



New Hampshire STD/HIV Surveillance Program 5 Year Data Summary Report 2012-2016



Data Notes:

All Data in this report are based upon information provided to the New Hampshire Department of Health and Human Services under specific legislative authority. The numbers may represent an underestimate of the true absolute number and incidence rate of cases in the state. Any release of personal identifying information is conditioned upon such information remaining confidential. The unauthorized disclosure of any confidential medical or scientific data is a misdemeanor under New Hampshire law. The department is not responsible for any duplication or misrepresentation of surveillance data released in accordance with this guideline. Population data used in this report come from the most recently available U.S. Census Bureau population estimates. Historical data in this report may differ from previously released data due to ongoing quality assurance activities and receipt of new surveillance information. All data in this report are complete as of October 16, 2017.

1: Case rate per 100,000 persons. Case rates calculated on events <20 are considered statistically unreliable and should be interpreted with caution.

The Infectious Disease Surveillance Section restricts the release of calculated rate data to cell sizes ≥ 5 cases.

2: Other/Unknown race category includes multi-race

3: Hispanic may be of any race

4: NC = Not Calculated. HIV co-infection data is considered incomplete because most STD cases have an unknown HIV status. Rates are not presented due to incomplete data.

5: County/City data is based upon residence at time of disease diagnosis.

6: MSM= male-to-male sexual contact, IDU = injection drug use, Pediatric=mother with or at risk for HIV, NRR=no reported risk, and NIR= no identified risk.

Heterosexual contact = The Centers for Disease Control and Prevention (CDC) changed the term in the mode of transmission category from "high-risk heterosexual contact" to "heterosexual contact". This is clarified in the report "Diagnoses of HIV infection and AIDS in the United States and Dependent Areas, 2008", released in July 2010. Persons whose transmission category is classified as heterosexual contact are persons who report specific heterosexual contact with a person known to have, or to be at high risk for, HIV infection (e.g., an injection drug user).

7: Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis.

8: US Dependency refers to Puerto Rico and the Virgin Islands, Other Region refers to Canada, Mexico, Europe, Asia, Middle East, Central America, and South America

9: Indicates a new diagnosis of AIDS in the specified year, regardless of when diagnosed with HIV.

Data sources: Sexually Transmitted Disease Management Information System (STDMIS), enhanced HIV AIDS Reporting System (eHARS), and Environmental Systems Research Institute (ESRI) ArcMap.

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New Hampshire STD/HIV Surveillance Program

5 Year Data Summary Report

Highlights, 2012 - 2016

Chlamydia

1. Overall increase in case counts seen in the last 5 years.
2. Persons under age 30 and females of any age are most affected.
3. Highest rates of disease found in southern NH, notably Hillsborough County and more specifically Manchester.

Gonorrhea

1. Overall increase in case counts over the last 5 years, with outbreak status declared in 2016.
2. Females and males both affected, though males account for more cases of diagnosed gonorrhea. Persons under age 30 are most affected.
3. Hillsborough County, specifically the city of Manchester, bears the highest burden of disease.

Primary, Secondary, and Early Latent Syphilis (Infectious Syphilis)

1. Case count stable between 2012 and 2015 with a mean of 48 cases per year.
2. Outbreak status declared in 2017 in accordance with the definition of outbreak for STDs (increase of 2 or more standard deviations from the mean across various characteristics).
3. A higher proportion of those diagnosed with infectious syphilis are co-infected with HIV compared to those diagnosed with chlamydia or gonorrhea.

HIV

1. Newly diagnosed infections have been relatively stable over the past 5 years.
2. Male to male sexual contact is the most common risk factor.
3. The majority of new cases occur among people living in the southern part of NH (Hillsborough, Merrimack, Rockingham, and Strafford Counties).

AIDS

1. Risk factors identified for AIDS diagnoses are very similar to the risk factors identified for HIV diagnoses.
2. The percent of patients concurrently diagnosed with AIDS (AIDS diagnosis within 12 months of their first HIV diagnosis) has varied over the past 5 years with the 5-year average being 29%.

Resources

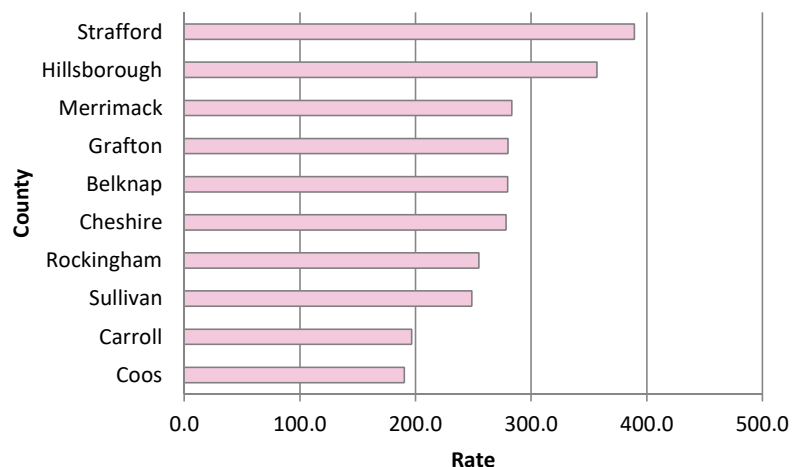
1. CDC/NCHHSTP Atlas: <http://gis.cdc.gov/GRASP/NCHHSTPAtlas/main.html>
2. CDC HIV Surveillance: <http://www.cdc.gov/hiv/default.html>
3. NH DPHS, STD/HIV Publications: <http://www.dhhs.nh.gov/dphs/bchs/std/publications.htm>

New Hampshire Infectious Disease Surveillance Section
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 Chlamydia

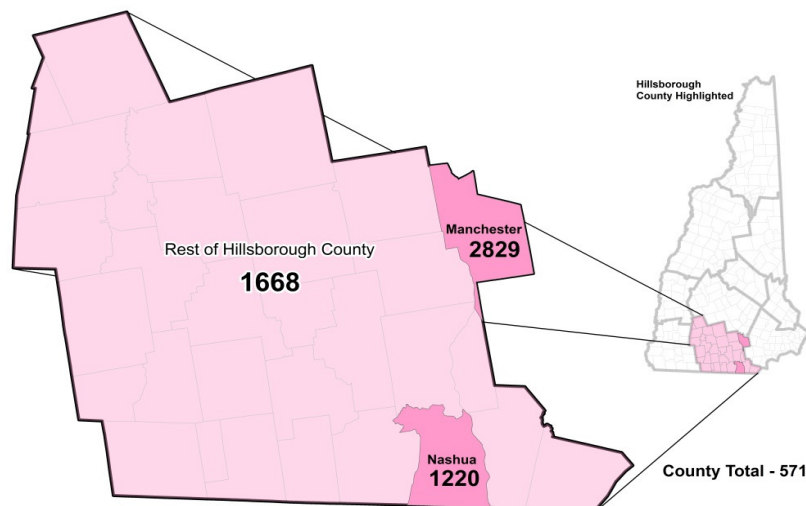


YEAR	2012		2013		2014		2015		2016	
	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹
TOTAL	3070	232.4	3132	236.8	2311	173.9	3687	277.2	4038	302.5
GENDER	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases*	Rate ¹
Male	918	140.7	933	142.8	748	113.8	1198	182.0	1325	200.5
Female	2152	321.8	2199	328.6	1563	232.7	2489	370.5	2711	402.3
AGE-SPECIFIC	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹
0-12	0	0.0	1	*	1	*	5	2.7	0	0.0
13-19	923	737.6	824	671.4	573	474.2	890	749.7	960	820.8
20-24	1354	1563.1	1450	1639.5	1026	1131.4	1612	1764.3	1786	1969.3
25-29	455	601.9	474	615.8	372	473.3	659	824.1	713	873.5
30-34	180	243.5	210	280.5	167	219.1	255	331.8	290	367.2
35-39	83	112.9	69	95.3	83	114.3	117	159.7	142	189.0
40-44	33	35.5	51	57.0	39	45.6	70	85.9	57	74.0
45-49	24	22.7	27	26.6	25	25.6	39	40.9	42	44.6
50-54	12	10.5	19	16.8	20	17.8	20	18.1	19	17.8
55-59	5	4.9	5	4.8	3	*	15	13.7	19	17.2
60+	1	*	2	*	2	*	5	1.6	10	3.1
RACE	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹
White	2539	203.5	2567	205.9	1705	136.3	2490	199.2	2643	211.1
Black	116	642.9	113	603.1	103	540.2	126	646.6	152	750.0
Asian/Pacific Isl.	35	110.0	23	69.7	25	72.9	29	81.7	37	101.5
Amlnd/AlaskNat	9	246.7	11	296.5	5	131.9	10	262.2	8	203.8
Other/Unknown ²	371	1861.8	418	2043.6	473	2253.1	1032	4794.9	1198	5380.9
ETHNICITY		Rate ¹		Rate ¹		Rate ¹		Rate ¹		Rate ¹
Hispanic ³	122	303.9	159	380.5	115	265.6	153	338.9	158	335.3
HIV INFECTED⁴		Rate ¹		Rate ¹		Rate ¹		Rate ¹		Rate ¹
Total	9	NC	8	NC	15	NC	12	NC	15	NC
COUNTY/CITY⁵	Cases	Rate ¹	Cases	Rate ¹	Cases [^]	Rate ¹	Cases	Rate ¹	Cases [^]	Rate ¹
Belknap	119	197.2	153	254.4	99	164.2	165	273.1	170	279.7
Carroll	82	172.0	38	80.0	42	88.6	74	156.7	93	196.7
Cheshire	210	273.3	188	245.4	170	222.8	230	302.3	211	278.5
Coos	43	134.4	62	193.9	26	79.3	70	216.8	61	190.4
Grafton	209	234.2	232	259.4	140	156.5	238	268.0	249	280.1
Hillsborough	1055	262.0	1093	271.0	852	210.4	1262	310.8	1455	356.8
Manchester	546	495.5	524	474.8	433	392.0	628	569.8	698	631.7
Nashua	227	261.1	254	291.5	167	191.4	285	324.0	287	326.5
Merrimack	312	212.3	367	249.2	284	192.3	439	296.4	421	283.3
Rockingham	579	194.5	527	176.4	396	131.8	696	230.7	773	254.9
Strafford	354	284.1	348	278.8	231	183.0	421	332.8	496	389.2
Sullivan	107	247.8	124	288.6	69	160.1	92	213.8	107	248.8

Chlamydia by County and Rate¹, 2016



Chlamydia - Hillsborough County, 2012-2016

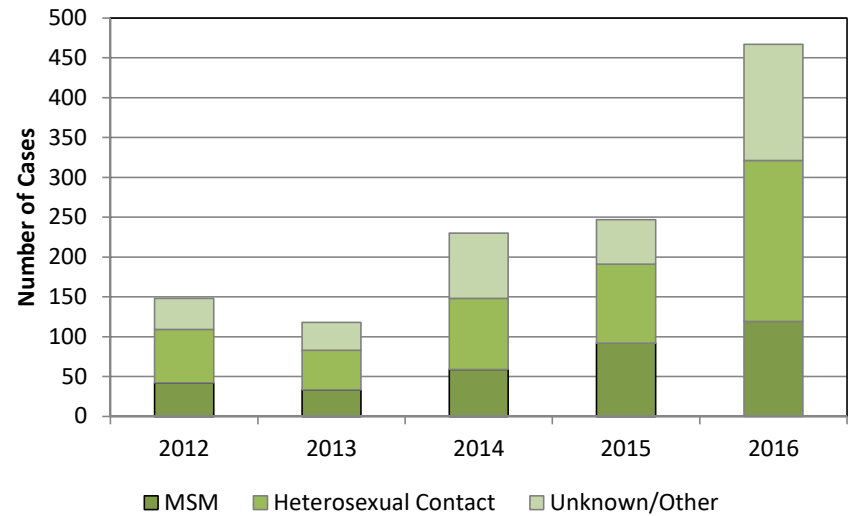


*Excluded: 2 unknown gender
[^]Excluded: 2 unknown county

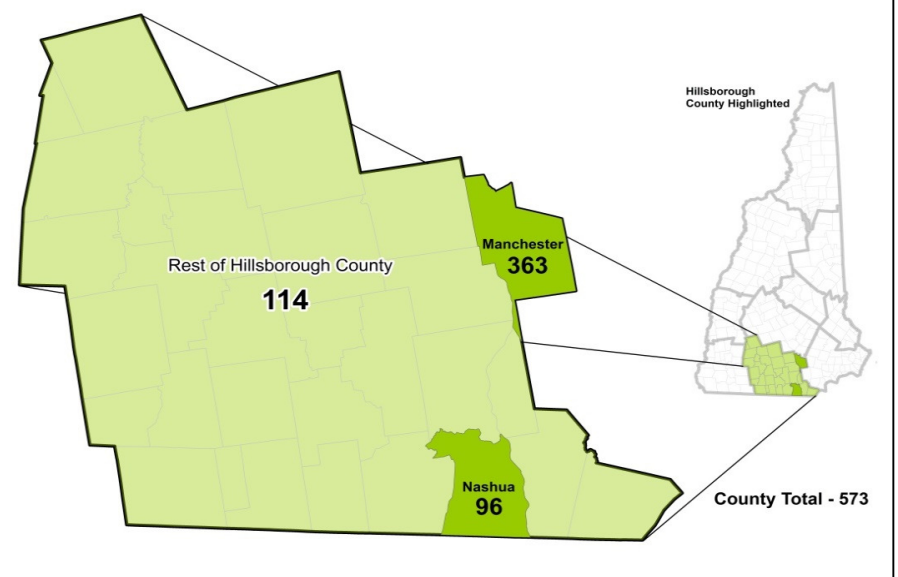
New Hampshire Infectious Disease Surveillance Section
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 2012-2016
 Gonorrhea

YEAR	2012		2013		2014		2015		2016	
	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹
TOTAL	148	11.2	118	8.9	230	17.3	247	18.6	467	35.0
GENDER	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹
Male	84	12.9	69	10.6	136	20.7	181	27.5	333	50.4
Female	64	9.6	49	7.3	94	14.0	66	9.8	134	19.9
AGE-SPECIFIC	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹
0-12	0	0.0	0	0.0	0	0.0	0	0.0	1	*
13-19	25	20.0	9	7.3	27	22.3	31	26.1	48	41.0
20-24	47	54.3	39	44.1	66	72.8	74	81.0	106	116.9
25-29	39	51.6	22	28.6	60	76.3	41	51.3	92	112.7
30-34	11	14.9	8	10.7	38	49.9	38	49.4	70	88.6
35-39	7	9.5	9	12.4	13	17.9	11	15.0	42	55.9
40-44	8	8.6	9	10.1	7	8.2	14	17.2	26	33.7
45-49	6	5.7	11	10.8	10	10.2	19	19.9	29	30.8
50-54	5	4.4	7	6.2	5	4.5	8	7.3	25	23.4
55-59	0	0.0	1	*	3	*	6	5.5	18	16.3
60+	0	0.0	3	*	1	*	5	1.6	10	3.1
RACE	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹
White	112	9.0	98	7.9	172	13.8	183	14.6	332	26.5
Black	13	72.1	9	48.0	19	99.6	15	77.0	24	118.4
Asian/Pacific Isl.	0	0.0	1	*	2	*	6	16.9	5	13.7
Amlnd/AlaskNat	1	*	2	*	0	0.0	0	0.0	0	0.0
Other/Unknown ²	22	110.4	8	39.1	37	176.2	43	199.8	106	476.1
ETHNICITY	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹
Hispanic ³	10	24.9	7	16.8	13	30.0	14	31.0	23	48.8
HIV INFECTED⁴	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹
Total	13	NC	6	NC	16	NC	23	NC	28	NC
COUNTY/CITY⁵	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹
Belknap	3	*	3	*	4	*	6	9.9	12	19.7
Carroll	1	*	2	*	2	*	2	*	1	*
Cheshire	5	6.5	9	11.7	17	22.3	27	35.5	19	25.1
Coos	1	*	1	*	1	*	1	*	6	18.7
Grafton	3	*	4	*	9	10.1	10	11.3	19	21.4
Hillsborough	67	16.6	55	13.6	89	22.0	111	27.3	251	61.6
<i>Manchester</i>	43	39.0	25	22.7	51	46.2	72	65.3	172	155.7
<i>Nashua</i>	9	10.4	15	17.2	18	20.6	21	23.9	33	37.5
Merrimack	21	14.3	12	8.1	21	14.2	24	16.2	49	33.0
Rockingham	22	7.4	20	6.7	48	16.0	35	11.6	68	22.4
Strafford	21	16.9	12	9.6	33	26.1	26	20.6	34	26.7
Sullivan	4	*	0	0.0	6	13.9	5	11.6	8	18.6

Gonorrhea Case Count by Risk⁶, 2012-2016



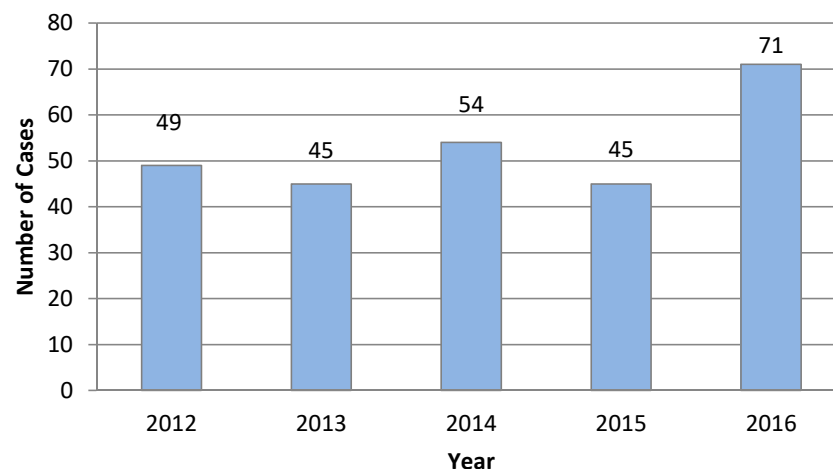
Gonorrhea - Hillsborough County, 2012-2016



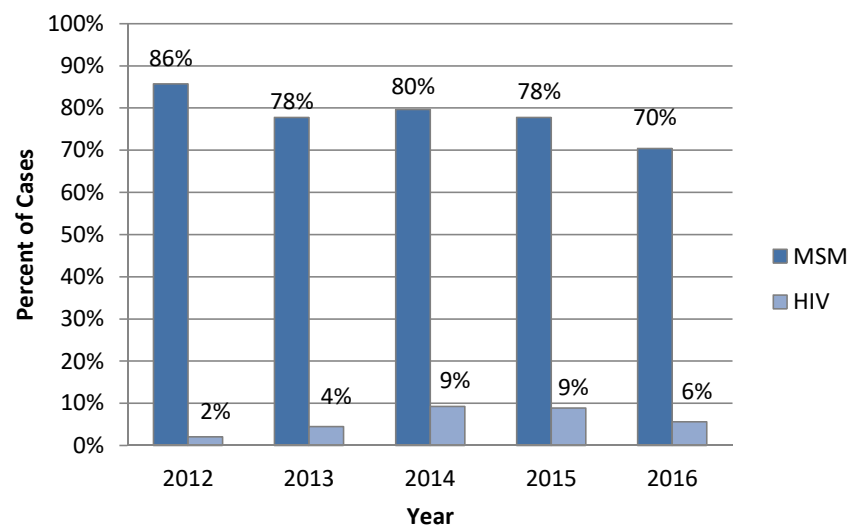
New Hampshire Infectious Disease Surveillance Section
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2012-2016
Infectious Syphilis

YEAR	2012		2013		2014		2015		2016	
	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹
TOTAL	49	3.7	45	3.4	54	4.1	45	3.4	71	5.3
GENDER	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹
Male	49	7.5	42	6.4	47	7.2	41	6.2	65	9.8
Female	0	0.0	3	*	7	1.0	4	*	6	0.9
AGE-SPECIFIC	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹
0-12	0	0.0	0	0.0	0	0.0	1	*	0	0.0
13-19	0	0.0	2	*	2	*	2	*	1	*
20-24	8	9.2	6	6.8	10	11.0	6	6.6	7	7.7
25-29	7	9.3	5	6.5	3	*	7	8.8	10	12.3
30-34	5	6.8	8	10.7	12	15.7	10	13.0	17	21.5
35-39	4	*	7	9.7	6	8.3	6	8.2	11	14.6
40-44	5	5.4	5	5.6	2	*	3	*	3	*
45-49	12	11.4	3	*	9	9.2	3	*	11	11.7
50-54	5	4.4	6	5.3	5	4.5	3	*	7	6.6
55-59	3	*	1	*	2	*	1	*	3	*
60+	0	0.0	2	*	3	*	3	*	1	*
RACE	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹
White	42	3.4	38	3.0	48	3.8	38	3.0	62	5.0
Black	4	*	3	*	3	*	1	*	2	*
Asian/Pacific Isl.	1	*	0	0.0	1	*	0	0.0	0	0.0
AmInd/AlaskNat	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other/Unknown ²	2	*	4	*	2	*	6	27.9	7	31.4
ETHNICITY	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹
Hispanic ³	1	*	2	*	5	11.5	4	*	4	*
HIV INFECTED⁴	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹
Total	21	NC	18	NC	16	NC	15	NC	27	NC
COUNTY/CITY⁵	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹
Belknap	1	*	1	*	0	0.0	2	*	0	0.0
Carroll	0	0.0	1	*	0	0.0	1	*	0	0.0
Cheshire	0	0.0	2	*	1	*	1	*	1	*
Coos	0	0.0	0	0.0	0	0.0	1	*	2	*
Grafton	3	*	2	*	3	*	4	*	5	5.6
Hillsborough	25	6.2	15	3.7	24	5.9	13	3.2	29	7.1
<i>Manchester</i>	16	14.5	8	7.2	15	13.6	9	8.2	17	15.4
<i>Nashua</i>	3	*	6	6.9	6	6.9	4	*	7	8.0
Merrimack	5	3.4	2	*	3	*	1	*	6	4.0
Rockingham	13	4.4	15	5.0	18	6.0	17	5.6	15	4.9
Strafford	0	0.0	5	4.0	3	*	5	4.0	13	10.2
Sullivan	2	*	2	*	2	*	0	0.0	0	0.0

Cases of Primary, Secondary and Early Latent Syphilis, 2012-2016



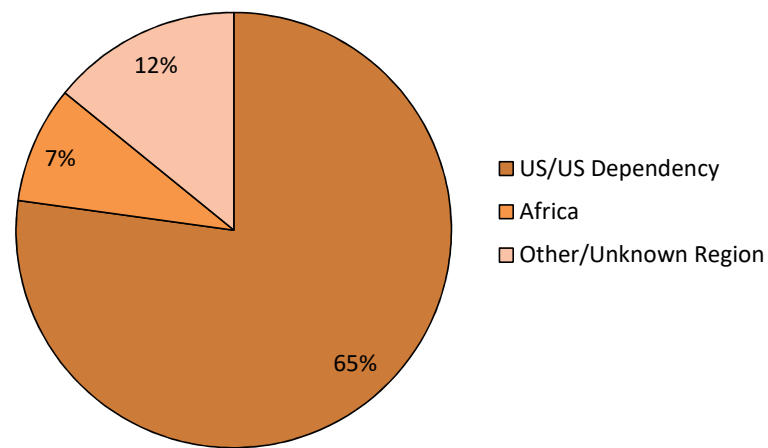
Primary, Secondary and Early Latent Syphilis: Percent MSM⁶ and HIV Co-Infected, 2012-2016



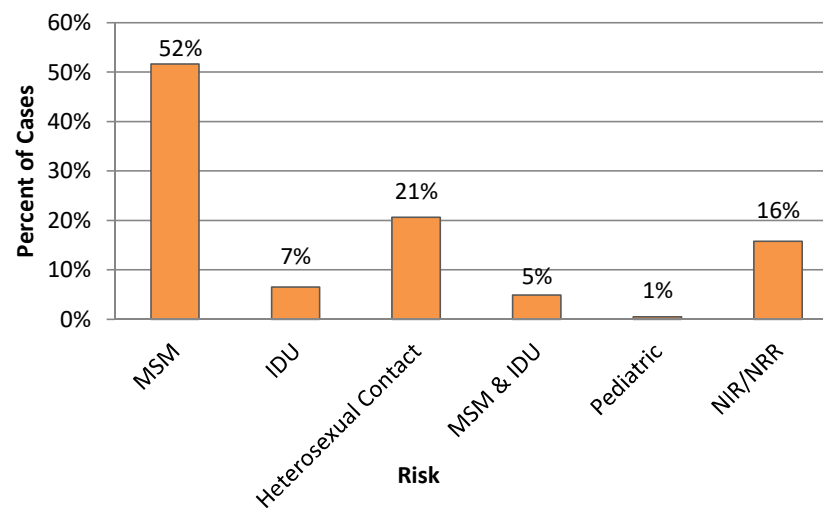
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HIV

YEAR	2012		2013		2014		2015		2016	
	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹
TOTAL⁸	47	3.6	35	2.6	38	2.9	23	1.7	41	3.1
GENDER	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹
Male	36	5.5	29	4.4	31	4.7	21	3.2	27	4.1
Female	11	1.6	6	0.9	7	1.0	2	*	14	2.1
AGE-SPECIFIC	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹
0-12	0	0.0	1	*	0	0.0	0	0.0	0	0.0
13-19	1	*	1	*	1	*	1	*	0	0.0
20-24	7	7.9	4	*	7	7.7	5	5.5	5	5.5
25-29	6	7.9	8	10.4	5	6.4	2	*	6	7.4
30-34	5	6.8	3	*	6	7.9	4	*	7	8.9
35-39	5	6.8	2	*	3	*	2	*	3	*
40-44	8	8.6	2	*	2	*	2	*	5	6.5
45-49	5	4.7	5	4.9	4	*	0	0.0	5	5.3
50-54	5	4.4	5	4.4	5	4.5	4	*	6	5.6
55-59	4	*	2	*	4	*	3	*	2	*
60+	1	*	2	*	1	*	0	0.0	2	*
RACE	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹
White	34	2.7	26	2.1	22	1.8	18	1.4	24	1.9
Black	8	44.3	3	*	9	47.2	3	*	7	34.5
Asian/Pacific Isl.	0	0.0	1	*	1	*	0	0.0	1	*
Amlnd/AlaskNat	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other/Unknown ²	5	25.1	5	24.4	6	28.6	1	*	8	35.9
ETHNICITY	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹
Hispanic ⁵	2	*	3	*	6	13.9	0	0.0	7	14.9
COUNTY/CITY⁵	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹	Cases	Rate¹
Belknap	1	*	0	0.0	1	*	2	*	0	0.0
Carroll	1	*	0	0.0	1	*	0	0.0	1	*
Cheshire	1	*	2	*	1	*	0	0.0	3	*
Coos	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grafton	4	*	1	*	3	*	2	*	2	*
Hillsborough	25	6.2	10	2.5	21	5.2	7	1.7	16	3.9
Merrimack	6	4.1	8	5.4	3	*	5	3.4	9	6.1
Rockingham	5	1.7	7	2.3	6	2.0	5	1.7	5	1.6
Strafford	3	*	4	*	2	*	2	*	4	*
Sullivan	1	*	3	*	0	0.0	0	0.0	1	*

HIV by Region of Birth⁸, 2012-2016



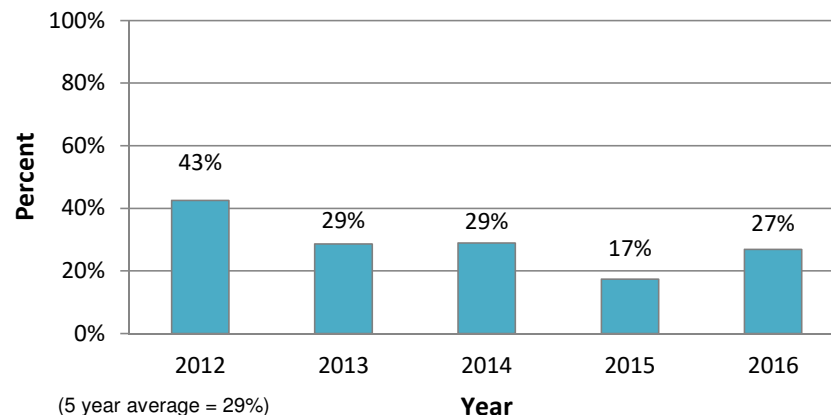
HIV by Risk⁶, 2012-2016



New Hampshire Infectious Disease Surveillance Section
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 AIDS

YEAR	2012		2013		2014		2015		2016	
	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹
TOTAL⁸	27	2.0	17	1.3	16	1.2	15	1.1	22	1.6
GENDER		Rate ¹		Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹
Male	20	3.1	14	2.1	11	1.7	12	1.8	18	2.7
Female	7	1.0	3	*	5	0.7	3	*	4	*
AGE-SPECIFIC		Rate ¹		Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹
0-12	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
13-19	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
20-24	1	*	2	*	1	*	2	*	0	0.0
25-29	3	*	0	0.0	2	*	2	*	3	*
30-34	4	*	1	*	0	0.0	2	*	2	*
35-39	3	*	3	*	1	*	0	0.0	3	*
40-44	2	*	2	*	3	*	0	0.0	1	*
45-49	3	*	3	*	2	*	2	*	7	7.4
50-54	3	*	3	*	3	*	3	*	3	*
55-59	5	4.9	2	*	3	*	3	*	3	*
60+	3	*	1	*	1	*	1	*	0	0.0
RACE		Rate ¹		Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹
White	19	1.5	9	0.7	8	0.6	10	0.8	15	1.2
Black	4	*	4	*	4	*	3	*	1	*
Asian/Pacific Isl.	0	0.0	1	*	1	*	0	0.0	1	*
Amlnd/AlaskNat	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other/Unknown ²	2	*	3	*	3	*	2	*	5	22.5
ETHNICITY		Rate ¹		Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹
Hispanic ⁵	2	*	3	*	3	*	2	*	3	*
COUNTY/CITY⁵		Rate ¹		Rate ¹	Cases	Rate ¹	Cases	Rate ¹	Cases	Rate ¹
Belknap	0	0.0	0	0.0	2	*	0	0.0	0	0.0
Carroll	2	*	0	0.0	1	*	0	0.0	0	0.0
Cheshire	1	*	1	*	1	*	1	*	1	*
Coos	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Grafton	3	*	0	0.0	1	*	0	0.0	1	*
Hillsborough	12	3.0	7	1.7	8	2.0	7	1.7	12	2.9
Merrimack	4	*	4	*	0	0.0	3	*	1	*
Rockingham	3	*	2	*	3	*	2	*	6	6.8
Strafford	1	*	2	*	0	0.0	2	*	1	*
Sullivan	1	*	1	*	0	0.0	0	0.0	0	0.0

HIV/AIDS Concurrent Diagnosis, 2012-2016



Concurrent diagnosis is defined as receiving an AIDS diagnosis within 12 months of an initial HIV diagnosis.

2016 concurrent diagnosis data is provisional and not yet validated.

2016 concurrent diagnosis data may change when data are finalized.

AIDS By Risk⁶, 2012-2016

