



Hamilton County Public Health - Epidemiology and Assessment

HIV Quarterly Report

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New HIV Diagnoses by Month, Hamilton County, Ohio (January 2016 - December 2017)

Table 1. Hamilton County New HIV Infections

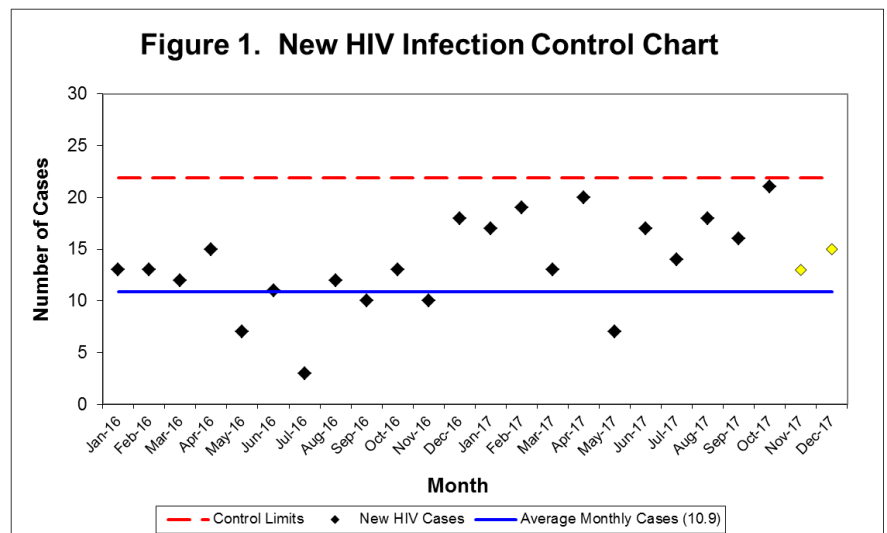
Month	New Cases of HIV 2016	New Cases of HIV 2017
January	13	17
February	13	19
March	12	13
April	15	20
May	7	7
June	11	17
July	3	14
August	12	18
September	10	16
October	13	21
November	10	13
December	18	15
Total	137	190

This report was created as a surveillance effort to help prevent new cases of HIV within Hamilton County. Table 1 displays the breakdown of new HIV cases for Hamilton County residents for January 2016 through December 2017 on a monthly basis. Only HIV cases where the resident was identified as a new HIV infection by a disease investigation specialist were counted for analysis purposes in this report. In 2016, the highest number of cases was seen in December (18 cases). In 2017, the highest number of new HIV cases occurred in October (21 cases). The average number of new HIV cases per month was 11.4 and 15.8 for the years 2016 and 2017, respectively. The 2017 monthly counts may change in future reports, as lag times in disposition of cases directly affect the case counts presented. Some HIV cases are unable to be located for follow-up and partner services, which may impact total number of cases. For 2016 and 2017 respectively, there were a total of 2 and 3 cases that were unable to be located.

New HIV cases are derived from partner services data in the Ohio Disease Reporting System and may not fully represent all new HIV infections. These data are provisional and subject to change when additional information is gained. Cases are selected based on address at diagnosis. Source: Ohio Department of Health (ODH), Ohio Disease Reporting System (ODRS). Data reported as of 01/26/2018.

Surveillance of New HIV Cases Diagnosed in Hamilton County, Ohio (October 2015 - December 2017)

One way to monitor HIV infections within Hamilton County is through the use of surveillance control charts. Factors that these control charts show are the number of new HIV cases for each month (black diamonds), control limit (red dashed lines), and the average number of cases (solid blue line). Yellow diamonds indicate data that are most likely to change in future reports. Control charts are used to detect unexpected events, such as a single point outside of the control limit, many consecutive points above or below the average line, or two or three consecutive points near a control limit. When anomalies such as these occur, it may be beneficial to examine events surrounding the anomalies in order to devise a strategy to reduce the number of cases in subsequent months or see which strategies already in place are working. Figure 1 illustrates the control chart for new HIV infections from January 2016 to December 2017. All of the monthly counts in this time frame fell below the upper control limit for number of new HIV infections. The average (10.9) was calculated from October 2011 to September 2013.



New HIV cases are derived from partner services data in the Ohio Disease Reporting System and may not fully represent all new cases of HIV. These data are provisional and subject to change when additional information is gained. Cases are selected based on address at diagnosis. Source: ODH, ODRS. Data reported as of 01/26/2018.

Demographics and Social Factors Associated with High Risk for HIV Infection

Figure 2, below, illustrates the distribution of age among new HIV diagnoses in Hamilton County. The age distribution of newly diagnosed HIV cases has shifted from 2013 to 2017. In 2013, 15-24 year olds made up the largest percentage of cases whereas in 2017 the 25-34 year olds represent the largest percentage. Table 2 compares the race, sex, and risk behavior groups for new HIV infections from January 2016 through December 2017. The data reflect confirmed HIV cases designated as newly testing positive and residing in Hamilton County. When race was examined, the percent of black Hamilton County residents was relatively the same in 2017 (55.3 percent) compared to 2016 (55.5 percent). A large disparity in the sex of cases was apparent in 2016 and 2017 as males constituted approximately 75% of cases in both years. As Table 2 illustrates, the men who have sex with men (MSM) population accounted for 36.5 percent and 38.9 percent of new HIV cases in 2016 and 2017, respectively. Sixty percent of MSMs newly diagnosed with HIV during 2017 were black Hamilton County residents. Table 2 also illustrates, injection drug use (IDU) population accounted for 8.8 percent and 19.5 percent of new HIV cases in 2016 and 2017, as a result this was over a 208 percent increase in IDU. Eighty percent of IDUs newly diagnosed with HIV during 2017 were white Hamilton County residents. Understanding these demographics and high-risk factors that contribute most to new HIV infections, is vital in formulating specific and effective prevention strategies.

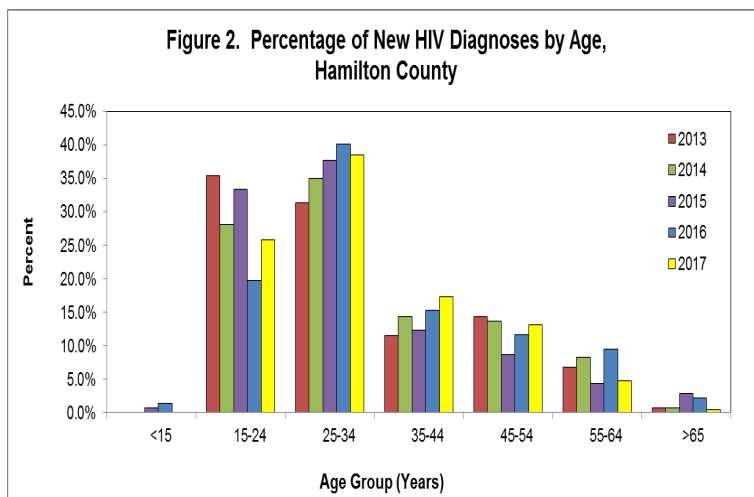


Table 2. Demographics of New HIV Cases

	Jan - Dec 2016		Jan - Dec 2017	
	#	%	#	%
Race				
Black	76	55.5	105	55.3
White	50	36.5	74	38.9
Other	11	8.0	11	5.8
Sex				
Male	103	75.2	141	74.2
Female	34	24.8	49	25.8
Risk Groups				
MSM	50 of 137	36.5	74 of 190	38.9
HRH	40 of 137	29.2	68 of 190	35.8
IDU	12 of 137	8.8	37 of 190	19.5

These data are provisional and subject to change when additional information is gained. New HIV positive cases between January 2016 and December 2017 were used for analysis. Cases were selected based on address at diagnosis. Source: ODH, ODRS. Data reported as of 01/26/2018. Percentages may not total to 100 due to rounding. Percentages are based on availability of data for all cases. High risk heterosexuals (HRH) are residents who are not MSM but participate in risky behaviors such as having sex with men who have sex with men (MSM), HIV+, intravenous drug user (IDU), or anonymous people. HRH status is also determined from factors such as having sex while intoxicated, exchanging sex for drugs, or having previous STIs.

Additional Resources

For additional resources on HIV/AIDS please visit the following websites:

- http://www.hamiltoncountyhealth.org/en/programs_and_services/community_health_services/stds.html
- <http://www.cdc.gov/hiv/>
- <http://www.odh.ohio.gov/odhprograms/bid/hivstd/hivprev.aspx>