

Annual  
Communicable  
Disease Report

2015



**Public Health**  
Prevent. Promote. Protect.

**Dayton &  
Montgomery  
County**

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## **Introduction**

The 2015 Annual Communicable Disease Report presents a five year (2011-2015) overview of the incidence and rates of confirmed reportable diseases that occurred in Montgomery County. Also included in this report are the top reportable diseases for all of Montgomery County, 0 to 18 year olds, and 65 years of age and older; demographic characteristics of sexually-transmitted disease cases reported in 2015; and a summary of the 2014-2015 influenza season.

Information pertaining to prevention, control, and reporting of suspected or confirmed cases of any communicable disease can be found in the Infectious Disease Control Manual (IDCM) published by the Ohio Department of Health. The IDCM is based on Ohio Administrative Code (OAC) Chapter 3701-3. The OAC designates which diseases are to be reported to the local health department and the time frame in which this must occur.

Data for this report was gathered from the Ohio Disease Reporting System (ODRS).

The 2015 Annual Infectious Disease Report was prepared by Public Health - Dayton & Montgomery County's Epidemiology and Communicable Disease sections.

## Reportable Communicable Diseases Montgomery County, 2011-2015

GENERAL INFECTIOUS DISEASES	2011		2012		2013		2014		2015	
	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Botulism, infant	-	-	1	0.2	-	-	-	-	1	0.2
Campylobacteriosis	34	6.3	28	5.2	30	5.6	24	4.5	29	5.4
Coccidioidomycosis	-	-	2	0.4	-	-	-	-	-	-
Cryptosporidiosis	5	0.9	1	0.2	1	0.2	1	0.2	7	1.3
Cytomegalovirus (CMV), congenital	-	-	2	0.4	5	0.9	NA	NA	NA	NA
<i>E. coli</i> O157:H7 and other enterohemorrhagic <i>E. coli</i>	6	1.1	22	4.1	6	1.1	7	1.3	-	-
Giardiasis	17	3.2	21	3.9	19	3.5	13	2.4	9	1.7
Haemophilus influenzae, invasive	16	3.0	14	2.6	11	2.1	4	0.8	14	2.6
Hemolytic Uremic Syndrome (HUS)	-	-	3	0.6	-	-	-	-	-	-
Legionnaires' Disease	25	4.7	10	1.9	31	5.8	32	6.0	51	9.6
Listeriosis	2	0.4	1	0.2	1	0.2	-	-	1	0.2
Meningitis, aseptic	88	16.4	41	7.7	40	7.5	33	6.2	44	8.3
Meningitis, bacterial	10	1.9	10	1.9	11	2.1	11	2.1	9	1.7
Mycobacterial disease, other than tuberculosis (MOTT)	30	5.6	39	7.3	35	6.5	30	5.6	34	6.4
Salmonellosis	40	7.4	54	10.1	35	6.5	57	10.7	68	12.8
Shigellosis	15	2.8	165	30.9	32	6.0	5	0.9	23	4.3
<i>Staphylococcus aureus</i> , with resistance or intermediate resistance to vancomycin (VRSA, VISA)	2	0.4	4	0.7	1	0.2	1	0.2	-	-
Streptococcal Disease, Group A, invasive	27	5.0	19	3.6	12	2.2	24	4.5	20	3.8
Streptococcal Disease, Group B, newborn	3	0.6	4	0.7	2	0.4	3	0.6	4	0.8
Streptococcal Toxic Shock Syndrome (STSS)	5	0.9	1	0.2	-	-	-	-	-	-
<i>Streptococcus pneumoniae</i> , invasive	106	19.7	74	13.8	57	10.6	61	11.4	50	9.4
Toxic Shock Syndrome (TSS)	-	-	1	0.2	-	-	-	-	-	-
Tuberculosis	16	3.0	10	1.9	17	3.2	8	1.5	7	1.3
Typhoid Fever	-	-	2	0.4	-	-	-	-	-	-
Vibriosis	-	-	1	0.2	-	-	-	-	-	-
Yersiniosis	1	0.2	1	0.2	1	0.2	4	0.8	1	0.2

Notes:

Rates use U.S. Census estimates and are per 100,000 population  
 Dash (-) indicates no cases were reported for the given category  
 NA indicates that the disease was not reportable during the year  
 Data reported through February 5, 2016

Class A	2011	2012	2013	2014	2015
Diphtheria	-	-	-	1	-
Influenza A Virus, Novel Human Infection	-	5	-	-	-
Meningococcal Disease	1	-	-	-	-

Notes:

Dash (-) indicates no cases were reported for the given category

NA indicates that the disease was not reportable during the year

Data reported through February 5, 2016

Hepatitis	2011		2012		2013		2014		2015	
	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Hepatitis A	1	0.2	1	0.2	1	0.2	-	-	1	0.2
Hepatitis B	*	*	*	*	*	*	*	*	45	8.4
Hepatitis C	*	*	*	*	507	94.6	658	123.4	601	112.7
Hepatitis E	-	-	-	-	-	-	-	-	-	-

Notes:

Rates use U.S. Census estimates and are per 100,000 population

Asterisk (\*) indicates data not available due to data entry errors

Dash (-) indicates no cases were reported for the given category

NA indicates that the disease was not reportable during the year

Data reported through February 5, 2016

Vaccine-Preventable	2011		2012		2013		2014		2015	
	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Influenza-Associated Hospitalization	114	21.2	135	25.3	186	34.7	460	86.3	249	46.7
Influenza-Associated Pediatric Mortality	NA	NA	NA	NA	1	0.2	-	-	-	-
Mumps	-	-	-	-	-	-	-	-	-	-
Pertussis	3	0.6	32	6.0	186	34.7	73	13.7	50	9.4
Varicella	16	3.0	7	1.3	3	0.6	7	1.3	5	0.9

Notes:

Rates use U.S. Census estimates and are per 100,000 population

Dash (-) indicates no cases were reported for the given category

NA indicates that the disease was not reportable during the year

Data reported through February 5, 2016

Zoonotic	2011		2012		2013		2014		2015	
	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Lyme Disease	-	-	1	0.2	4	0.7	9	1.7	5	0.9
Malaria	4	0.7	2	0.4	3	0.6	4	0.8	2	0.4
West Nile virus Infection	1	0.2	2	0.4	-	-	-	-	1	0.2

Notes:

Rates use U.S. Census estimates and are per 100,000 population

Dash (-) indicates no cases were reported for the given category

Data reported through February 5, 2016

HIV	2011	2012	2013	2014	2015
Male	44	49	45	45	41
Female	14	10	11	12	7
Total	58	59	56	57	48

Notes:  
Data reported through February 16, 2016

Sexually Transmitted	2011		2012		2013		2014		2015	
	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Chlamydia	2,866	533.1	2,922	546.9	3044	568.1	3,184	597.2	3,099	581.3
Gonorrhea	1,175	218.6	1,138	213.0	1164	217.2	968	181.6	1,081	202.8
Syphilis										
Primary	4	0.7	3	0.6	5	0.9	1	0.2	8	1.5
Secondary	13	2.4	25	4.7	16	3.0	14	2.6	10	1.9
Early Latent	14	2.6	21	3.9	15	2.8	13	2.4	18	3.4
Late and Late Latent	25	4.7	16	3.0	28	5.2	12	2.3	21	3.9
Unknown Latent	-	-	1	0.2	-	-	-	-	-	-
Total	56	10.4	66	12.4	64	11.9	40	7.5	56	10.5

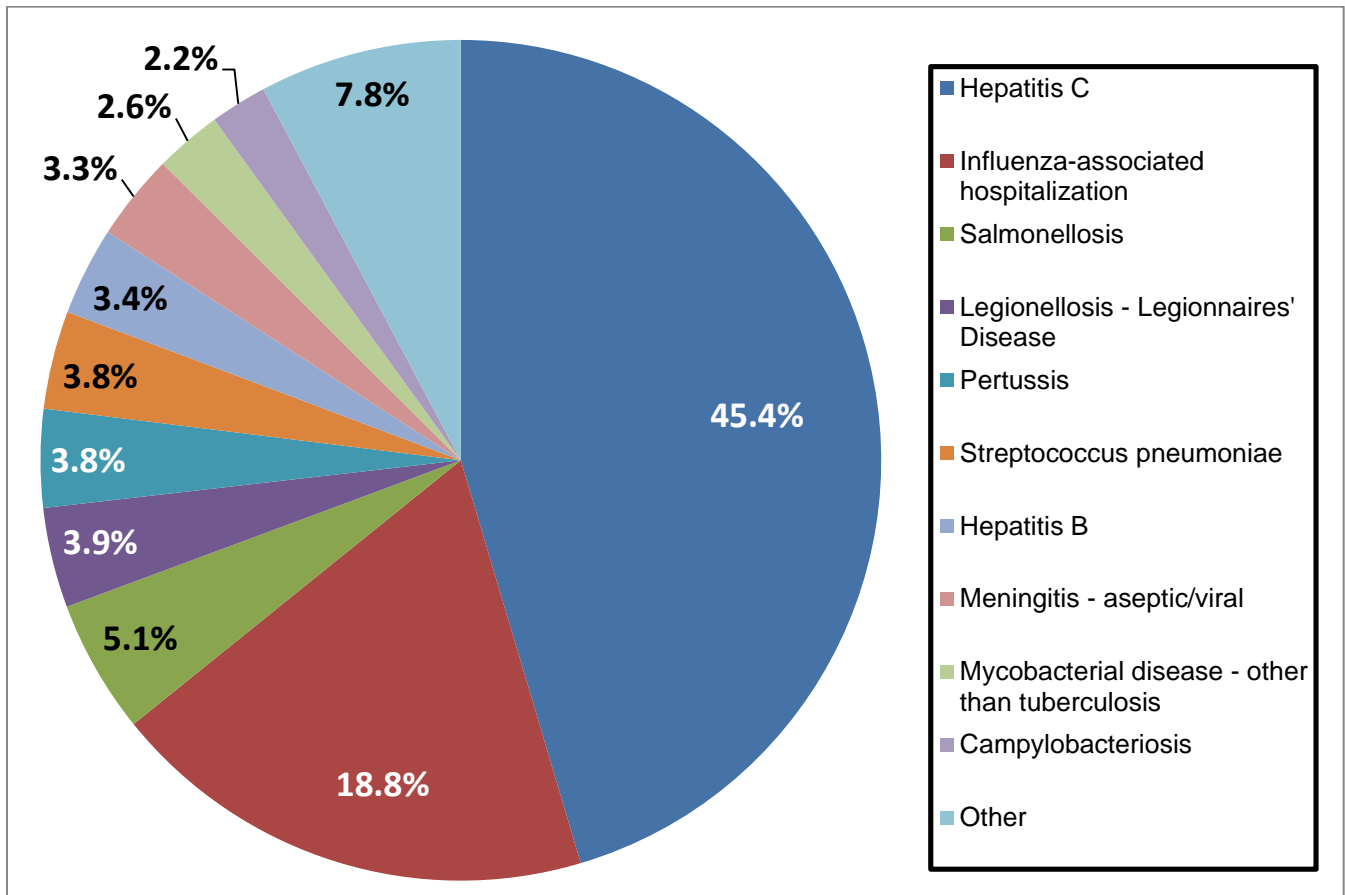
Notes:  
Rates use U.S. Census estimates and are per 100,000 population  
Dash (-) indicates no cases were reported for the given category  
Data reported through February 5, 2016

Outbreaks	2011	2012	2013	2014	2015
Community	-	1	-	-	-
Foodborne	-	1	-	2	-
Healthcare-Associated	1	-	2	-	5
Institutional	5	5	1	4	6
Waterborne	1	-	-	1	1
Zoonotic	-	1	-	-	-

Notes:  
Dash (-) indicates no cases were reported for the given category  
Data reported through February 5, 2016

## Top 10 Most Reportable Diseases Montgomery County, 2015

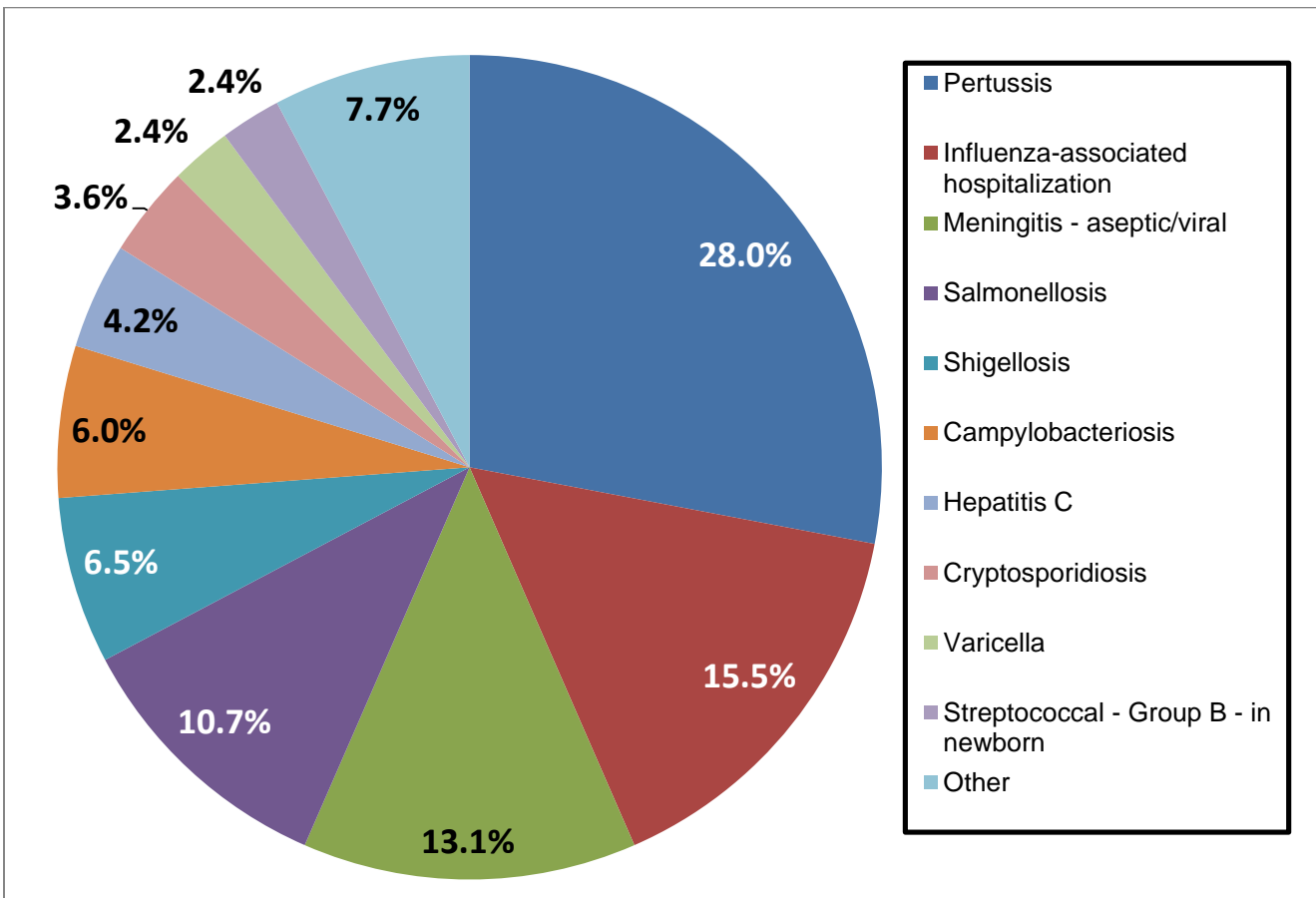
Reportable Condition (Class B)	Cases	Percent
Hepatitis C	601	45.4%
Influenza-associated hospitalization	249	18.8%
Salmonellosis	68	5.1%
Legionellosis - Legionnaires' Disease	51	3.9%
Pertussis	50	3.8%
Streptococcus pneumoniae	50	3.8%
Hepatitis B	45	3.4%
Meningitis - aseptic/viral	44	3.3%
Mycobacterial disease - other than tuberculosis	34	2.6%
Campylobacteriosis	29	2.2%
<b>Total Cases for 2015</b>	<b>1,324</b>	





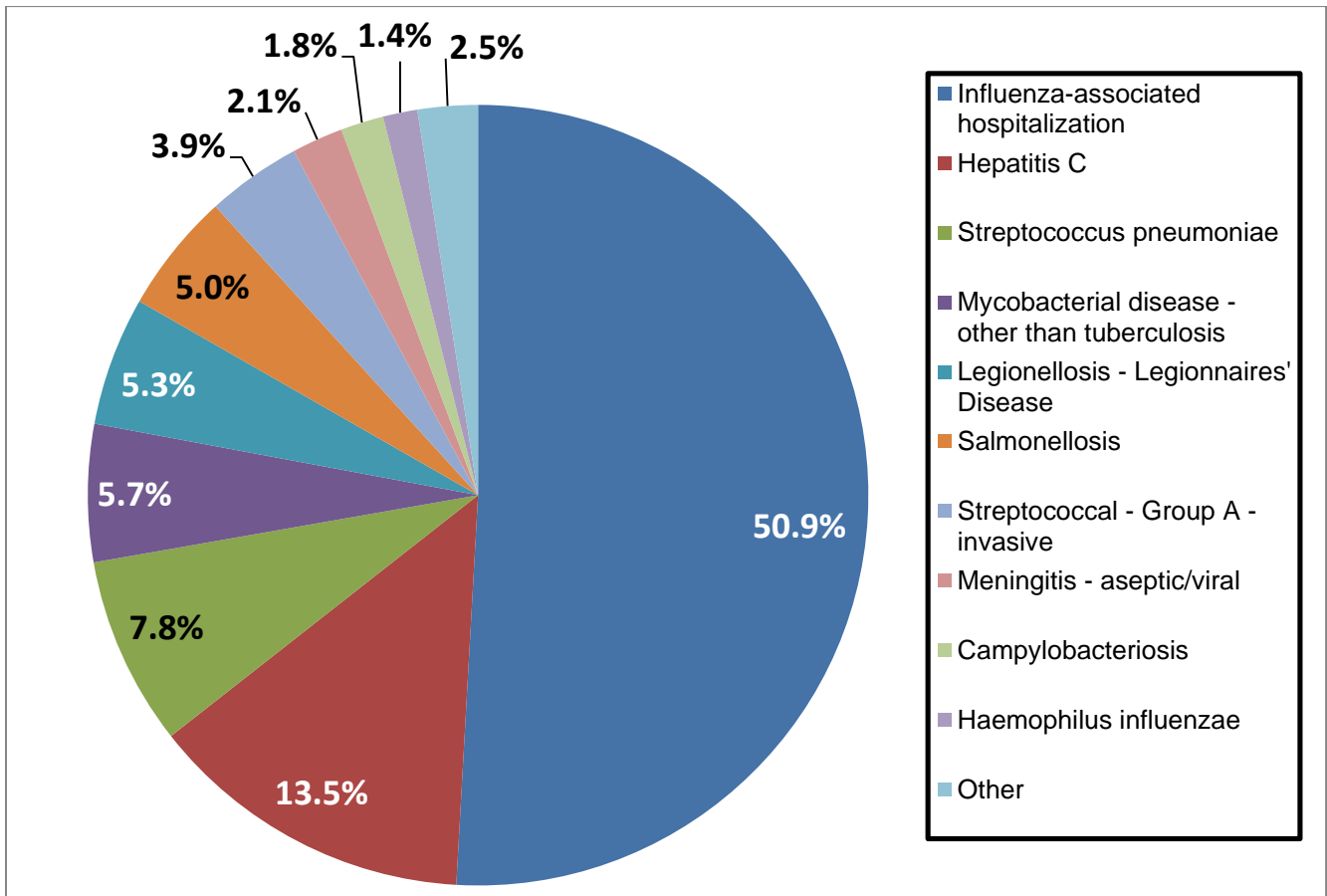
## Top 10 Most Reportable Diseases for ages 0-18 years Montgomery County, 2015

Reportable Condition (Class B)	Cases	Percent
Pertussis	47	28.0%
Influenza-associated hospitalization	26	15.5%
Meningitis - aseptic/viral	22	13.1%
Salmonellosis	18	10.7%
Shigellosis	11	6.5%
Campylobacteriosis	10	6.0%
Hepatitis C	7	4.2%
Cryptosporidiosis	6	3.6%
Varicella	4	2.4%
Streptococcal - Group B - in newborn	4	2.4%
<b>Total Cases for 2015</b>	<b>168</b>	



## Top 10 Most Reportable Diseases for ages 65 + years Montgomery County, 2015

Reportable Condition (Class B)	Cases	Percent
Influenza-associated hospitalization	143	50.9%
Hepatitis C	38	13.5%
Streptococcus pneumoniae	22	7.8%
Mycobacterial disease - other than tuberculosis	16	5.7%
Legionellosis - Legionnaires' Disease	15	5.3%
Salmonellosis	14	5.0%
Streptococcal - Group A -invasive	11	3.9%
Meningitis - aseptic/viral	6	2.1%
Campylobacteriosis	5	1.8%
Haemophilus influenzae	4	1.4%
<b>Total Cases in 2015</b>	<b>281</b>	



# Legionnaires' Disease

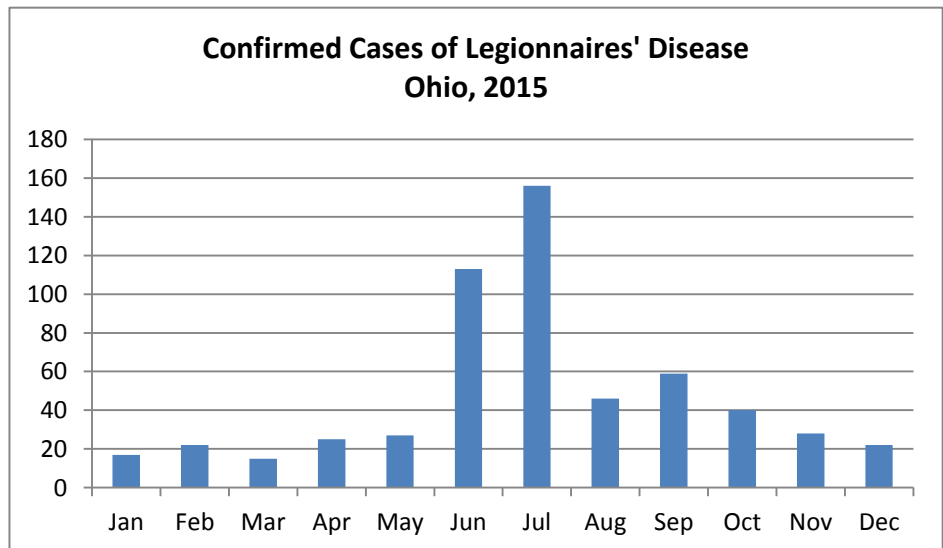
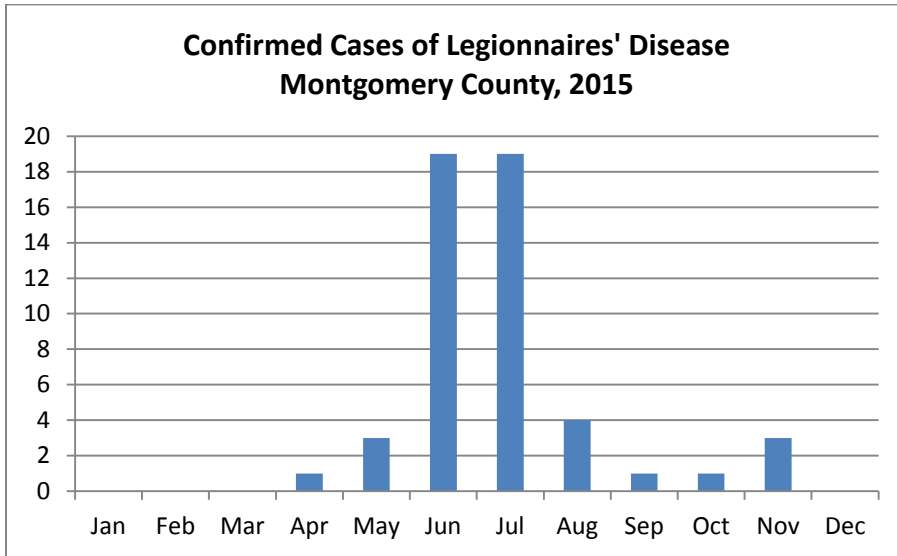
The bacterium, *Legionella*, infects the lungs causing pneumonia. Found naturally in fresh water, *Legionella* grows best in warm water. Exposure occurs by breathing in mist or water vapor containing the bacterium from items such as hot tubs, cooling towers, hot water tanks, decorative fountains, or large plumbing systems.

Those with a higher risk of infection include those age 50 and older, current or former smokers, and those with a chronic lung disease, a weak immune systems, or using of immunosuppressive drugs.

Legionnaires' disease cases in Montgomery County, 2015

Average Age	59
Oldest	91
Youngest	21

From 2014 to 2015, Montgomery County had a 59% increase in the number of confirmed cases of Legionnaires' disease. The majority of these cases occurred in the months of June and July. After extensive interviews with each case, there were no common possible sources of infection evident. There was an increase in cases of Legionnaires' disease throughout the state of Ohio.



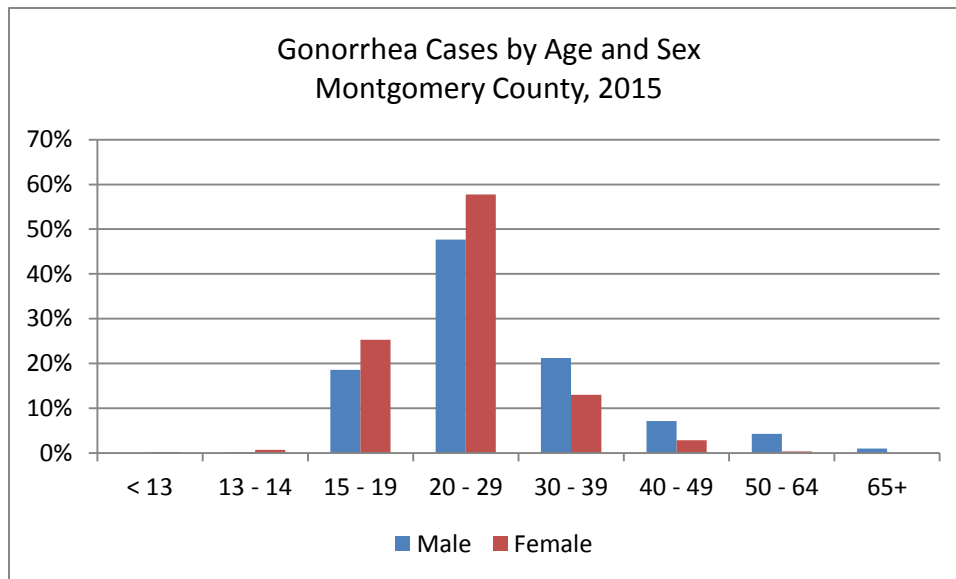
# Demographic Characteristics of Sexually Transmitted Diseases Montgomery County, 2015

## Gonorrhea

**Key points:**

- There were 45 more cases of gonorrhea diagnosed in women (563 cases) than men (518 cases).
- More than 50% of gonorrhea cases were diagnosed in individuals between the ages of 20 and 29.

Age Range	Total		Male		Female	
	Cases	Percent	Cases	Percent	Cases	Percent
< 13	1	0.0%	0	0.0%	1	0.2%
13 - 14	5	0.0%	1	0.2%	4	0.7%
15 - 19	238	22.0%	96	18.5%	142	25.3%
20 - 29	571	52.8%	247	47.7%	324	57.8%
30 - 39	183	16.9%	110	21.2%	73	13.0%
40 - 49	53	4.9%	37	7.1%	16	2.9%
50 - 64	24	2.2%	22	4.2%	2	0.4%
65+	5	0.5%	5	1.0%	0	0.0%
Unknown	1	0.0%	0	0.0%	1	0.2%
<b>Total</b>	<b>1081</b>		<b>518</b>		<b>563</b>	

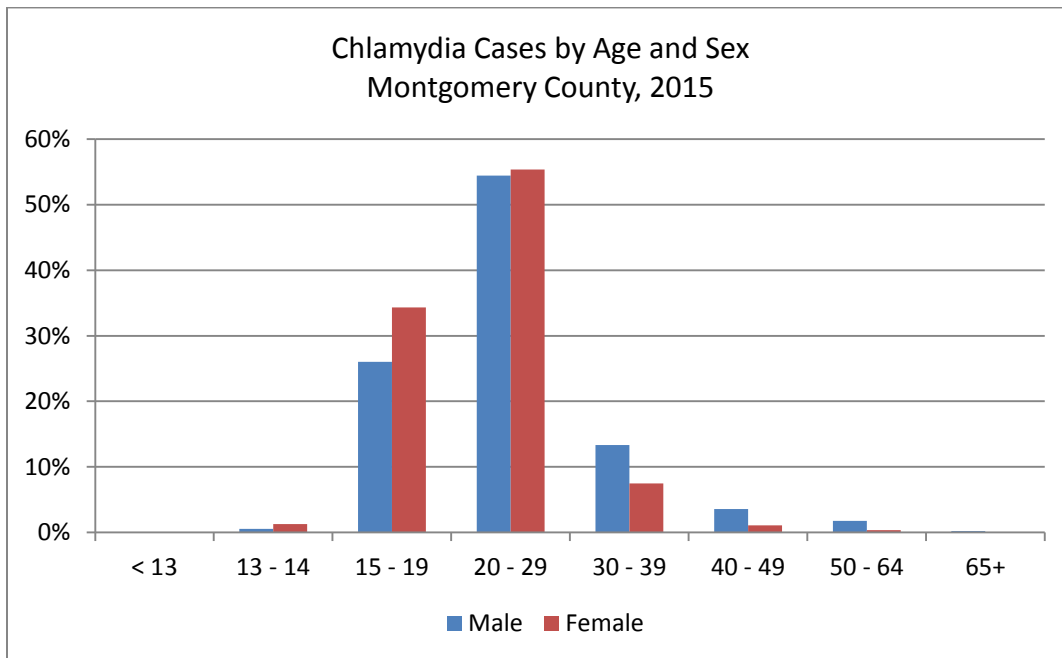


## Chlamydia

**Key points:**

- There were almost two and half times more cases of Chlamydia in women than in men (2,205 vs. 891).
- More than half of Chlamydia cases were diagnosed in individuals between 20 and 29 years of age.

Age Range	Total		Male		Female	
	Cases	Percent	Cases	Percent	Cases	Percent
< 13	2	0.1%	0	0.0%	2	0.1%
13 - 14	33	1.1%	5	0.6%	28	1.3%
15 - 19	989	32.0%	232	26.0%	757	34.4%
20 - 29	1,705	55.1%	485	54.4%	1,209	55.3%
30 - 39	284	9.2%	119	13.4%	165	7.5%
40 - 49	56	1.8%	32	3.6%	24	1.1%
50 - 64	24	0.8%	16	1.8%	8	0.4%
65+	2	0.1%	2	0.2%	0	0.0%
Unknown	1	0.0%	0	0.0%	1	0.0%
<b>Total</b>	<b>3,096</b>		<b>891</b>		<b>2,205</b>	



## Syphilis

### Key points:

- 40% of syphilis cases were diagnosed in women and 60% of cases were diagnosed in men.
- Primary syphilis and late latent syphilis cases were diagnosed most often in 20 to 29 year olds.
- The majority of syphilis cases were late latent (37%), and 32% of cases were early latent.

Age Range	Primary	Secondary	Early Latent	Late Latent	Total
<13	0	0	0	0	0
13-14	0	0	0	0	0
15-19	0	0	0	1	1
20-29	4	3	6	7	20
30-39	2	3	6	3	14
40-49	2	4	3	4	13
50-64	0	0	3	5	8
65+	0	0	0	1	1
<b>Total</b>	<b>8</b>	<b>10</b>	<b>18</b>	<b>21</b>	<b>57</b>

Sex	Primary	Secondary	Early Latent	Late Latent	Total
Male	6	8	15	5	34
Female	2	2	3	16	23
<b>Total</b>	<b>8</b>	<b>10</b>	<b>18</b>	<b>21</b>	<b>57</b>

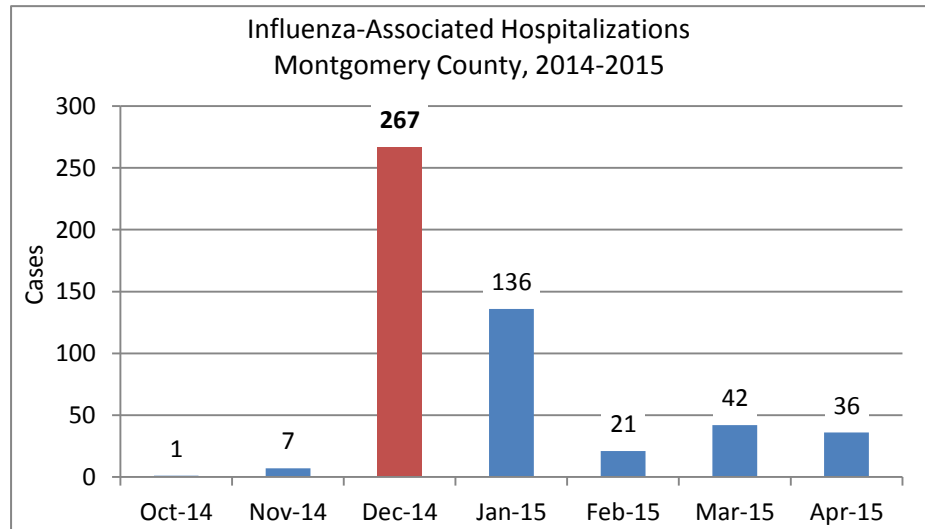
## 2014-2015 Influenza Season MMWR Week 40 – Week 20 (10/4/14- 5/23/15)

*The seasonal flu is a respiratory illness with symptoms that include fever, body aches, tiredness, and cough that last one to two weeks. In addition to practicing good hygiene, the flu vaccine is the best protection against the flu.*

**Key points:**

- Flu season peaked in December of 2014. More than half of influenza-associated hospitalizations were reported during flu season occurred in December.
- More than 55% of influenza-associated hospitalized patients were 65 years of age and older.

Month	Cases	Percent
Sep-14	0	0.0%
Oct-14	1	0.2%
Nov-14	7	1.4%
Dec-14	267	52.3%
Jan-15	136	26.6%
Feb-15	21	4.1%
Mar-15	42	8.2%
Apr-15	36	7.0%
May-15	1	0.2%
<b>Total</b>	<b>511</b>	



Age Range	Cases	Percent
< 5	56	11.0%
5 - 10	10	2.0%
11 - 18	14	2.7%
19 - 24	5	1.0%
25 - 34	17	3.3%
35 - 44	24	4.7%
45 - 54	42	8.2%
55 - 64	58	11.4%
65+	285	55.8%
<b>Total</b>	<b>511</b>	

