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HAMILTON COUNTY PUBLIC HEALTH

PREVENT. PROMOTE. PROTECT.

Alexis Grimes Trotter, MPH, Epidemiologist

Hamilton County Public Health

Epidemiology and Assessment

HIV Quarterly Report

New HIV Diagnoses by Month, Hamilton County, Ohio (January 2017-March 2018)

Table 1. Hamilton County New HIV Infections

Month	New Cases of HIV 2017	New Cases of HIV 2018
January	17	14
February	19	13
March	13	18
April	20	
May	7	
June	18	
July	14	
August	18	
September	16	
October	21	
November	13	
December	15	
Total	191	45

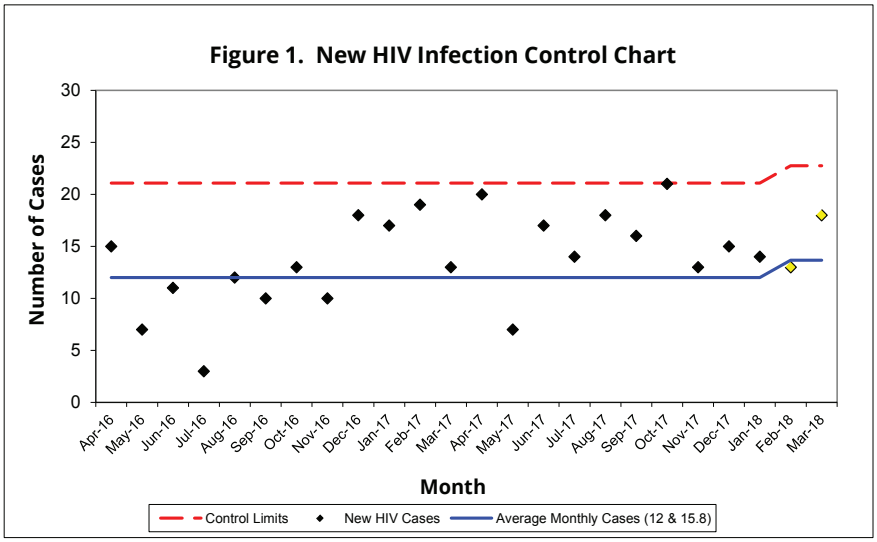
This report was created as a surveillance effort to help prevent new cases of HIV within Hamilton County. Table 1 displays the breakdown of new HIV cases for Hamilton County residents for January 2017 through March 2018 on a monthly basis. Only HIV cases where the resident was identified as a new HIV infection by a disease investigation specialist were counted for analysis purposes in this report. In 2017, the highest number of cases was seen in October (21 cases). In 2018, the highest number of new HIV cases occurred in March (18 cases). The average number of new HIV cases per month was 15.9 and 15 for the years 2017 and 2018, respectively. The 2018 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 with partner services, which may impact total number of cases. For 2017 and 2018 respectively, there were a total of 3 and 1 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 04/16/2018.

Surveillance of New HIV Cases Diagnosed in Hamilton County, Ohio (April 2016-March 2018)

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 April 2016 to March 2018. All of the monthly counts in this time frame fell below the upper control limit for number of new HIV infections. The average number of cases was calculated from October 2013 to September 2015 (12). There was a recalculation of the average starting February 2018 using data from February 2017 to January 2018 (15.8), in result of 8 consecutive cases above the average line.

Figure 1. New HIV Infection Control Chart



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 04/16/2018.

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. From 2014 to 2018, 25-34 year olds made up the largest percentage of cases. Table 2 compares the race, sex, and risk behavior groups for new HIV infections from January 2017 through March 2018. The data reflect confirmed HIV cases designated as newly testing positive and residing in Hamilton County. When race was examined, an increase in the percent of white Hamilton County residents can be seen in 2018 (48.9 percent) compared to 2017 (38.7 percent). A large disparity in the sex of cases was apparent in 2017 and 2018 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 2017 and 2018, respectively. Fifty percent of MSMs newly diagnosed with HIV during 2018 were black Hamilton County residents. Table 2 also illustrates, injection drug use (IDU) population accounted for 22.0 percent and 35.6 percent of new HIV cases. Over ninety percent of IDUs newly diagnosed with HIV during 2018 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.

Figure 2. Percentage of New HIV Diagnoses by Age, Hamilton County

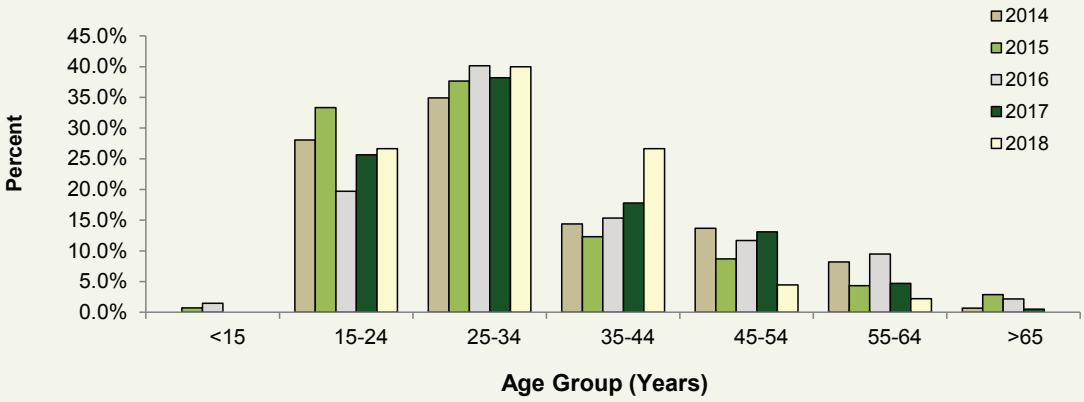


Table 2.	Jan. - Dec. 2017		Jan. - March. 2018			Jan. - Dec. 2017		Jan. - March 2018	
	#	%	#	%		#	%	#	%
Race					**Risk Groups**				
Black	106	55.5	19	42.2	MSM	74 of 191	38.7	15 of 45	33.3
White	74	38.7	22	48.9	HRH	69 of 191	36.1	22 of 45	48.9
Other	11	5.8	4	8.9	IDU	42 of 191	22.0	16 of 45	35.6
Sex									
Male	142	74.3	34	75.6					
Female	49	25.7	11	24.4					

These data are provisional and subject to change when additional information is gained. New HIV positive cases between January 2017 and March 2018 were used for analysis. Cases were selected based on address at diagnosis. Source: ODH, ODRS. Data reported as of 04/16/2018. 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:

- https://www.hamiltoncountyhealth.org/services/for-residents/programs/std-and-sti-prevention-and-services/
- http://www.cdc.gov/hiv/
- http://www.odh.ohio.gov/odhprograms/bid/hivstd/hivprev.aspx