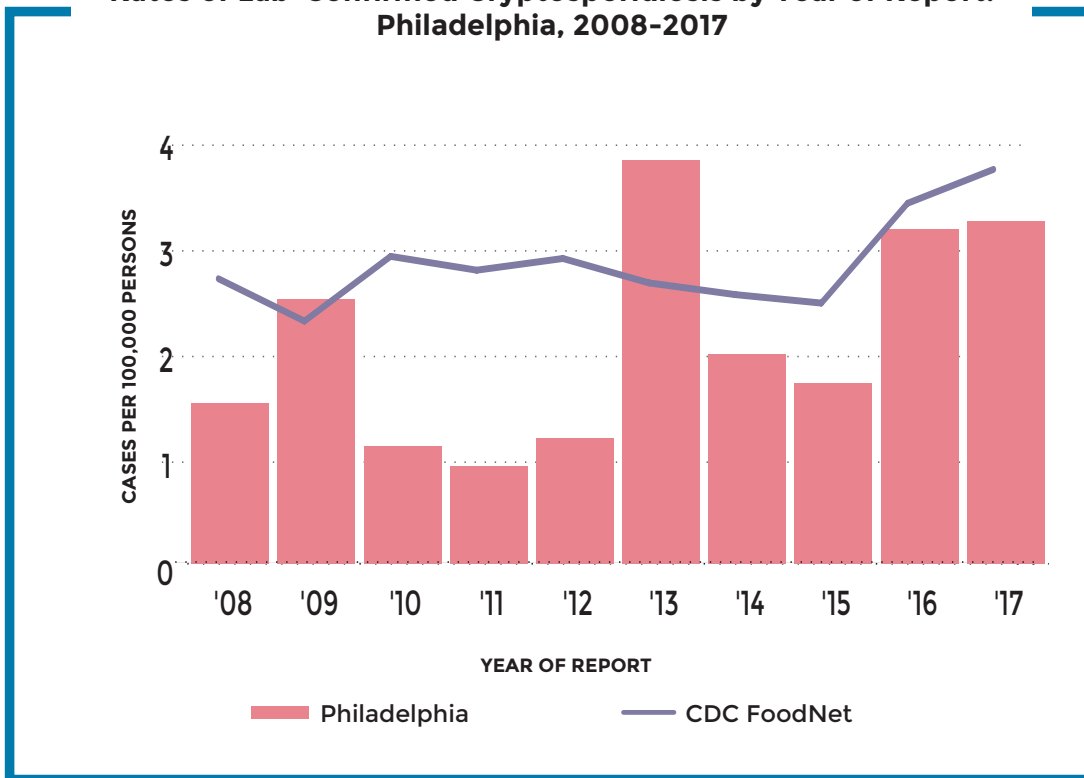
	0-4 Years		5-24 Years		24-49 Years		50-65 Years		66+ Years		Total*	
	n	%	n	%	n	%	n	%	n	%	n	%
<b>Male</b>	13	5.6	21	9.0	41	17.6	27	11.6	18	7.7	120	51.6
<b>Female</b>	6	2.6	17	7.3	39	16.7	17	7.3	32	13.7	111	48.4
<b>Total</b>	19	8.2	38	16.3	80	34.3	44	18.9	50	21.5	231	100

\*unknown=2

# CRYPTOSPORIDIOSIS

(*Cryptosporidium* spp.)

Rates of Lab-Confirmed Cryptosporidiosis by Year of Report:  
Philadelphia, 2008-2017



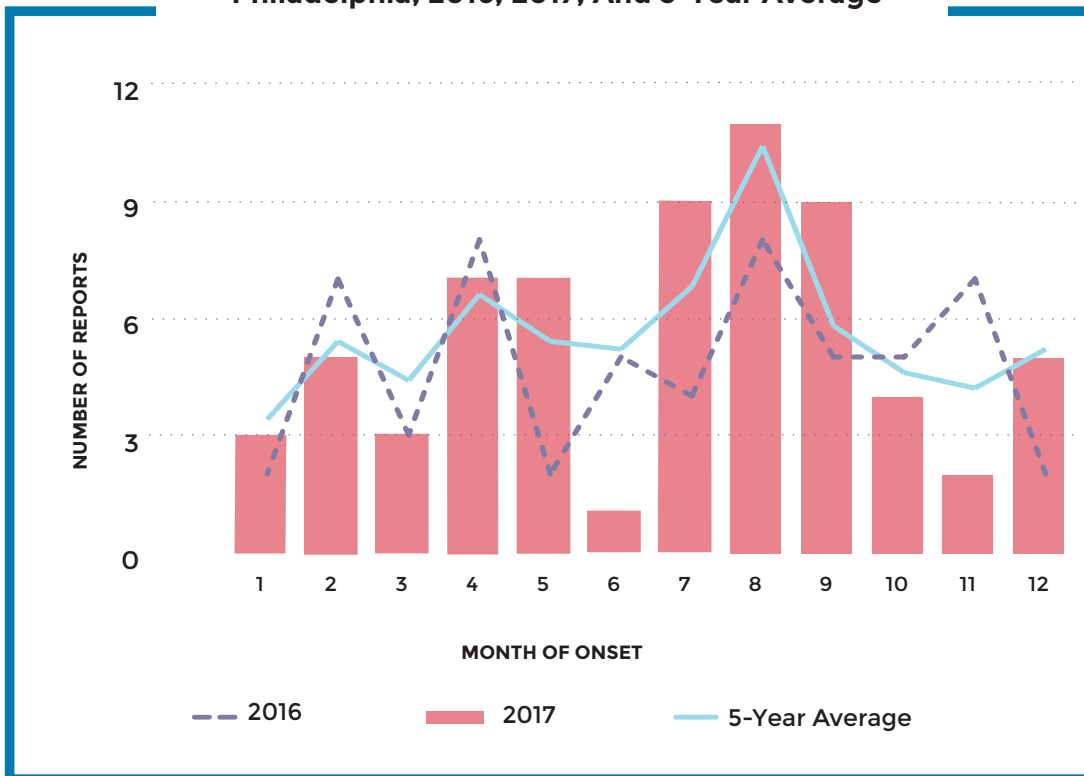
Number of Cryptosporidiosis Reports by Age and Gender:  
Philadelphia, 2017

	0-5 Years		6-17 Years		18-35 Years		36+ Years		Total	
	n	%	n	%	n	%	n	%	n	%
<b>Male</b>	<6	--	<6	--	<10	--	15	29.4	30	58.8
<b>Female</b>	<6	--	<10	--	<6	--	8	15.7	21	41.2
<b>Total</b>	5	9.8	10	19.6	13	25.5	23	45.1	51	100

# GIARDIASIS

(*Giardia lamblia*)

Number of Giardiasis Reports by Week of Onset:  
Philadelphia, 2016, 2017, And 5-Year Average



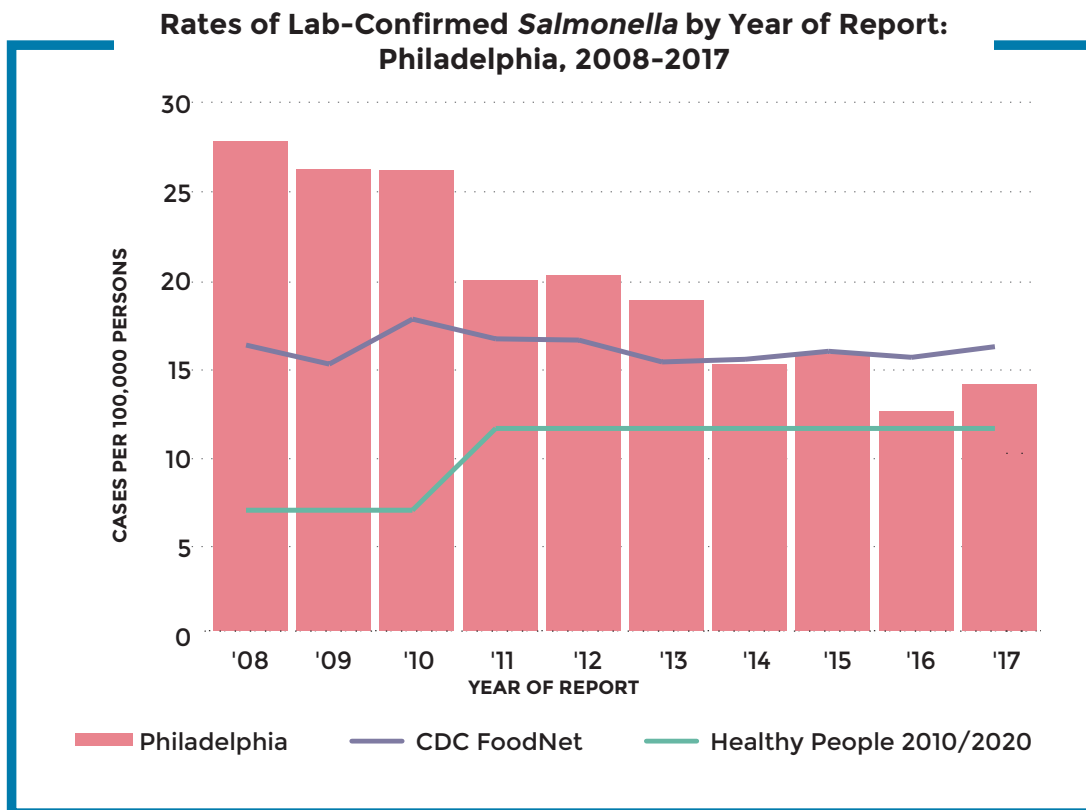
Number of Giardiasis Reports by Age and Gender:  
Philadelphia, 2017

	0-34 Years		35+ Years		Total*	
	n	%	n	%	n	%
<b>Male</b>	29	44.6	17	26.2	46	70.78
<b>Female</b>	12	18.5	7	10.8	19	29.2
<b>Total</b>	41	63.1	24	36.9	65	100

\*unknown=1

# SALMONELLOSIS

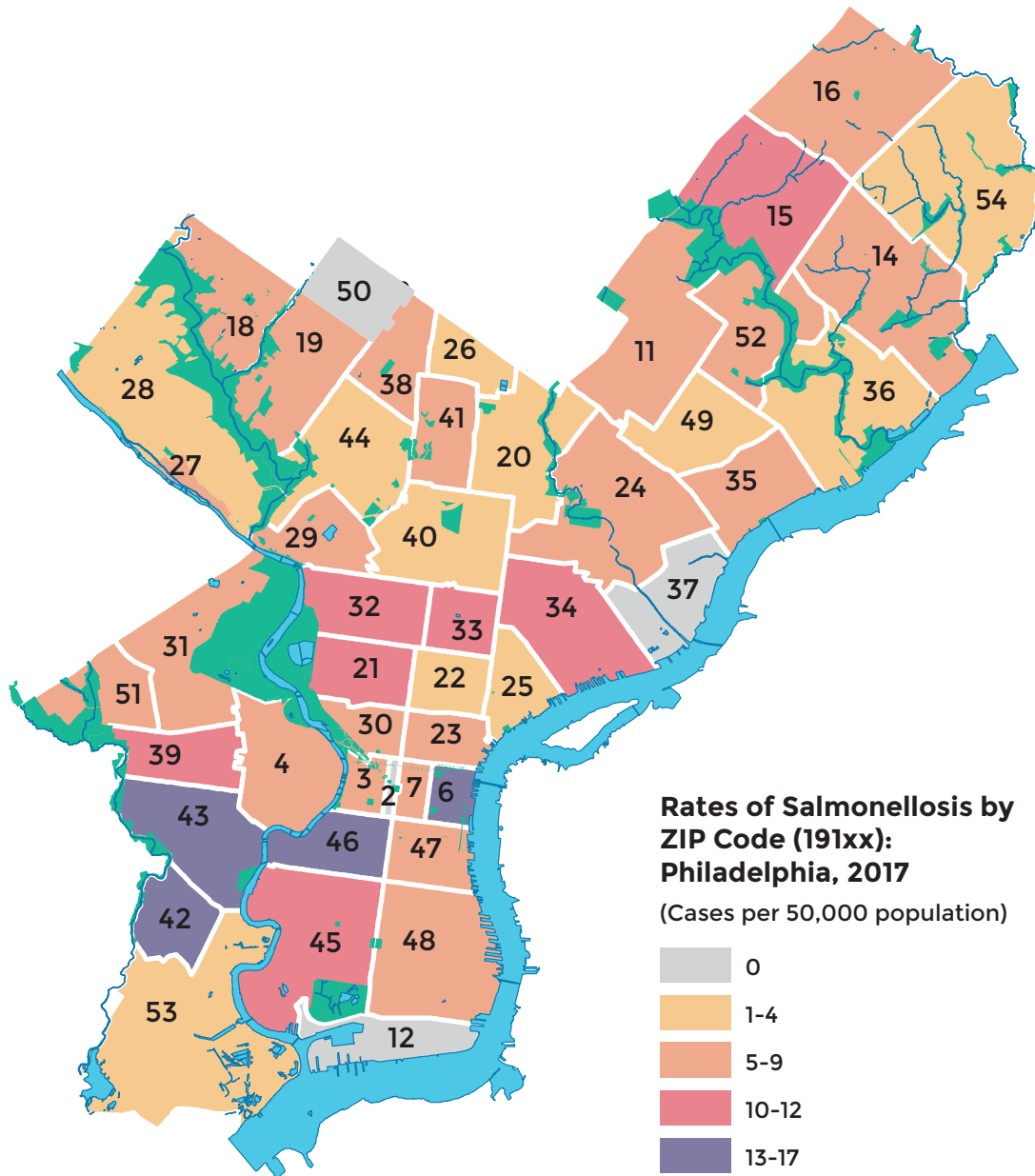
(*Salmonella* spp.)



**Number of Salmonellosis Reports by Age and Gender: Philadelphia, 2017**

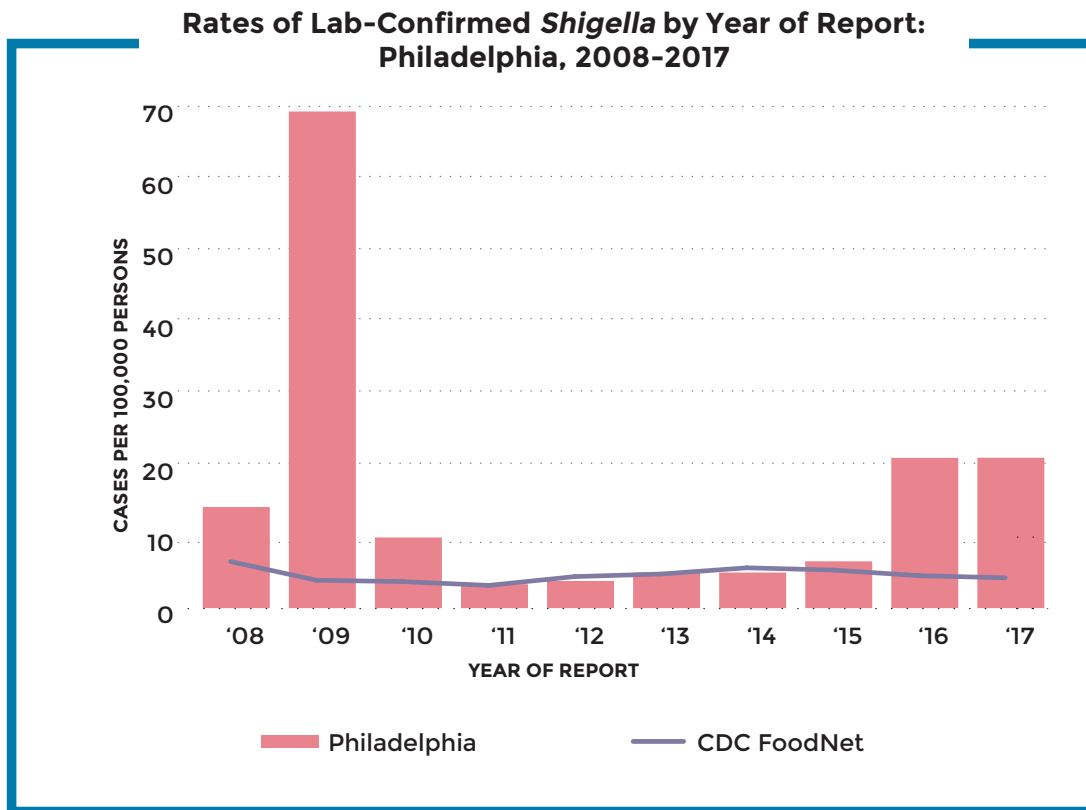
	0-4 Years		5-17 Years		18-34 Years		35-60 Years		61+ Years		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
<b>Male</b>	25	11.4	10	4.6	22	10.0	21	9.6	11	5.0	89	40.6
<b>Female</b>	30	13.7	14	6.4	41	18.7	28	12.8	17	7.8	130	59.4
<b>Total</b>	55	25.1	24	11.0	63	28.8	49	22.4	28	12.8	219	100

# SALMONELLOSIS (Cont.)



# SHIGELLOSIS

(*Shigella spp.*)



**Number of Shigellosis Reports by Age and Gender: Philadelphia, 2017**

	0-5 Years		6-20 Years		21-34 Years		35+ Years		Total	
	n	%	n	%	n	%	n	%	n	%
Male	7	7.7	6	6.6	16	17.6	26	28.6	55	60.4
Female	10	11.0	8	8.8	10	11.0	8	8.8	36	39.6
Total	17	18.7	14	15.4	26	28.6	34	37.4	91	100





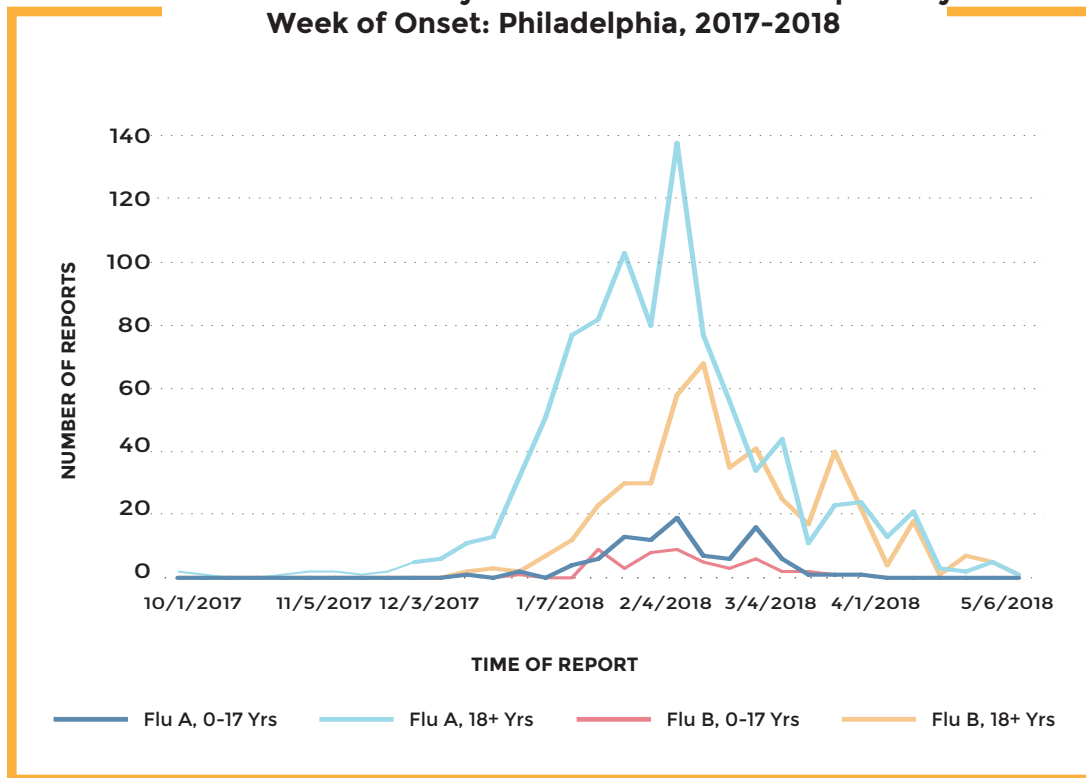
# RESPIRATORY

INFECTIONS

INFLUENZA  
LEGIONELLOSIS  
TUBERCULOSIS

# INFLUENZA

**Number of Laboratory-Confirmed Influenza Reports by Week of Onset: Philadelphia, 2017-2018**



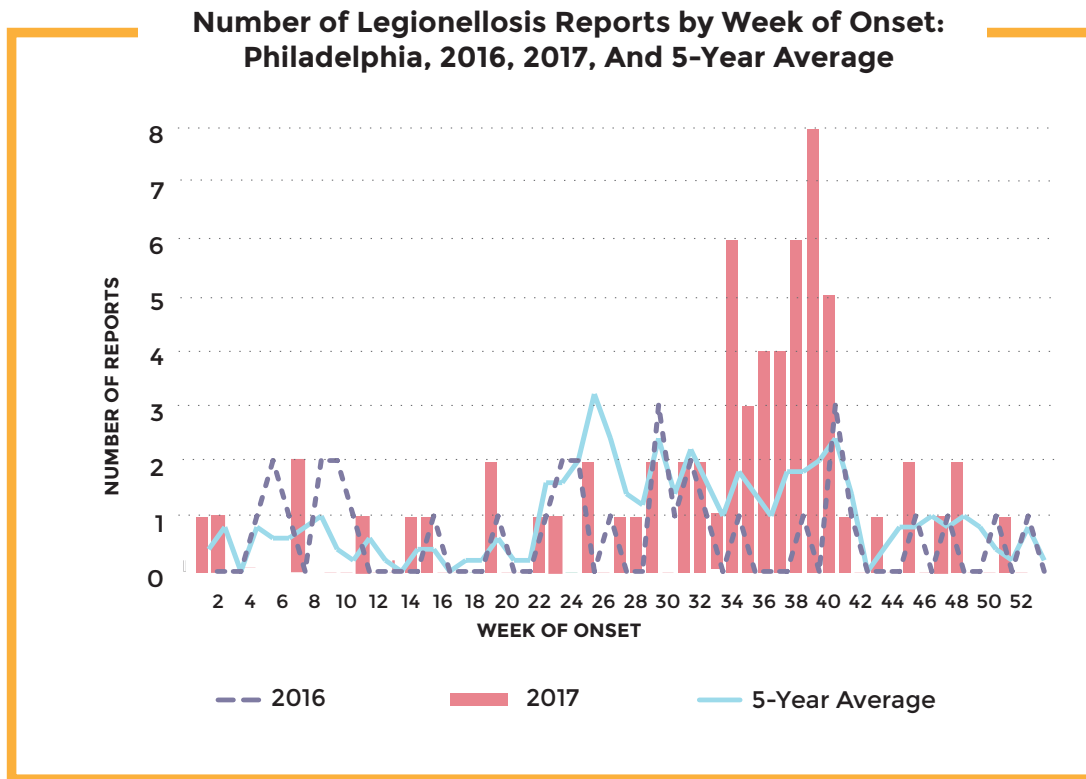
**Number of Hospitalized Influenza Reports by Age and Region: Philadelphia, 2017-2018**

	NE		NW		N		CC		S		W/SW		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
<b>Age</b>														
0-4 Yrs	13	0.9	<6	--	44	2.9	<6	--	<10	--	17	1.1	88	5.8
5-17 Yrs	12	0.8	<6	--	26	1.7	<6	--	<6	--	14	0.9	60	3.9
18-44 Yrs	22	1.4	<6	--	66	4.3	<10	--	30	2.0	54	3.5	186	12.2
45-64 Yrs	44	2.9	20	1.3	153	10.0	32	2.1	81	5.3	153	10.0	483	31.7
65+ Yrs	105	6.9	63	4.1	155	10.2	65	4.3	130	8.5	189	12.4	707	46.4
<b>Total</b>	196	12.9	94	6.2	444	29.1	108	7.1	255	16.7	427	28.0	1524	100
<b>Rate**</b>	55.0		92.7		82.9		139.7				156.5		99.9	

\* South Philadelphia's rate is combined with Center City's rate  
 \*\*Rate per 100,000

# LEGIONELLOSIS

(*Legionella pneumophila*)



## OF NOTE

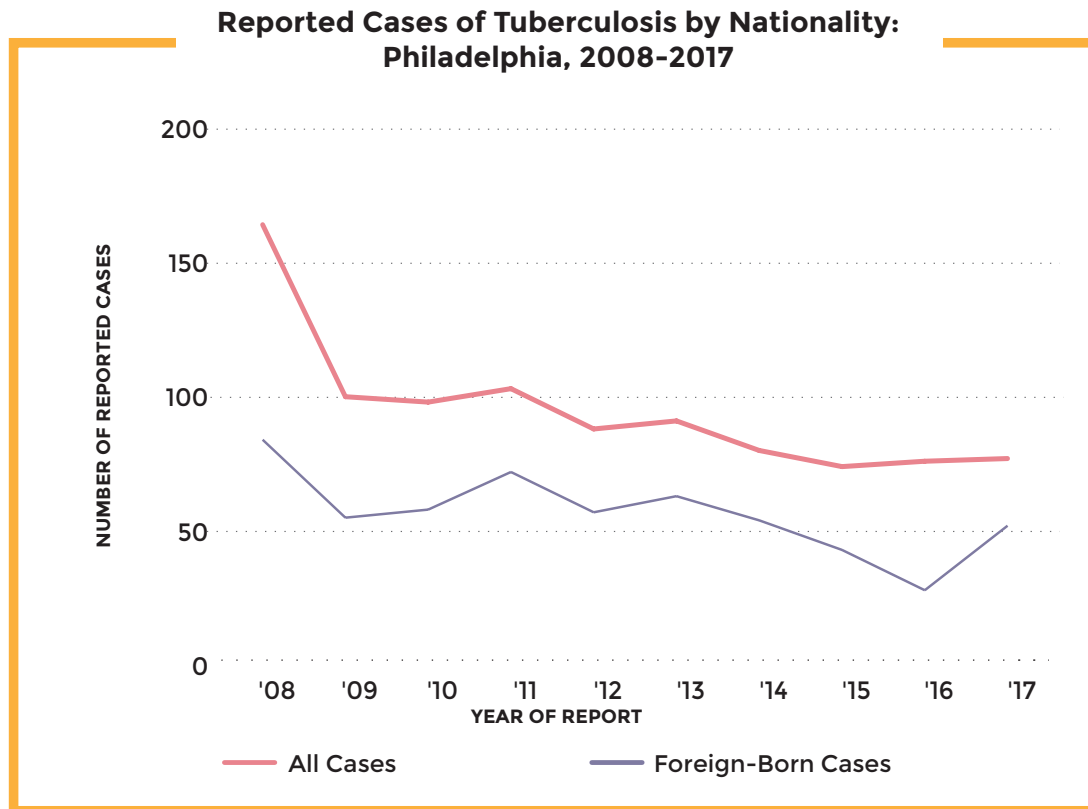
PDPH investigated a **community outbreak** of Legionnaires' disease in **Northeast Philadelphia** during **Fall 2017**. **Twenty-three confirmed cases** were linked to this outbreak. Environmental sampling was performed at 6 community locations but no source was identified.

## Number of Legionellosis Reports by Age: Philadelphia, 2017

	0-50 Years		51-64 Years		65+ Years		Total	
	n	%	n	%	n	%	n	%
Total	12	18.2	18	27.3	36	54.5	66	100

# TUBERCULOSIS

(*Mycobacterium tuberculosis*)



**Number of Tuberculosis Reports by Age:  
Philadelphia, 2017**

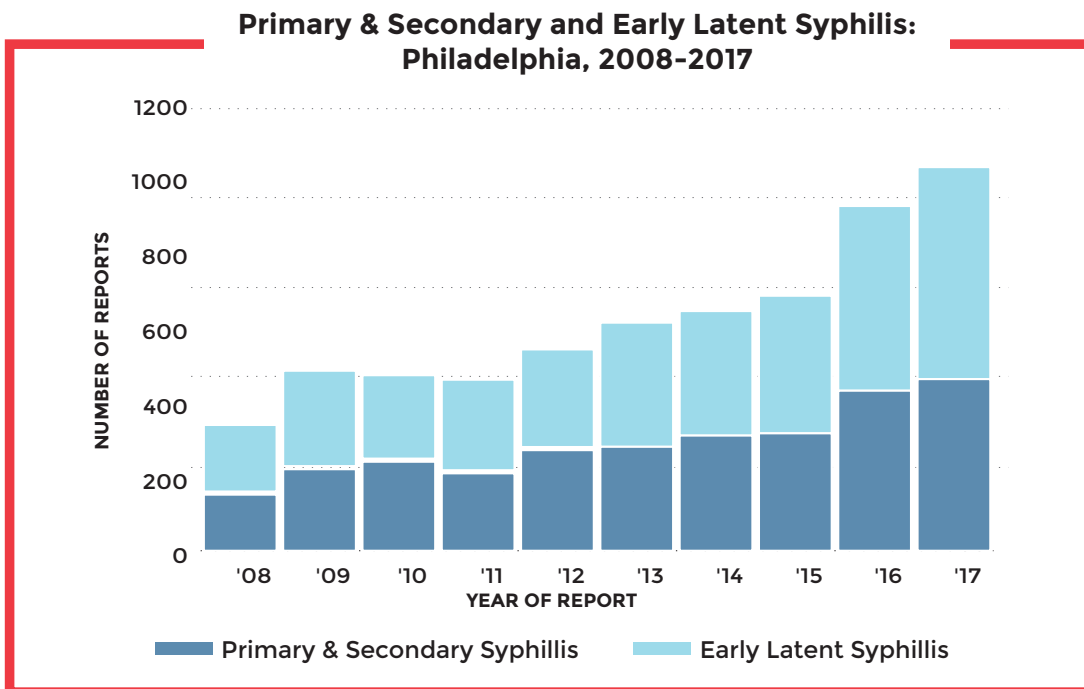
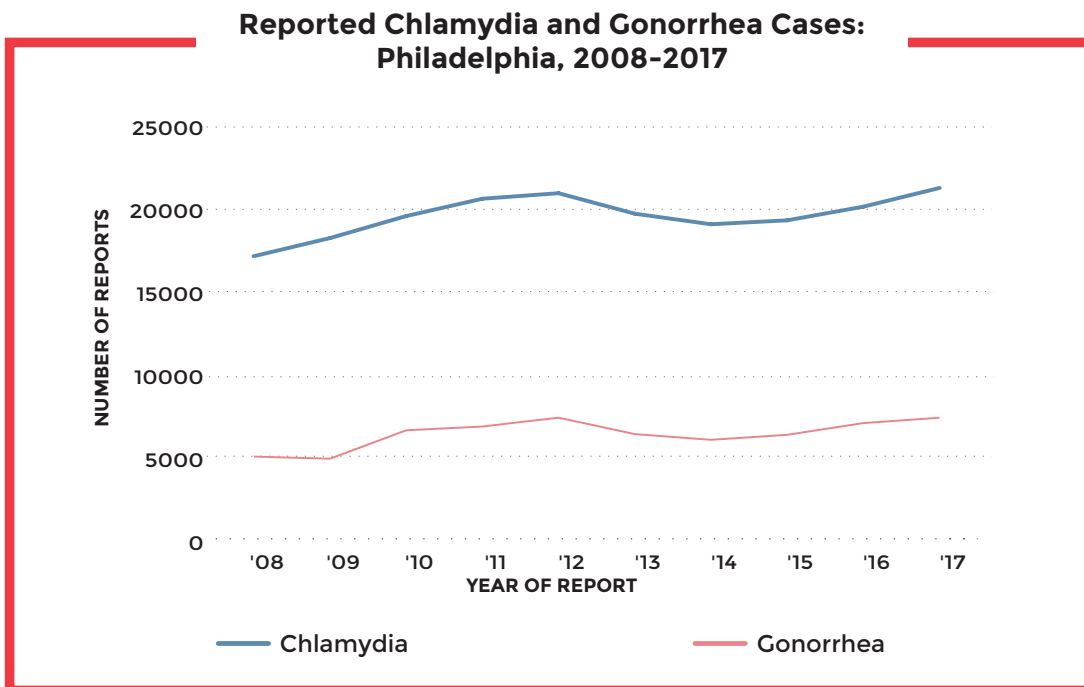
	0-30 Years		31-44 Years		45-65 Years		66+ Years		Total	
	n	%	n	%	n	%	n	%	n	%
<b>Total</b>	13	17.3	14	18.7	26	34.7	22	29.3	75	100



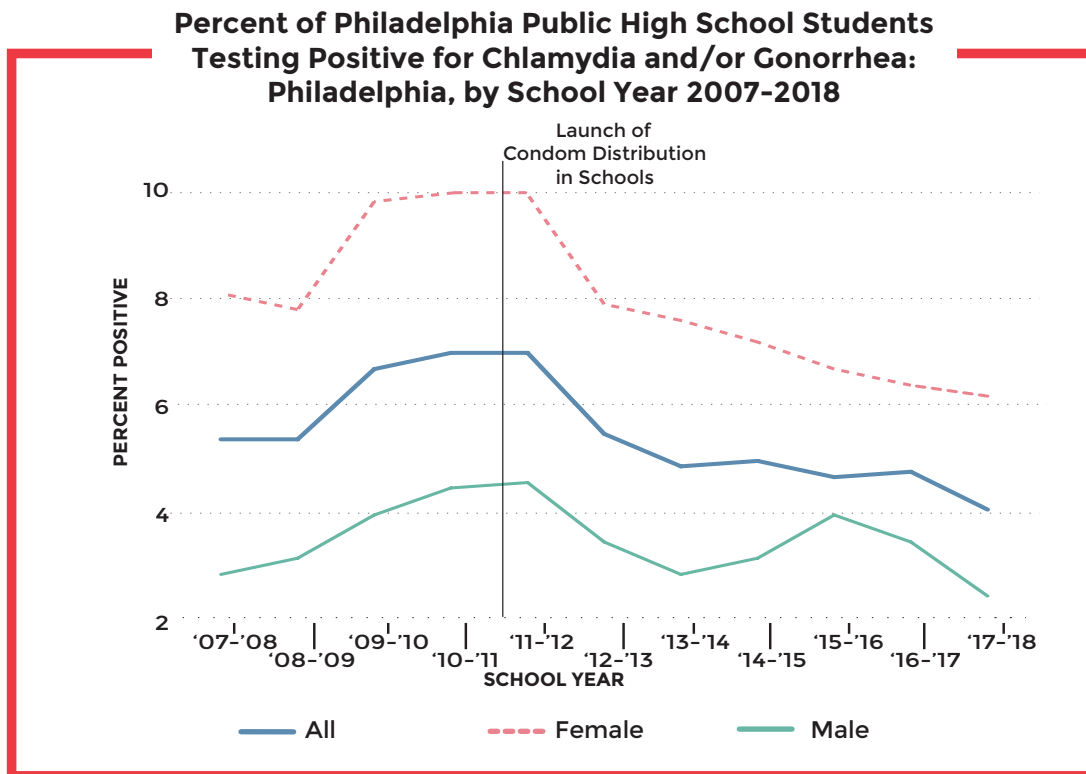
# SEXUALLY TRANSMITTED DISEASES

OVERVIEW  
CHLAMYDIA  
GONORRHEA  
SYPHILIS-PRIMARY & SECONDARY  
SYPHILIS-LATENT

# OVERVIEW



# OVERVIEW (Cont.)

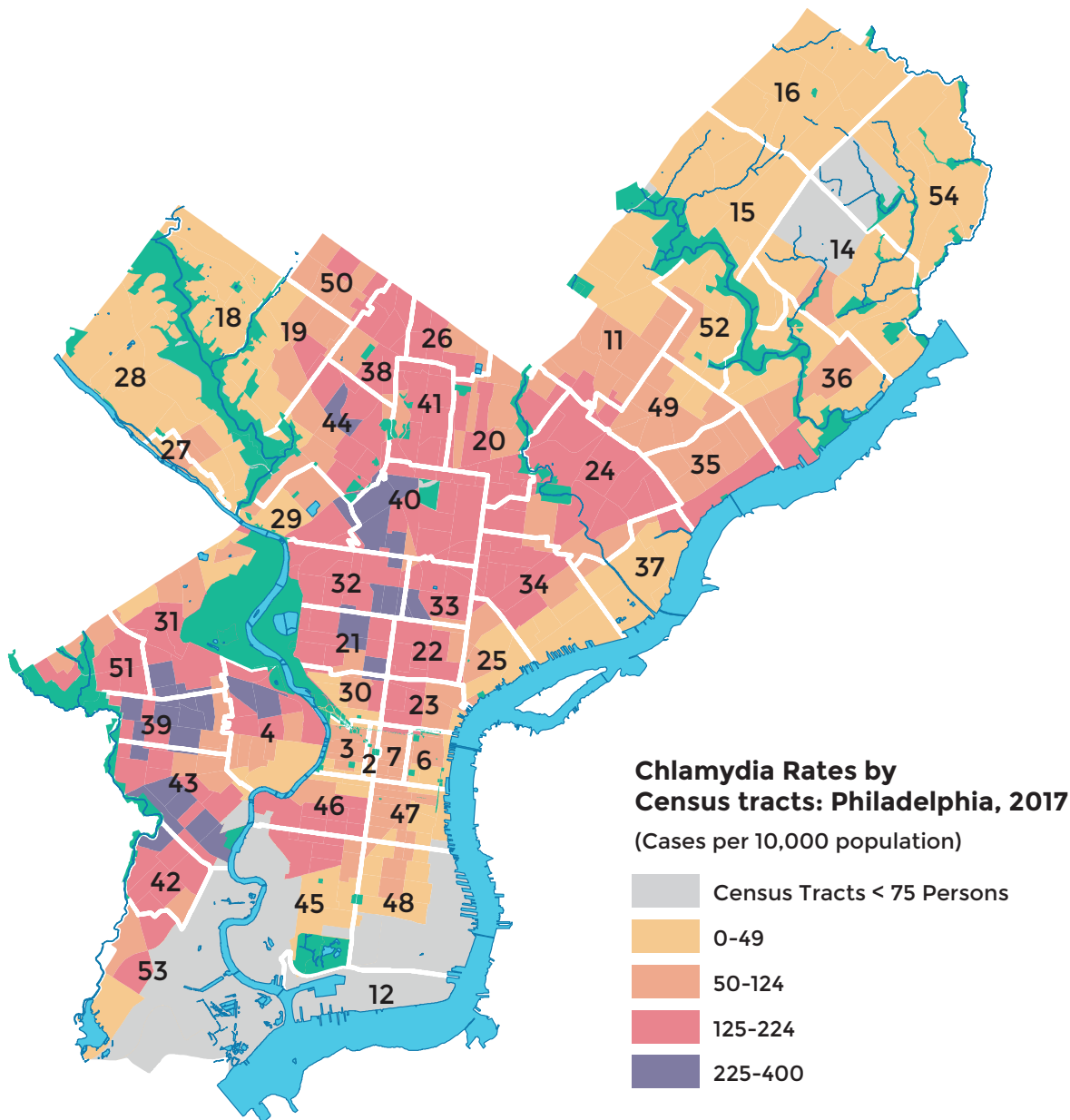


**Percent of Philadelphia Public High School Students Testing Positive for Chlamydia and/or Gonorrhea: Philadelphia, by School Year 2007-2018**

	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
	%	%	%	%	%	%	%	%	%	%	%
Male	2.8	3.1	3.9	4.4	4.5	3.4	2.8	3.1	3.9	3.4	2.4
Female	8	7.7	9.7	10	10	7.8	7.5	7.1	6.6	6.3	6.1
Total	5.3	5.3	6.6	6.9	6.9	5.4	4.8	4.9	4.6	4.7	4.0

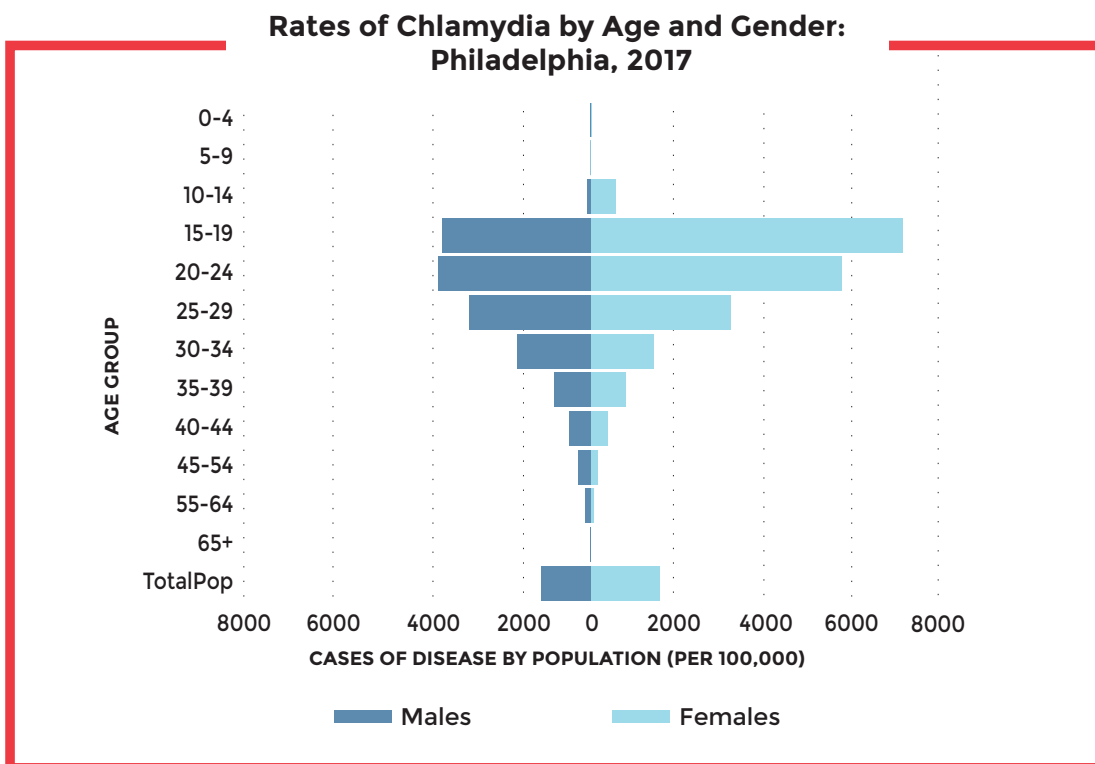
# CHLAMYDIA

(*Chlamydia trachomatis*)





# CHLAMYDIA (Cont.)



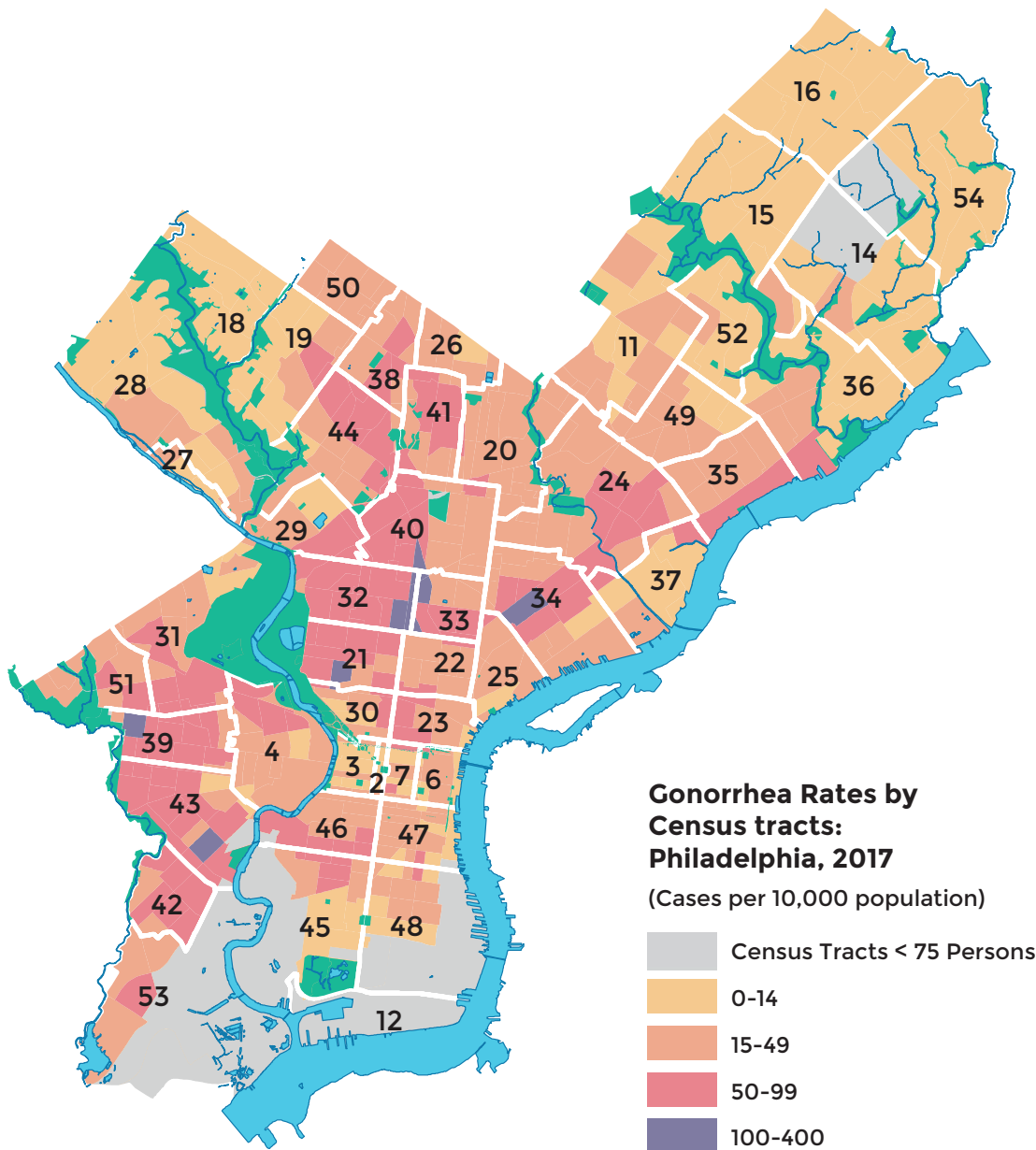
**Number of Chlamydia Reports by Age, Gender, and Region:  
Philadelphia, 2017**

	NE		NW		N		CC		S		W/SW		Total*	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
<b>Male</b>														
0-14 Yrs	<6	--	<6	--	16	0	<6	--	<6	--	16	0	41	0
15-19 Yrs	152	1	78	0	1021	5	38	0	117	1	597	3	2004	10
20-24 Yrs	239	1	106	1	1208	6	107	1	174	1	670	3	2507	12
25-34 Yrs	238	1	94	0	1155	5	249	1	363	2	612	3	2712	13
35+ Yrs	82	0	34	0	384	2	97	0	150	1	222	1	971	5
<b>Female</b>														
0-14 Yrs	<20	--	<20	--	119	1	<20	--	<20	--	85	0	256	1
15-19 Yrs	402	2	163	1	2321	11	79	0	249	1	1087	5	4305	20
20-24 Yrs	486	2	148	1	2213	10	143	1	291	1	1086	5	4370	21
25-34 Yrs	354	2	120	1	1493	7	141	1	270	1	744	4	3126	15
35+ Yrs	123	1	29	0	379	2	31	0	67	0	164	1	794	4
<b>Grand Total</b>	<b>2095</b>	<b>10</b>	<b>785</b>	<b>4</b>	<b>10309</b>	<b>49</b>	<b>901</b>	<b>4</b>	<b>1693</b>	<b>8</b>	<b>5283</b>	<b>25</b>	<b>21066</b>	<b>100</b>

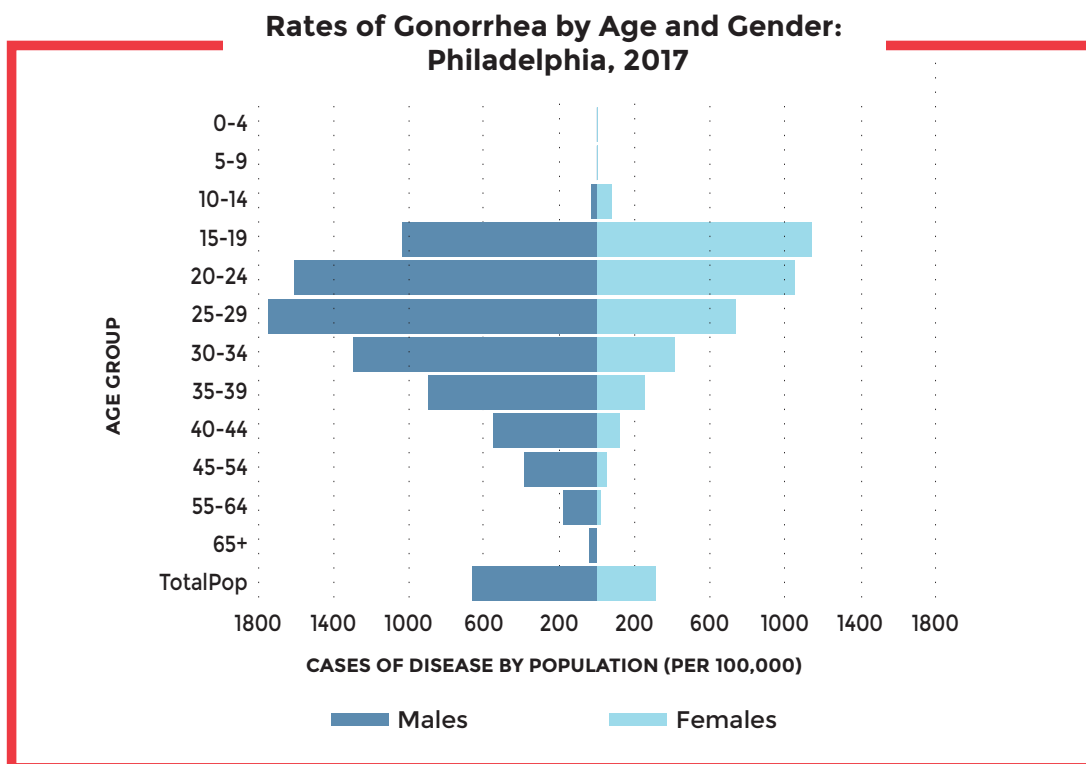
\*unknown=53

# GONORRHEA

(*Neisseria gonorrhoeae*)



# GONORRHEA (Cont.)



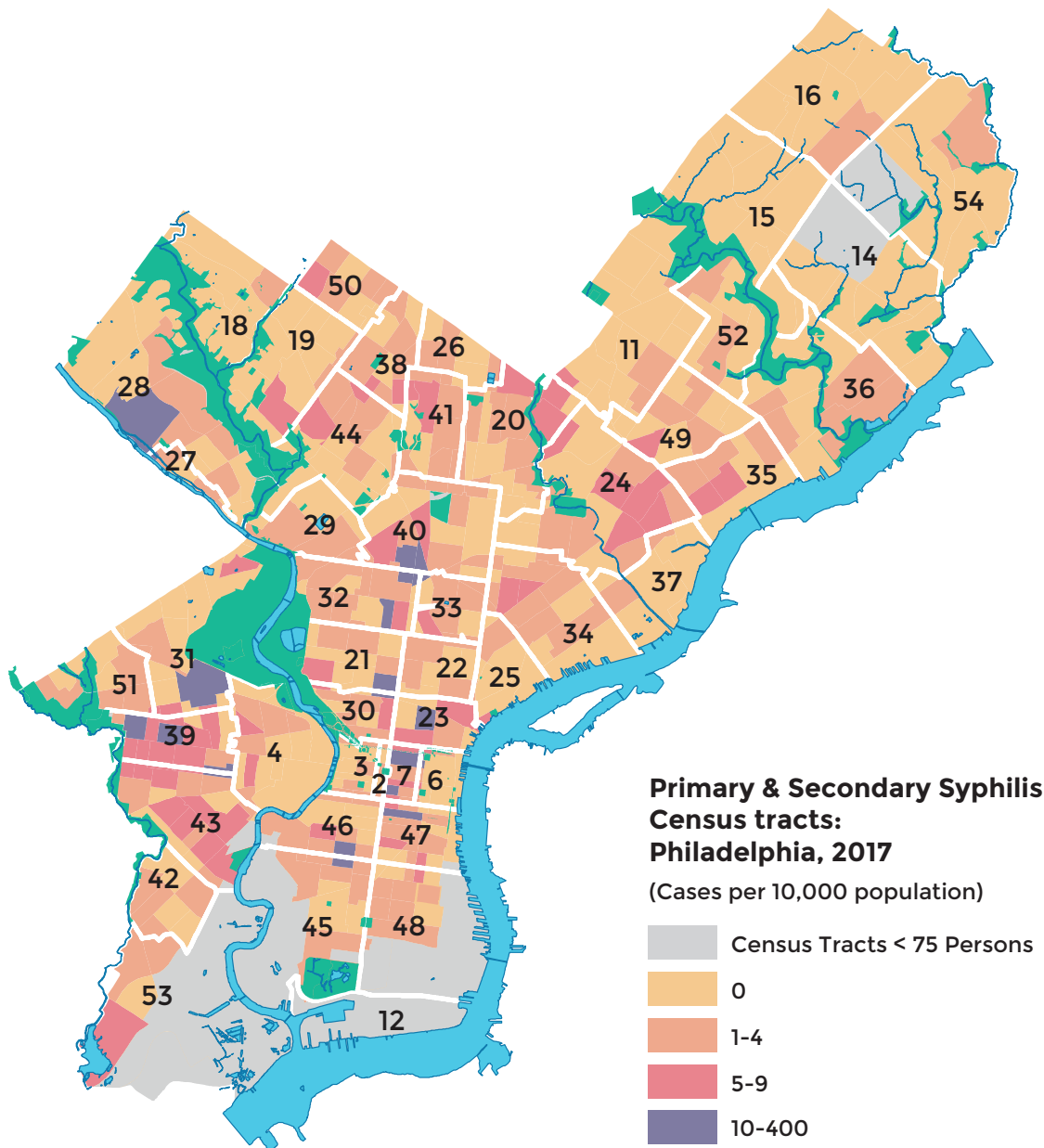
**Number of Gonorrhea Reports by Age, Gender, and Region:  
Philadelphia, 2017**

	NE		NW		N		CC		S		W/SW		Total*	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
<b>Male</b>														
0-14 Yrs	<6	--	<6	--	6	0	<6	--	<6	--	6	0	14	0
15-19 Yrs	41	1	15	0	324	4	16	0	29	0	180	2	605	8
20-24 Yrs	106	1	31	0	536	7	45	1	90	1	338	5	1146	16
25-34 Yrs	145	2	66	1	753	10	151	2	277	4	419	6	1814	25
35+ Yrs	104	1	46	1	503	7	119	2	180	2	222	3	1174	16
<b>Female</b>														
0-14 Yrs	<6	--	<6	--	18	0	<6	--	<6	--	13	0	38	1
15-19 Yrs	69	1	39	1	362	5	18	0	31	0	166	2	685	9
20-24 Yrs	68	1	14	0	422	6	14	0	54	1	221	3	794	11
25-34 Yrs	81	1	18	0	408	6	14	0	54	1	185	3	761	10
35+ Yrs	21	0	11	0	144	2	9	0	20	0	44	1	251	3
<b>Grand Total</b>	<b>641</b>	<b>9</b>	<b>240</b>	<b>3</b>	<b>3476</b>	<b>48</b>	<b>388</b>	<b>5</b>	<b>736</b>	<b>10</b>	<b>1794</b>	<b>25</b>	<b>7275</b>	<b>100</b>

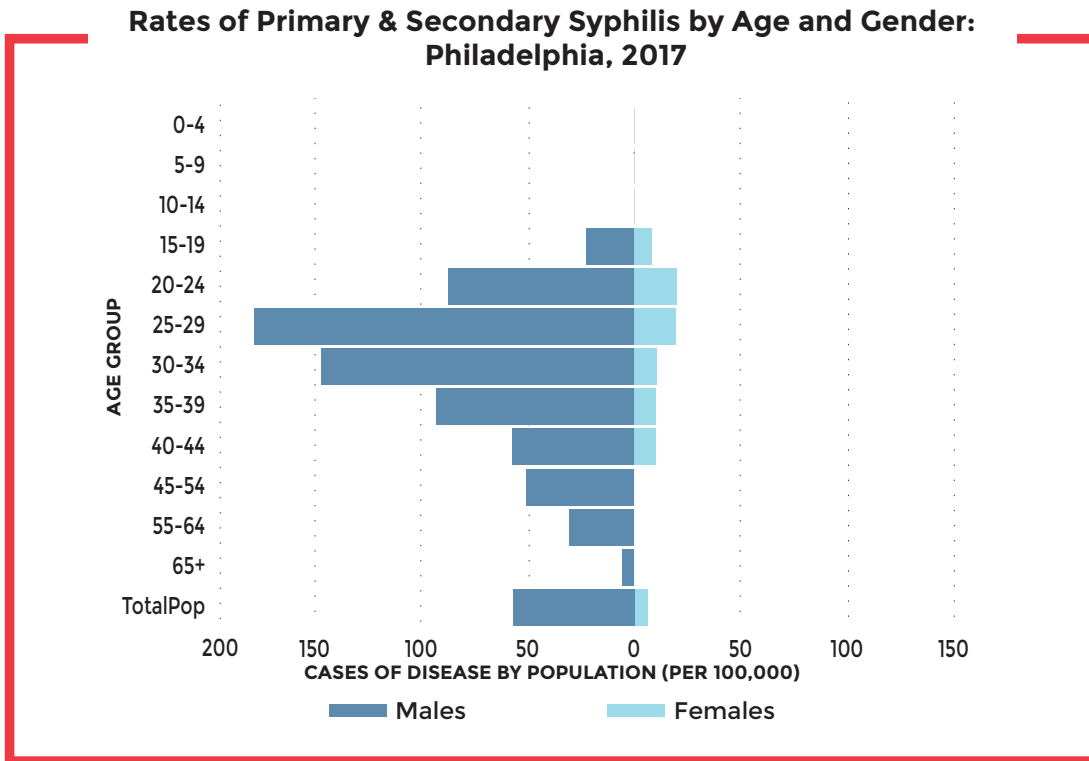
\*unknown=13

# SYPHILIS-PRIMARY & SECONDARY

(*Treponema pallidum*)



# SYPHILIS-PRIMARY & SECONDARY (Cont.)



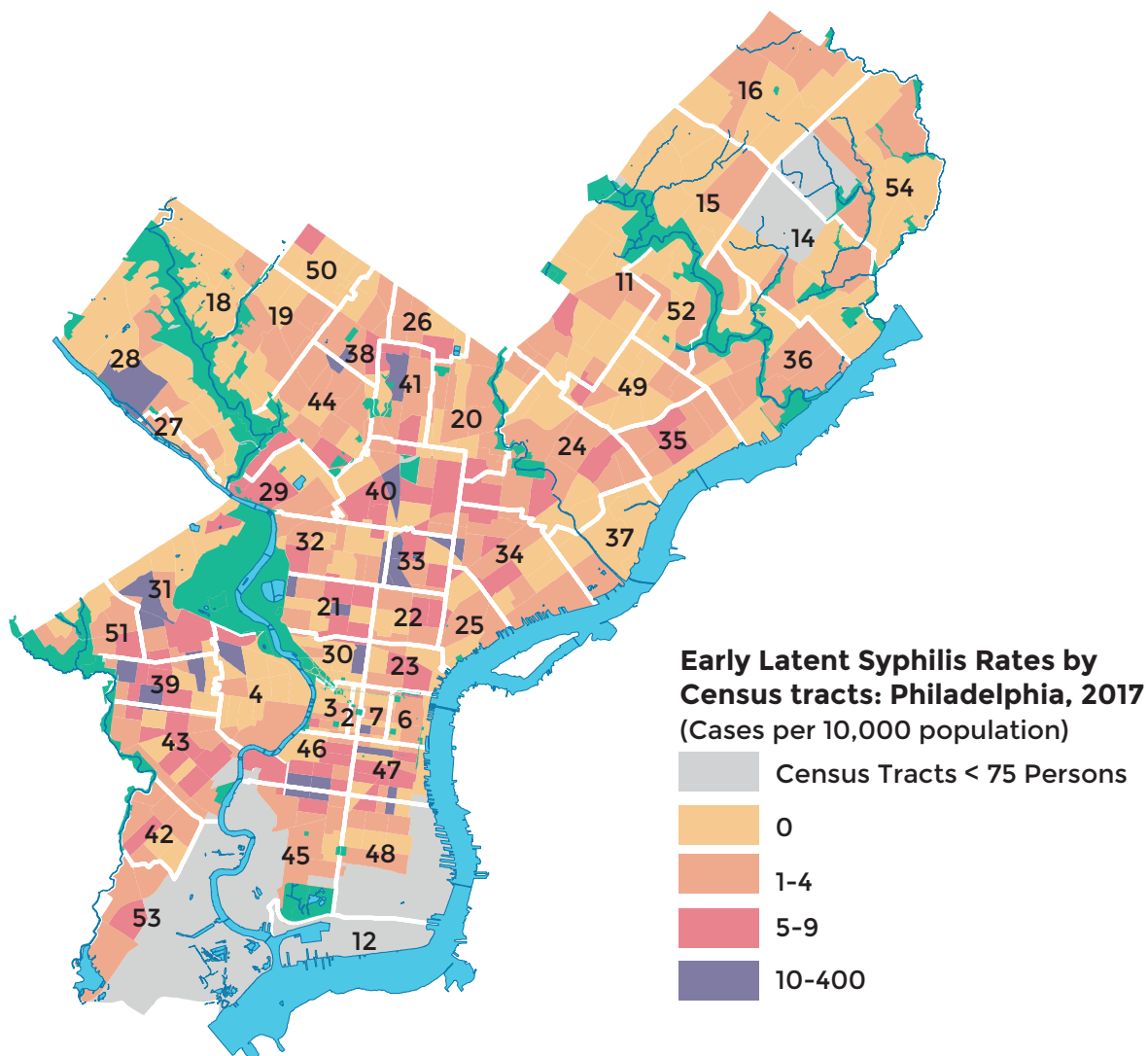
**Number of Primary & Secondary Syphilis Reports by Age and Region: Philadelphia, 2017**

	NE		NW		N		CC		S		W/SW		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
<b>Age</b>														
<b>0-24 Yrs</b>	10	2	<6	--	44	10	7	2	<10	--	26	6	95	21
<b>25-34 Yrs</b>	11	2	<10	--	109	24	15	3	<20	--	54	12	213	46
<b>35+ Yrs</b>	9	2	9	2	48	10	16	3	27	6	41	9	151	33
<b>Total</b>	30	7	15	3	201	44	38	8	53	12	121	26	459	100

\*unknown=1

# SYPHILIS-EARLY LATENT

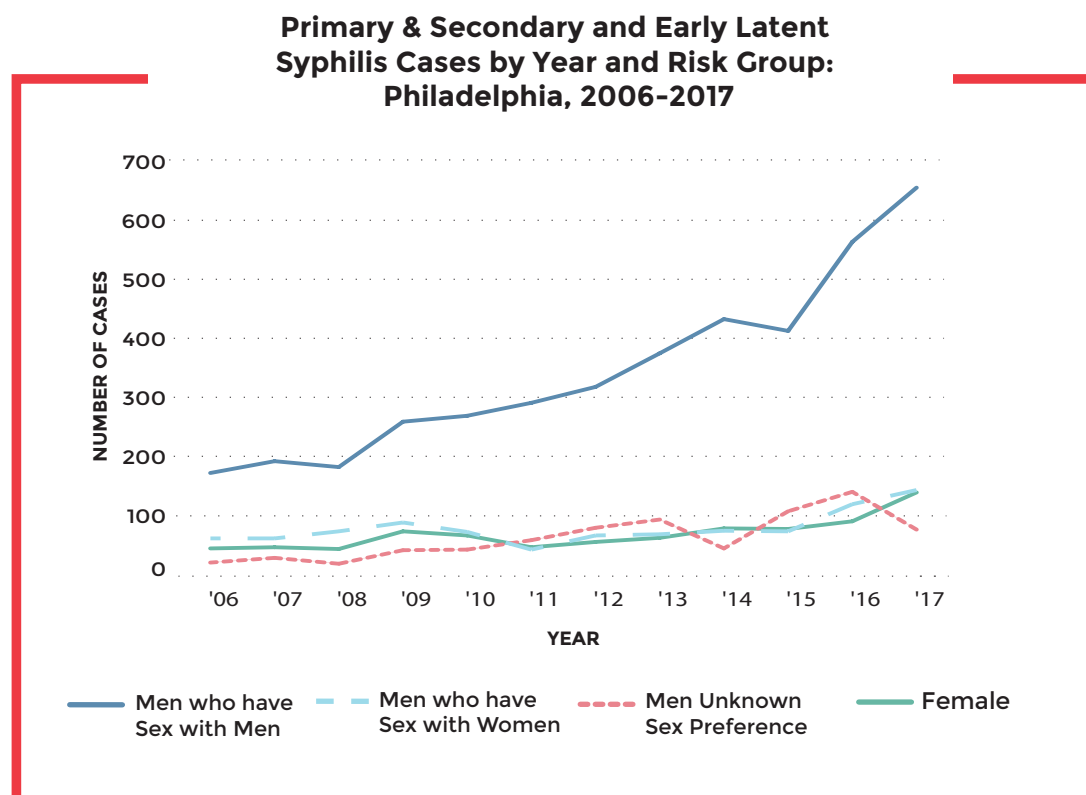
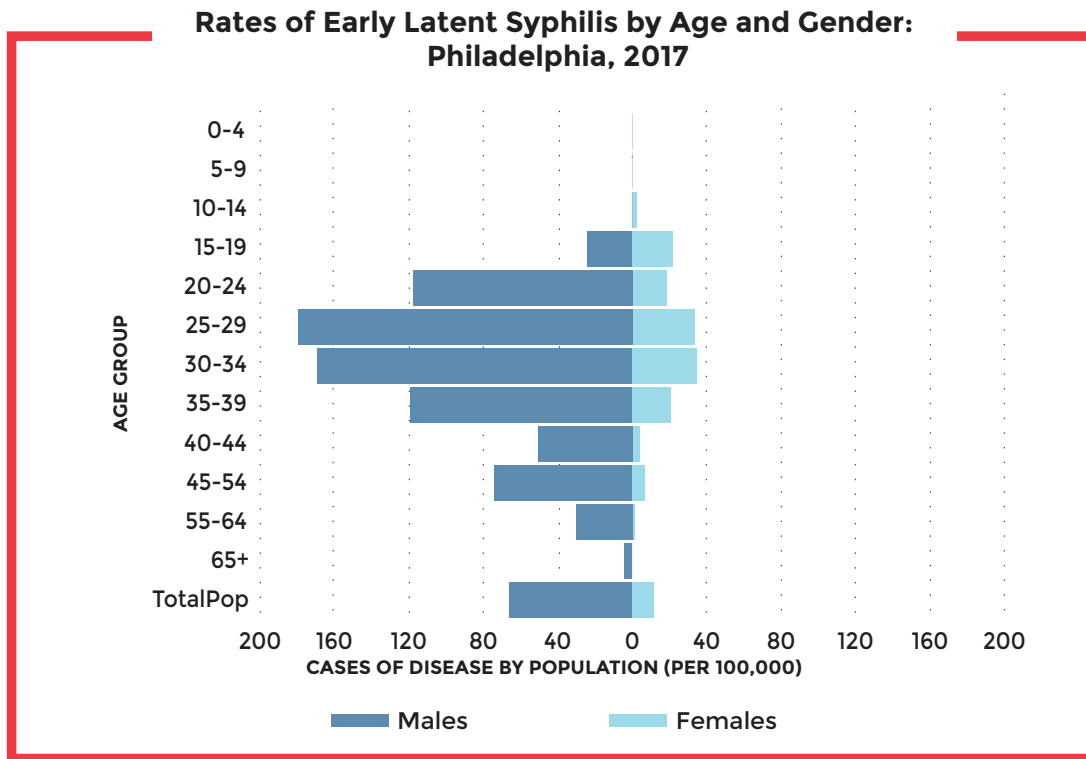
(*Treponema pallidum*)



**Number of Early Latent Syphilis Reports by Age and Region: Philadelphia, 2017**

	NE		NW		N		CC		S		W/SW		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
<b>Age</b>														
<b>0-24 Yrs</b>	13	2	<6	--	66	12	<6	--	11	2	28	5	126	22
<b>25-34 Yrs</b>	24	4	8	1	102	18	20	4	40	7	56	10	250	44
<b>35+ Yrs</b>	14	2	<10	--	72	13	<20	--	39	7	39	7	191	34
<b>Total</b>	51	9	20	4	240	42	43	8	90	16	123	22	567	100

# SYPHILIS-EARLY LATENT (Cont.)





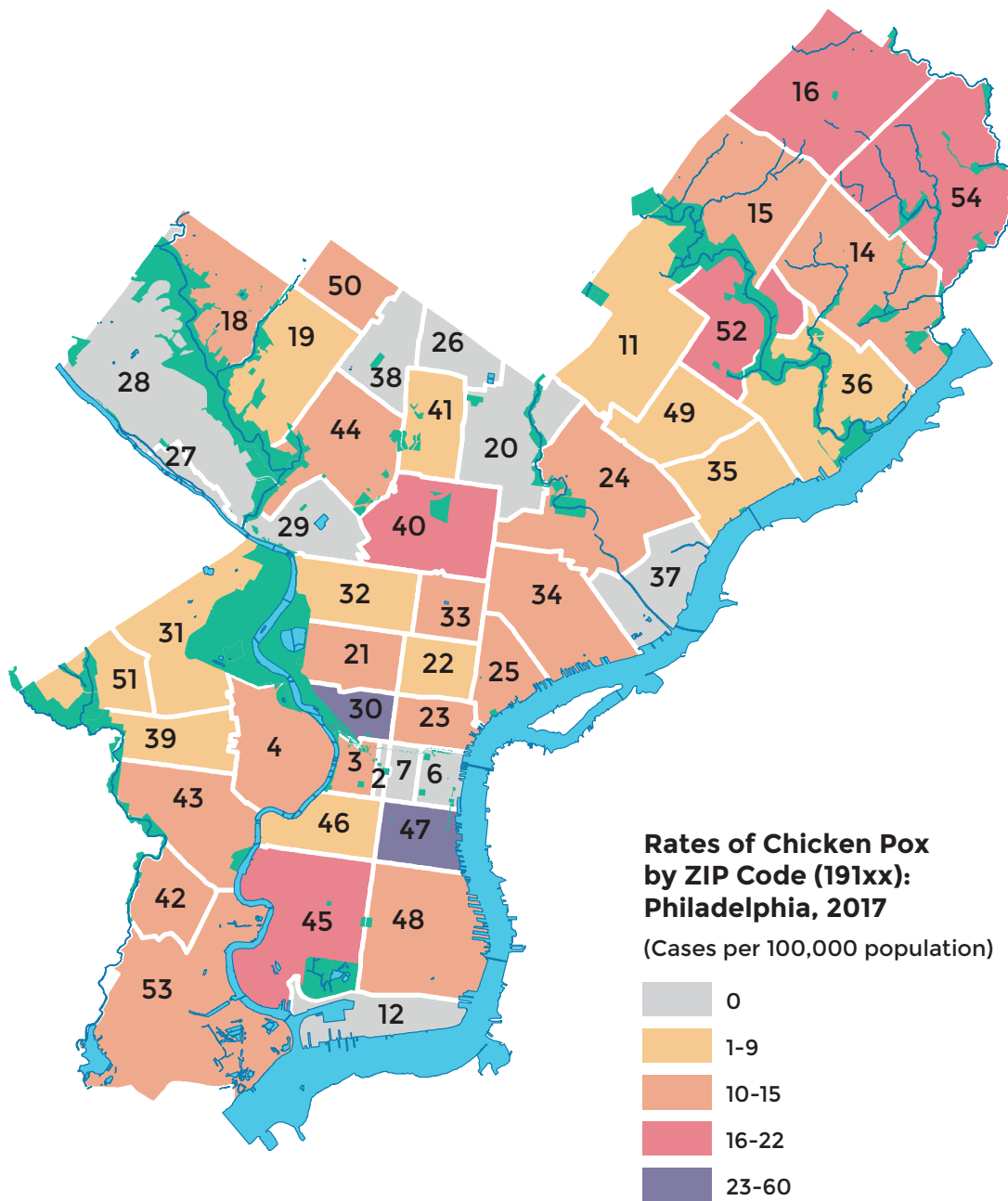
**VACCINE-  
PREVENTABLE  
DISEASES**

CHICKEN POX & SHINGLES  
MENINGOCOCCAL DISEASE  
PERTUSSIS



# CHICKEN POX

(Varicella zoster virus)



# CHICKEN POX & SHINGLES (Cont.)

**Number of Chicken Pox Reports by Age and Gender:  
Philadelphia, 2017**

	0-4 Years		5-17 Years		18-40 Years		41+ Years		Total	
	n	%	n	%	n	%	n	%	n	%
<b>Male</b>	15	14.4	16	15.4	6	5.8	8	7.7	45	43.3
<b>Female</b>	14	13.5	22	21.2	17	16.3	6	5.8	59	56.7
<b>Total</b>	29	27.9	38	36.5	23	22.1	14	13.5	104	100

## OF NOTE

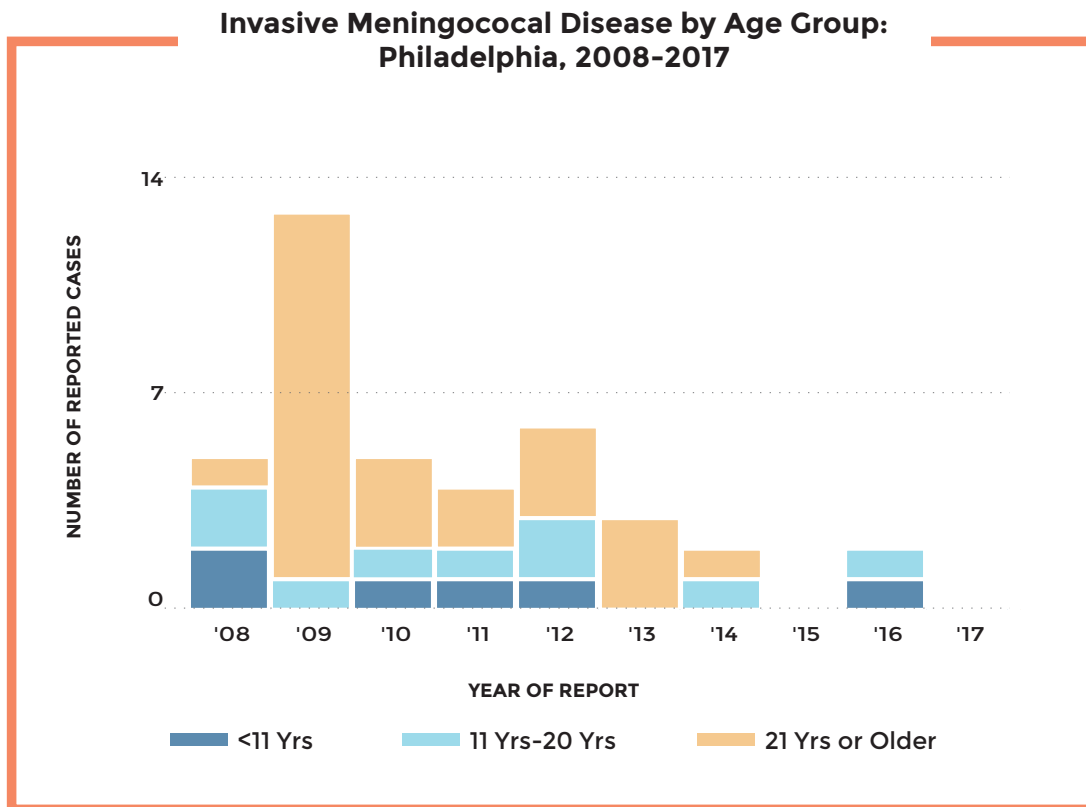
At the end of 2017, a **varicella outbreak** was identified in a private school with a high proportion of unvaccinated students (15%). This varicella outbreak was the largest reported in Philadelphia since 2007 and involved **19 cases (15 students and 4 household contacts)**. Seventeen of the 19 cases were unvaccinated due to religious or philosophical exemptions. To control further transmission within the school, 6 students lacking evidence of varicella immunity were excluded for 21 days or until proof of varicella immunity or post-exposure vaccination was provided.

**Number of Shingles Reports by Age and Gender:  
Philadelphia, 2017**

	0-14 Years		15-30 Years		31-45 Years		46-60 Years		61+ Years		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
<b>Male</b>	13	6.2	15	7.2	13	6.2	17	8.1	14	6.7	72	34.4
<b>Female</b>	8	3.8	19	9.1	41	19.6	37	17.7	32	15.3	137	65.6
<b>Total</b>	21	10.0	34	16.3	54	25.8	54	25.8	46	22.0	209	100

# MENINGOCOCCAL DISEASE

(*Neisseria meningitidis*)

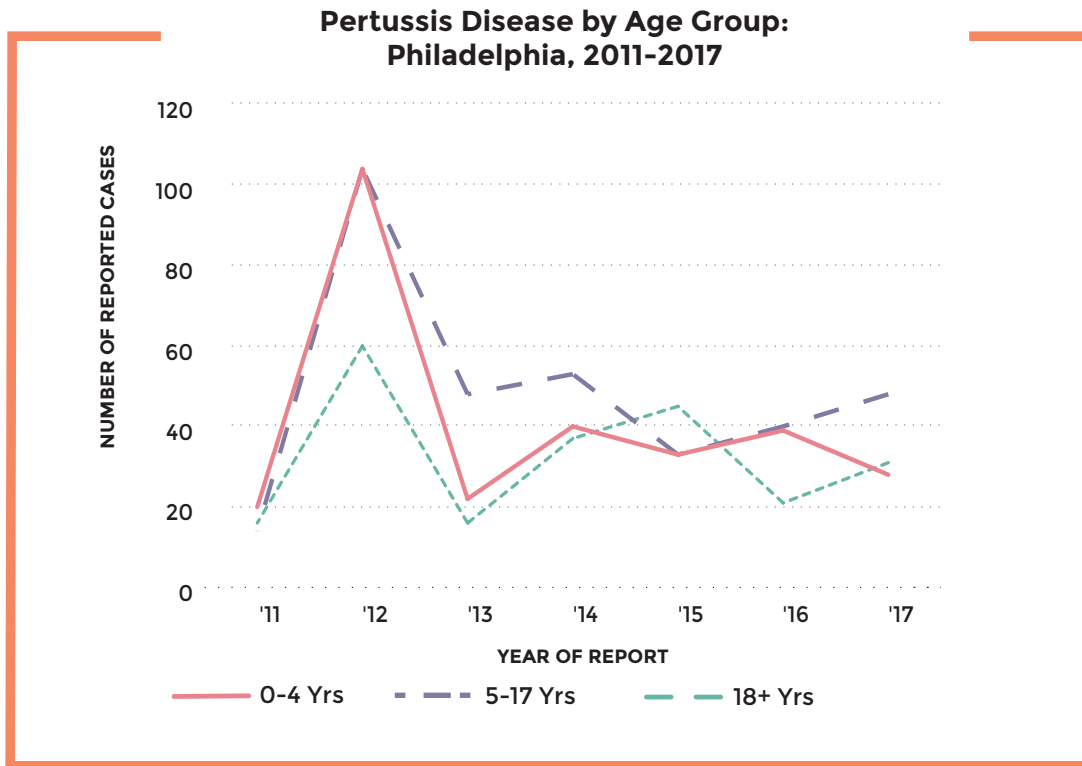


**Reports of Meningococcal Disease by Serogroup Per Year:  
Philadelphia, 2008-2017**

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total N (%)
<b>Serogroup</b>											
B	1	8	1	1	2	0	1	0	1	0	15 (38%)
C	0	1	1	0	1	0	0	0	0	0	3 (8%)
W	0	1	0	0	0	0	0	0	0	0	1 (3%)
X	0	0	0	1	0	0	0	0	0	0	1 (3%)
Y	2	2	2	2	2	2	0	0	0	0	12 (31%)
Z	0	0	0	0	0	0	0	0	0	0	0 (0%)
Nontypeable	2	0	1	0	1	1	1	0	1	0	7 (18%)
<b>Total</b>	<b>5</b>	<b>12</b>	<b>5</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>39(100%)</b>

# PERTUSSIS

(*Bordetella pertussis*)



## OF NOTE

In fall of 2017 an outbreak at a high school included 15 outbreak-related infections (13 confirmed and 2 suspect), only two of whom were unvaccinated. Among previously vaccinated infections, the median time from the last Tdap vaccine to symptom onset was 5.0 years. Additionally, in 2017, sixteen household clusters were identified.

**Number of Pertussis Reports by Age and Gender:  
Philadelphia, 2017**

	0-4 Years		5-17 Years		18+ Years		Total	
	n	%	n	%	n	%	n	%
<b>Male</b>	12	11.2	23	21.5	11	10.3	46	43
<b>Female</b>	16	15.0	25	23.4	20	18.7	61	57
<b>Total</b>	28	26.2	48	44.9	31	29.0	107	100



# VECTOR- BORNE

DISEASES

TICKBORNE INFECTIONS

ARBOVIRAL INFECTIONS

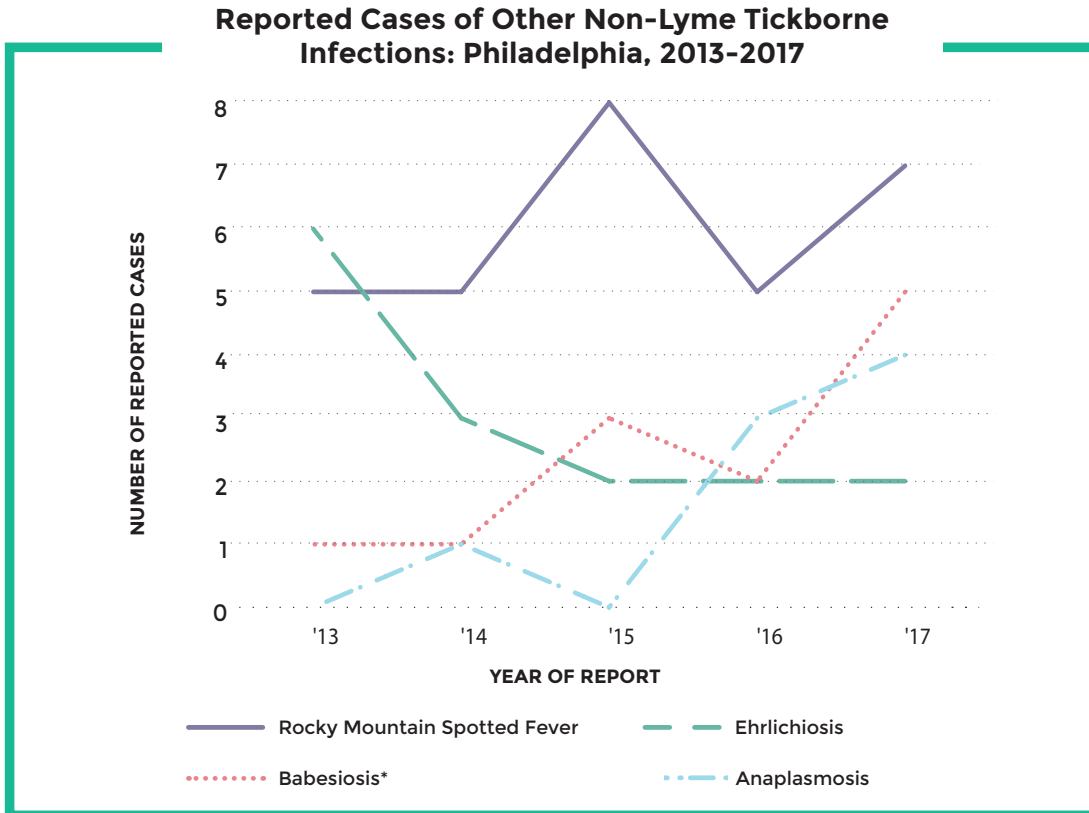
ZIKA VIRUS

LYME DISEASE

MALARIA

WEST NILE VIRUS

# TICKBORNE INFECTIONS



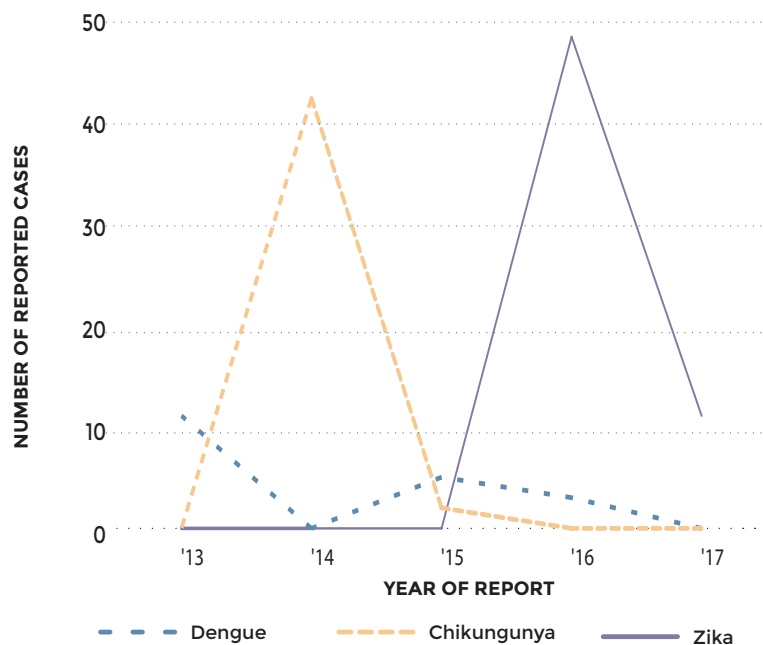
**Reported Cases of Other Non-Lyme Tickborne Infections: Philadelphia, 2013-2017**

	2013	2014	2015	2016	2017	Total
<b>Anaplasmosis</b>	0	1	0	3	4	8
<b>Babesiosis*</b>	1	1	3	2	5	12
<b>Ehrlichiosis</b>	6	3	2	2	2	15
<b>Rocky Mountain Spotted Fever</b>	5	5	8	5	7	30
<b>Total</b>	12	10	13	12	18	65

\*Babesiosis includes locally-acquired and travel-associated infections as well as transfusion-associated cases

# ARBOVIRAL INFECTIONS

**Reported Cases of Travel-associated Arboviral Infections: Philadelphia, 2013-2017**



**OF NOTE**

All confirmed and probable Zika infections among Philadelphia residents were acquired through travel to a Zika-affected area (54, 92%) or exposure to a recent traveler through sex (2, 3%) or maternal-fetal transmission (3, 5%). No *Aedes aegypti* mosquitoes (main Zika vector) were identified during seasonal mosquito surveillance in Philadelphia.

**Travel-associated Arboviral Infections: Philadelphia, 2013-2017**

	Chikungunya		Dengue		Zika	
	n= 44	%	n= 19	%	n=59	%
<b>Female</b>	34	77	10	53	45	76
<b>Foreign Born</b>	31	70	7	37	39	66
<b>Hospitalized</b>	9	20	11	58	0	0
<b>Death</b>	0	0	1	5	0	0
<b>Median Age (Range) Years</b>	42.5	(5-78)	42	(10-79)	34	(0-73)

# ZIKA VIRUS

## OF NOTE

As part of CDC US Zika Pregnancy and Infant Registry (USZPIR) activities, PDPH has followed **40 pregnant women** with evidence of confirmed, probable, or suspect Zika infection during pregnancy and their infants through 2 years of age since 2016. One other infant who had discordant test results at birth and whose mother tested negative for Zika is also being monitored. Among 35 USZPIR newborns (1 multiple birth) from Philadelphia, **no infant abnormalities were identified** although 3 had laboratory evidence suggestive of an unspecified flavivirus.

**Zika Pregnancy Registry Cases:  
Philadelphia, 2016-2017**

	N	(%)
<b>TOTAL</b>	<b>41</b>	<b>100</b>
<b>MATERNAL STATUS<sup>a</sup></b>		
<b>Confirmed</b>	4	18
<b>Probable</b>	13	59
<b>Suspect<sup>b</sup></b>	5	23
<b>PREGNANCY OUTCOME</b>	38	93
<b>Live Birth</b>	34	83
<b>Miscarriage</b>	2	5
<b>Elective Termination</b>	2	5
<b>Lost to Follow Up</b>	2	5
<b>Moved Outside Philadelphia</b>	1	2
<b>MATERNAL SYMPTOMATIC</b>	7	17

<sup>a</sup> Confirmed: Zika Nucleic Acid Test (NAT) positive Zika and negative Zika and negative Dengue neutralizing antibodies

Probable: Zika IgM positive with positive Zika and positive Dengue neutralizing antibodies

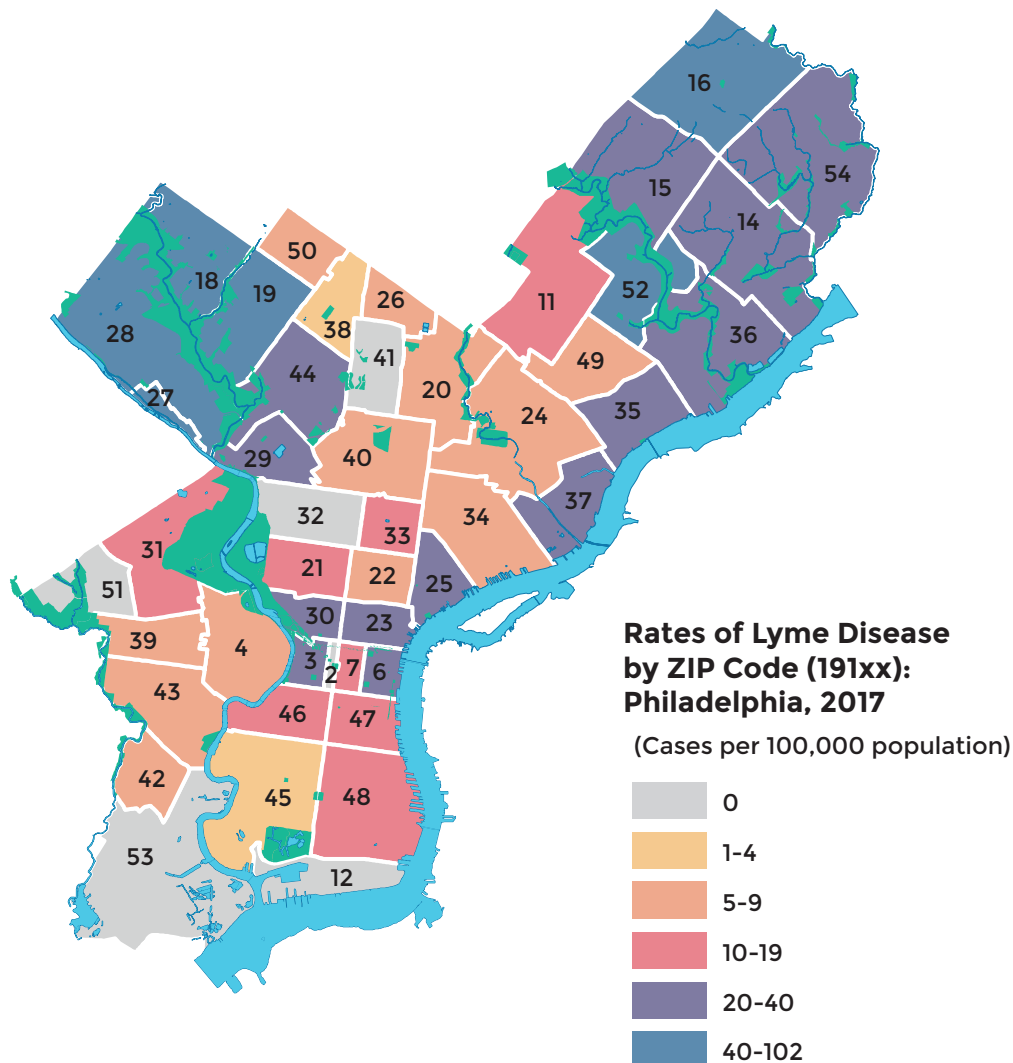
Suspect: Zika IgM equivocal with positive Zika and Positive Dengue neutralizing antibodies

<sup>b</sup> Includes one newborn who had discordant testing results and whose mother had negative Zika IgM and neutralizing antibody results.



# LYME DISEASE

*(Borrelia burgdorferi)*



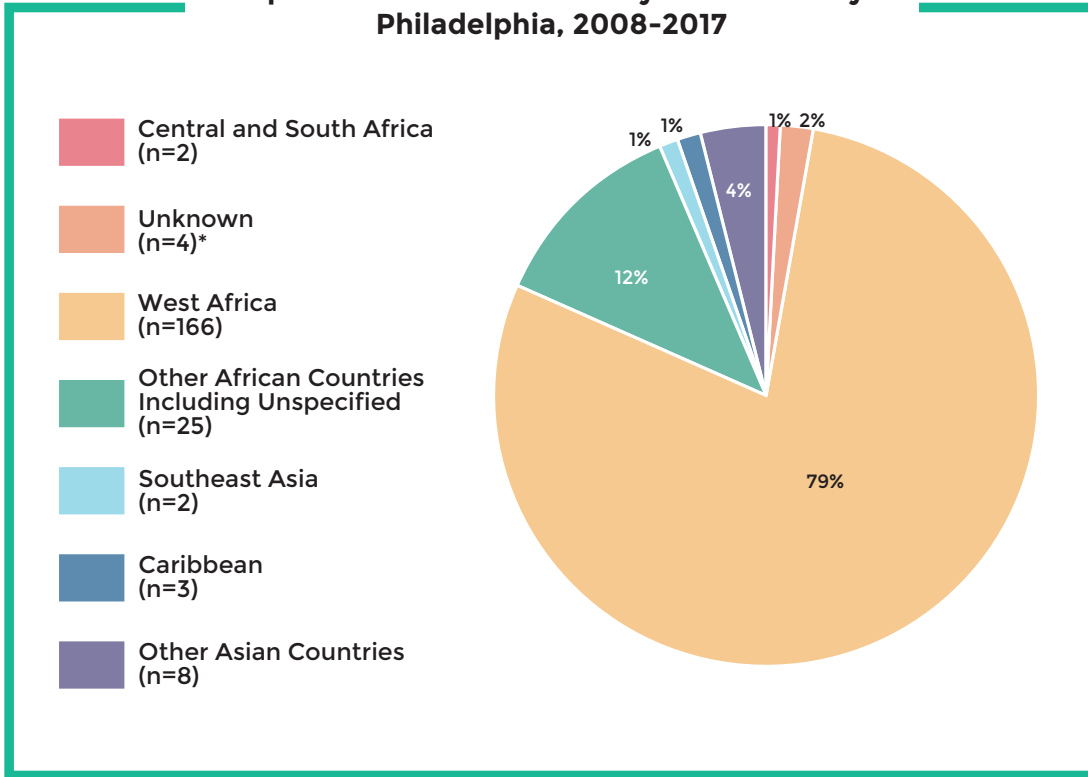
**Number of Lyme Disease Reports by Age and Gender: Philadelphia, 2017**

	0-14 Years		15-34 Years		35-60 Years		61+ Years		Total	
	n	%	n	%	n	%	n	%	n	%
<b>Male</b>	23	8.7	41	15.5	51	19.3	43	16.3	158	59.8
<b>Female</b>	20	7.6	30	11.4	28	10.6	28	10.6	106	40.2
<b>Total</b>	43	16.3	71	26.9	79	29.9	71	26.9	264	100

# MALARIA

(*Plasmodia spp.*)

Reported Cases of Malaria by Travel History:  
Philadelphia, 2008-2017



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

VECTOR-BORNE DISEASES

# WEST NILE VIRUS

## OF NOTE

During the 2017 season, **3 Philadelphia residents developed West Nile Virus (WNV) infections** (2 neuro-invasive WNV and 1 WNV fever). Both neuroinvasive cases occurred in adults >50 years of age and required hospitalization. One neuroinvasive case was fatal. Cumulative WNV positivity in mosquitoes collected during the 2017 season was **higher** than 2016 (17% vs. 8%), and higher than the historic median (3%).



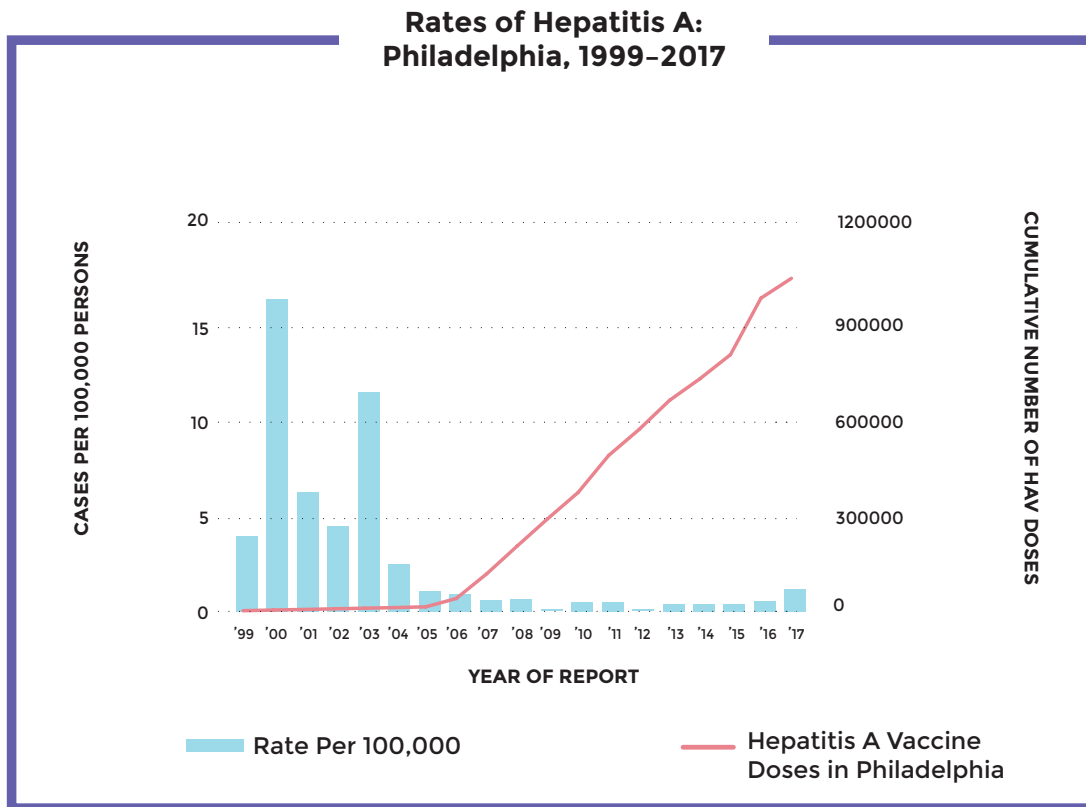
# **VIRAL HEPATITIS**

## **INFECTIONS**

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

# HEPATITIS A

(Hepatitis A virus)



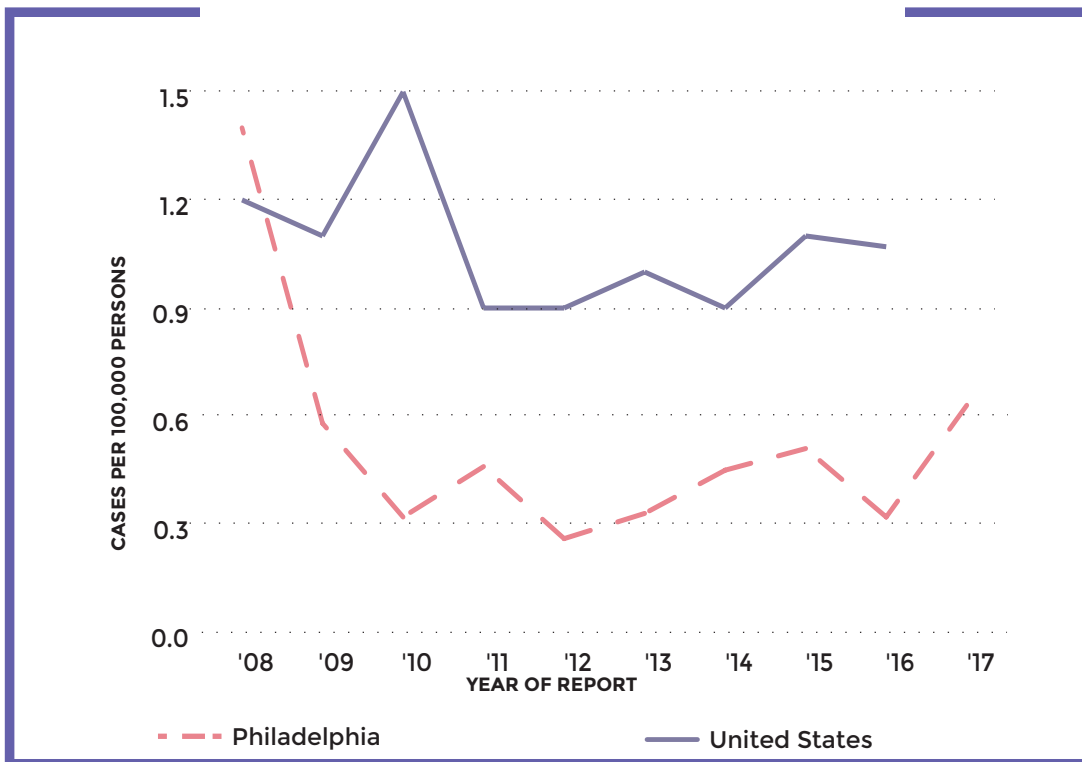
**OF NOTE**

PDPH identified **19 confirmed cases of hepatitis A** in 2017. This is a marked increase from a median of 6 cases reported annually from 2012 - 2016 (range 2 - 9 cases). The median age was 36 years (range 20 years - 54 years), and 84% of cases were male. Compared to previous years, fewer cases in 2017 reported international travel (41% vs. 15%). Notably, **63% of the cases from 2017 identified as men who have sex with men (MSM)**.

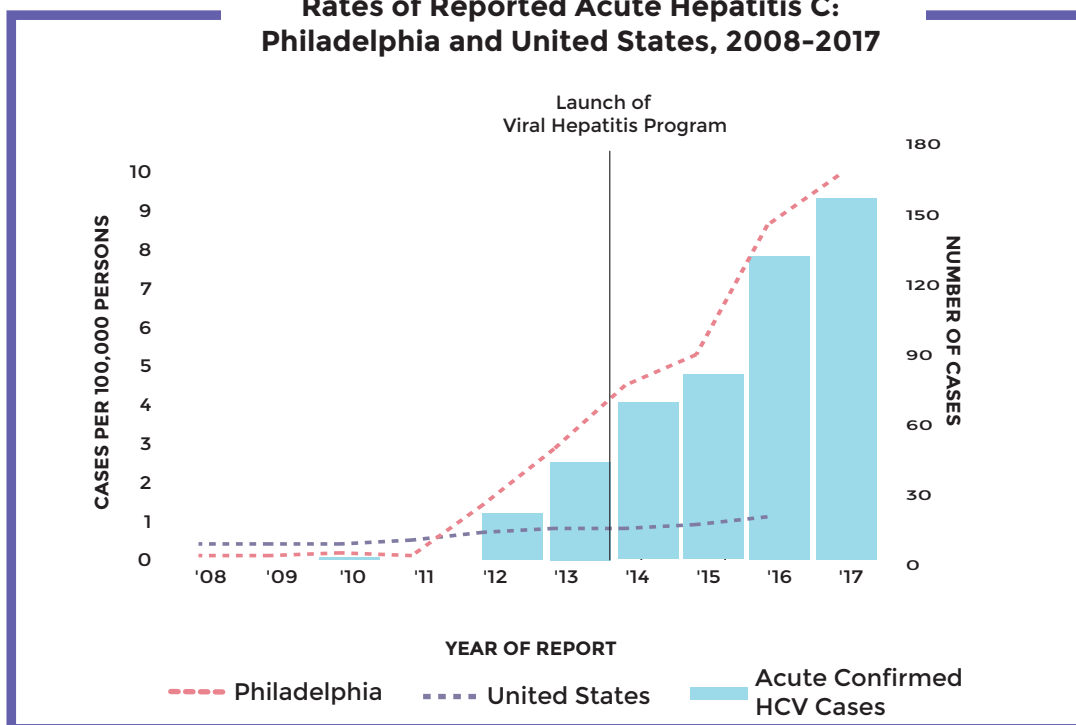
# HEPATITIS-ACUTE

(Hepatitis B & C virus)

**Rates of Reported Acute Hepatitis B:  
Philadelphia and United States, 2008-2017**

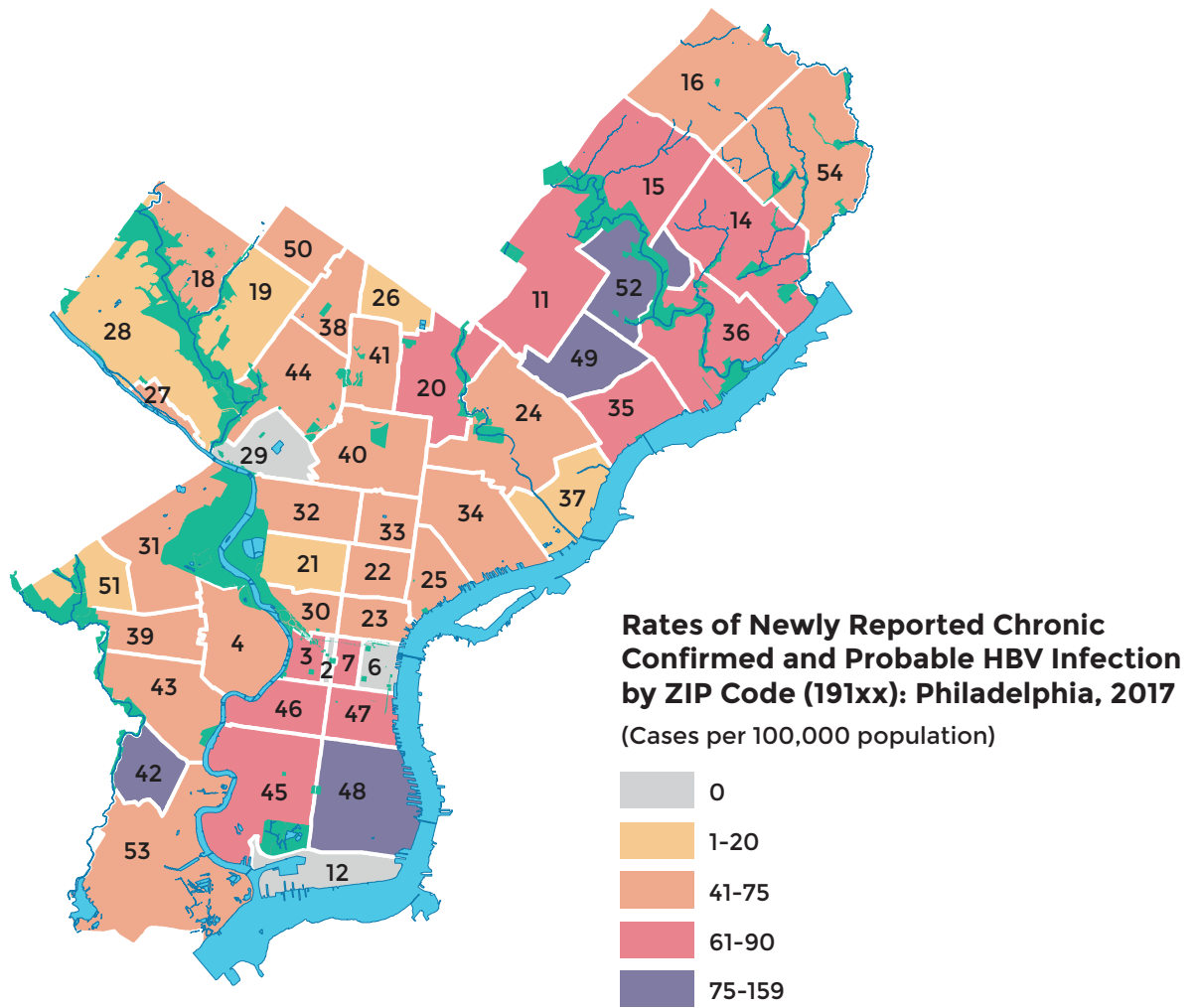


**Rates of Reported Acute Hepatitis C:  
Philadelphia and United States, 2008-2017**



# HEPATITIS B-CHRONIC

(Hepatitis B virus)



**Number of Newly-reported Chronic Hepatitis B Reports by Age and Gender: Philadelphia, 2017**

	0-30 Years		31-45 Years		46-65 Years		66+ Years		Total*	
	n	%	n	%	n	%	n	%	n	%
Male	75	10.3	157	21.5	164	22.4	37	5.1	433	59.2
Female	67	9.2	95	13.0	105	14.4	31	4.2	298	40.8
Total	142	19.4	252	34.5	269	36.8	68	9.3	731	100

\*Missing 10

# HEPATITIS-PERINATAL

(Hepatitis B & C virus)

## Comparison of Perinatal Hepatitis B: Philadelphia 2008-2016

	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total Mother-Child Pairs Followed	162	173	161	131	171	153	164	155	174
Total Children Receiving HBIG Within One Calendar Day of Birth	162 (100%)	168 (97%)	159 (99%)	129 (98%)	154 (90%)	140 (92%)	23 (14%)	81 (52%)	157 (90%)
Total Children Receiving Birth HepB Vaccine Within One Calendar Day of Birth	162 (100%)	171 (99%)	161 (100%)	129 (98%)	167 (98%)	150 (98%)	22 (23%)	128 (83%)	163 (94%)
Total Children Receiving 3 HBV Vaccines in 1 Year	153 (94%)	156 (90%)	140 (87%)	114 (87%)	167 (98%)	134 (88%)	139 (85%)	120 (77%)	154 (89%)
Children HBsAg+ at Screening (9-12 months old)	0	0	3 (2%)	0	1 (<1%)	0	0	1 (<1%)	0
Household Contacts Identified and Educated	167	182	130	79	-	-	-	-	-
Household Contacts Tested	117	115	86	75	-	-	-	-	-
Household Contacts Susceptible	17 [9]	6 [4]	8 [2]	10 [6]	-	-	-	-	-

**Note:** Due to the nature of the program, complete 2017 Perinatal Hepatitis B Prevention Program results will not be available until 2019.

### OF NOTE

In 2016, PDPH formed the **nation's first Perinatal Hepatitis C Program**. The program aims to work with healthcare providers and mothers to: (1) identify hepatitis C-positive pregnant women, (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-positive Babies After Perinatal Exposure: Philadelphia, 2016

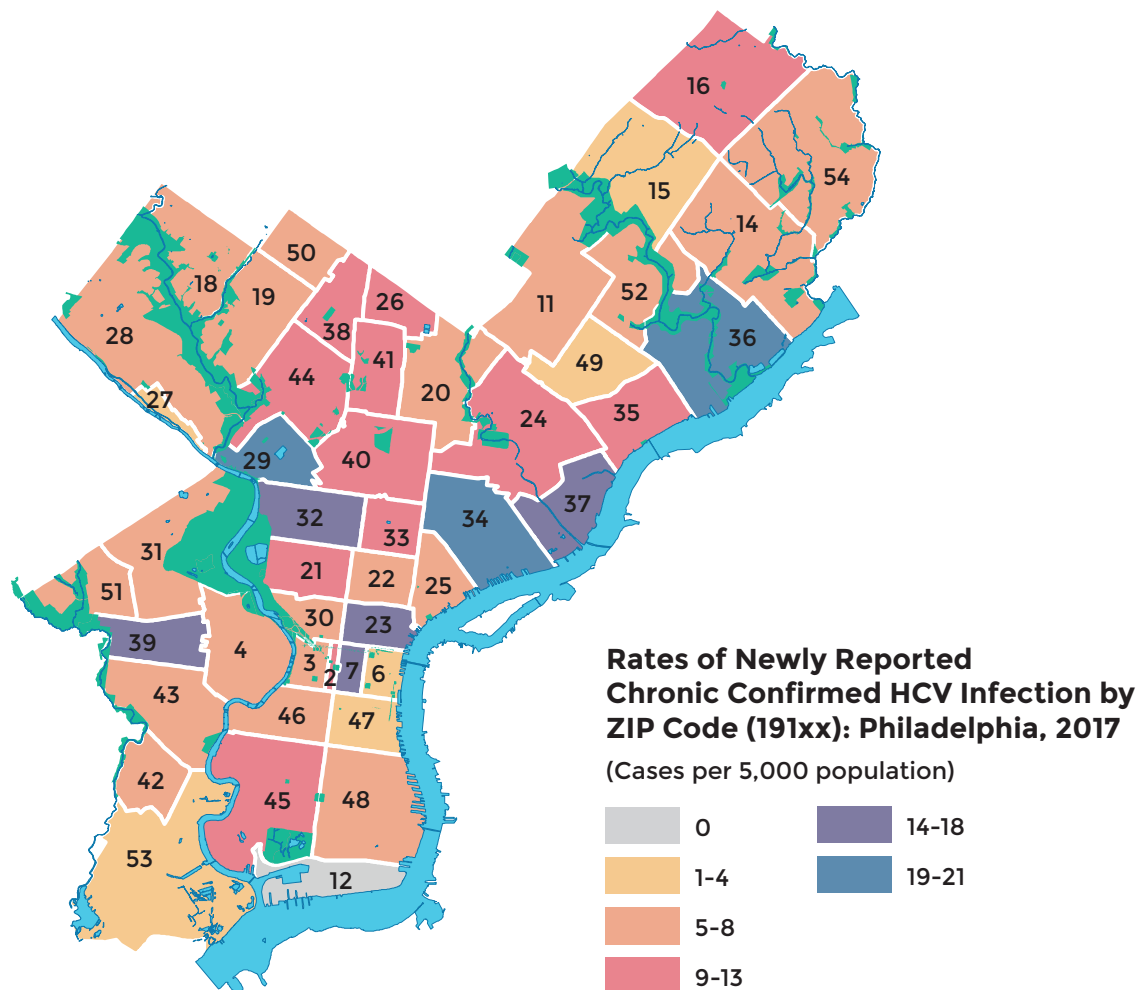
Year of Birth	Number Known Exposed	Infants with Completed Screening*	Infants Positive after Perinatal Exposure
2016	130	63	5

\*Final screening number not finalized as of 8/1/2018

**Note:** Due to the nature of the program, complete 2017 Perinatal Hepatitis C Program results will not be available until 2019.

# HEPATITIS C-CHRONIC

(Hepatitis C virus)



**Number of Newly-reported Chronic Hepatitis C Reports by Age and Gender: Philadelphia, 2017**

	0-30 Years		31-45 Years		46-65 Years		66+ Years		Total*	
	n	%	n	%	n	%	n	%	n	%
Male	277	8.9	458	14.6	1043	33.4	250	8.0	2028	64.9
Female	201	6.4	230	7.4	512	16.4	156	5.0	1099	35.1
Total	478	15.3	688	22.0	1555	49.7	406	13.0	3127	100

\*Missing 14





# **REPORTING DISEASES & CONDITIONS**

NOTIFIABLE DISEASE LIST  
REPORT FORM



For after hours immediate reporting and consultation: (215) 686-4514—ask for Division of Disease Control on-call staff

## REPORTABLE DISEASES AND CONDITIONS

Amebiasis	Giardiasis	Lead poisoning <sup>†</sup>	Shigellosis
Animal bites (wild/stray/domestic)	Gonococcal infections	Legionellosis	<b>Smallpox *</b>
<b>Anthrax *</b>	Guillain-Barré Syndrome	Leprosy (Hansen's disease)	<i>Staphylococcus aureus</i> , vancomycin insensitive
<b>Arboviruses *</b>	<b><i>Haemophilus influenzae</i>, invasive disease *</b>	Leptospirosis	Streptococcal disease, invasive group A
Babesiosis	Hantavirus Pulmonary Syndrome *	Listeriosis	Streptococcal disease, invasive group B (infants 0-89 days of age)
<b>Botulism *</b>	Hemorrhagic fever, all *	Lyme disease	<i>Streptococcus pneumoniae</i> , invasive disease
<b>Brucellosis *</b>	Hepatitis A	Malaria	Syphilis
Campylobacteriosis	Hepatitis B, also including: pregnancy in a Hepatitis B infected woman	<b>Measles (rubeola) *</b>	Tetanus
<b><i>Candida auris</i> *</b>	Hepatitis C, also including: pregnancy in a Hepatitis C infected woman	<b>Melioidosis *</b>	Toxic Shock Syndrome
Carbapenem-resistant	Hepatitis, other viral	Meningitis (viral, fungal, bacterial)	Trichinosis
<i>Enterobacteriaceae</i> (CRE)	Histoplasmosis	<b>Meningococcal infections *</b>	Tuberculosis <sup>§</sup>
Chancroid	Human immunodeficiency virus (HIV/AIDS) ‡, also including:	Mumps	<b>Tularemia *</b>
Chikungunya	• acute HIV infection <sup>++</sup>	<b>Novel coronavirus (SARS, MERS-Cov) *</b>	<b>Typhoid (<i>Salmonella typhi</i> and <i>paratyphi</i>) *</b>
<i>Chlamydia trachomatis</i> including lymphogranuloma venereum	• birth of an infant to an HIV infected woman <sup>*^</sup> ,	<b>Pandrug-resistant organism * •</b>	Varicella, including zoster
<b>Cholera *</b>	• new HIV positive result in a pregnant woman <sup>*^</sup> , and	Pertussis (whooping cough)	Vibriosis
Creutzfeldt-Jakob Disease	• pregnancy in an HIV infected woman <sup>*^</sup>	<b>Plague *</b>	<b>West Nile Virus *</b>
Cryptosporidiosis	Influenza (including novel influenza A *, pediatric deaths *, and institutional outbreaks *)	<b>Pollomyelitis *</b>	<b>Yellow Fever *</b>
Dengue		Pituitary adenoma	Yersiniosis
<b>Diphtheria *</b>		Rabies *	Zika, including prenatal and postnatal birth defects associated with congenital Zika infection
Ehrlichiosis/Anaplasmosis		Rickettsial diseases (including Rocky Mountain spotted fever, rickettsialpox, typhus fever)	
<b>Escherichia coli O157:H7 and Shiga toxin-producing bacteria *</b>		<b>Rubella (German Measles) &amp; Congenital Rubella *</b>	
<b>Food poisoning *</b>		Salmonellosis	

Mandatory reporting of all immunizations administered to all individuals of all ages in the City of Philadelphia to PhilaVax, the citywide immunization information system, at [vax.phila.gov](http://vax.phila.gov)

**\* Report suspected and confirmed cases within 24 hours** † Report to Lead Poisoning Prevention at (215) 685-2788 § Report to TB Control Program at (215) 685-6873  
All unusual disease clusters, disease outbreaks, and unusual ‡‡‡ Report to AIDS Activities Coordinating Office at ‡(215) 685-4789, +(215) 685-4781,  
disease occurrences should be reported immediately or ^ (215) 685-4786, 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:  
04/2018

# 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



### Patient Information

Report Date (Mo., Day, Yr.) ____/____/____		Name (Last, First, M.I.)		Parent or caretaker (if applicable)	
DOB (Mo., Day, Yr.) ____/____/____		Age	Sex <input type="checkbox"/> Male <input type="checkbox"/> Female	Occupation	
Name of Employer or School			Employer/School Address (Number, Street, City, Zip Code)		

Telephone  
(Home) \_\_\_\_\_  
(Cell) \_\_\_\_\_  
(Work) \_\_\_\_\_

### Medical Information

Disease or Condition		Date of Onset (Mo., Day, Yr.) ____/____/____	Diagnosis <input type="checkbox"/> Clinical <input type="checkbox"/> Lab confirmed	Fatal (check one) <input type="checkbox"/> No <input type="checkbox"/> Yes Date of Death _____
Chief Symptoms / Complaints <input type="checkbox"/> cough <input type="checkbox"/> nausea <input type="checkbox"/> diarrhea <input type="checkbox"/> headache <input type="checkbox"/> joint pain <input type="checkbox"/> coryza <input type="checkbox"/> vomiting <input type="checkbox"/> fever <input type="checkbox"/> body aches <input type="checkbox"/> rash		Suspected source(s) of Infection (if known) <input type="checkbox"/> school/daycare <input type="checkbox"/> home/relative <input type="checkbox"/> park/outdoors <input type="checkbox"/> work <input type="checkbox"/> restaurant <input type="checkbox"/> recreational water <input type="checkbox"/> travel (where/dts: _____) <input type="checkbox"/> 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
		<input type="checkbox"/> Blood <input type="checkbox"/> Stool <input type="checkbox"/> CSF <input type="checkbox"/> Other _____			
		<input type="checkbox"/> Blood <input type="checkbox"/> Stool <input type="checkbox"/> CSF <input type="checkbox"/> Other _____			
		<input type="checkbox"/> Blood <input type="checkbox"/> Stool <input type="checkbox"/> CSF <input type="checkbox"/> Other _____			

### Antibiotic Sensitivities (if applicable)

Antibiotic	Resistant	Intermediate	Susceptible
Ampicillin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ceftriaxone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ciprofloxacin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Levofloxacin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Penicillin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trimethoprim/ Sulfamethoxazole (Bactrim)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Notes

### Reporter Information

Facility Name	Reporter Name	Reporter Phone #	Reporter <input type="checkbox"/> ICP <input type="checkbox"/> ED <input type="checkbox"/> School Nurse <input type="checkbox"/> Lab <input type="checkbox"/> Other _____
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### DO NOT WRITE IN AREA BELOW - FOR DEPARTMENT USE

Name (Person Receiving Report)	Method of reporting <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> Mail <input type="checkbox"/> Other _____
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**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.**