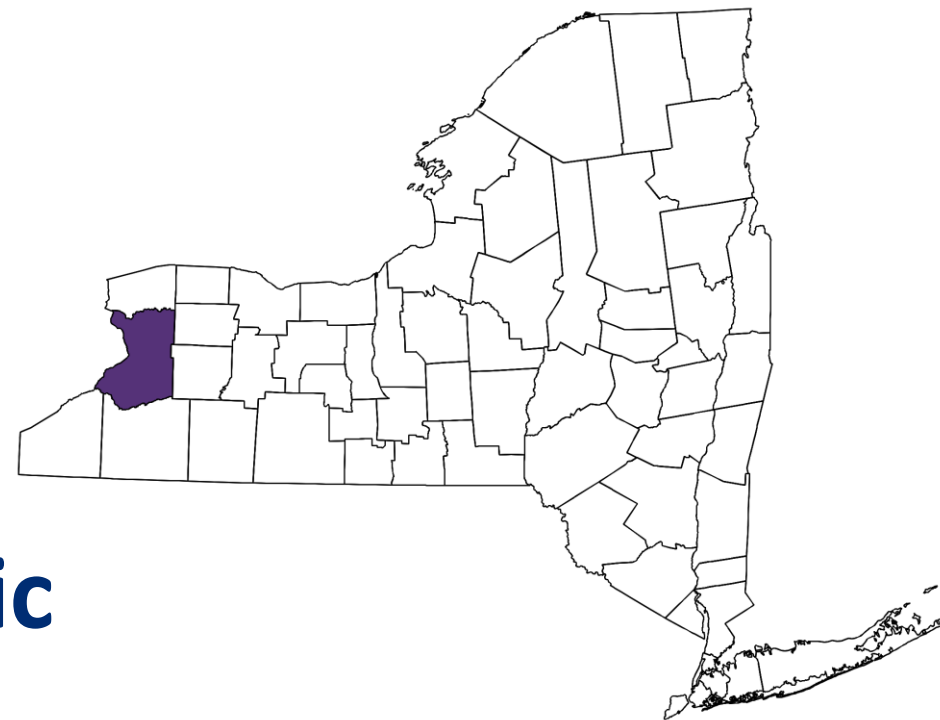


DART PHACT

Data Analysis and Research Translation (DART)
Presentation of HIV/AIDS Current Topic (PHACT)
Report #1, April 2022



Department
of Health

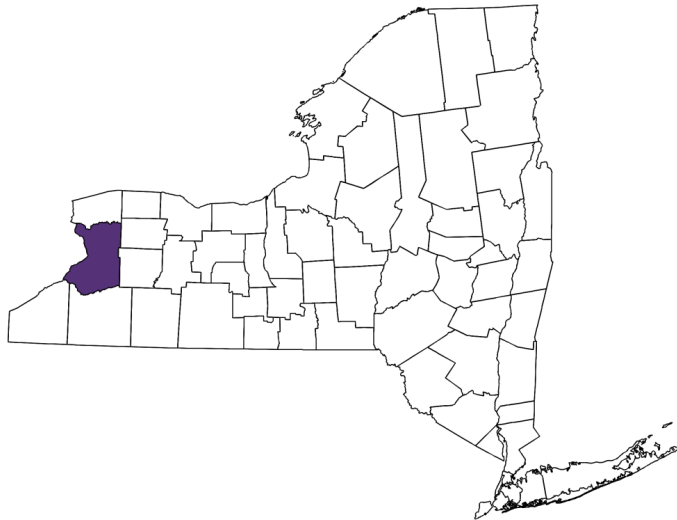


Characteristics of the HIV Epidemic in Erie County, 2020

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Background and Purpose

The New York State Department of Health actively monitors new diagnoses of HIV across the state. This involves analyzing the data for trends and identifying increases in geographical regions. In early 2020 the department noted an increase in new diagnoses in the western regions of the state. A health alert was issued in August 2021 to notify health care providers of these ongoing increases and to encourage testing, treatment, and prevention. This report investigates this increase in new diagnoses in relation to social determinants of health metrics to better understand how the increase in new HIV diagnoses impacted the people living in Erie County.

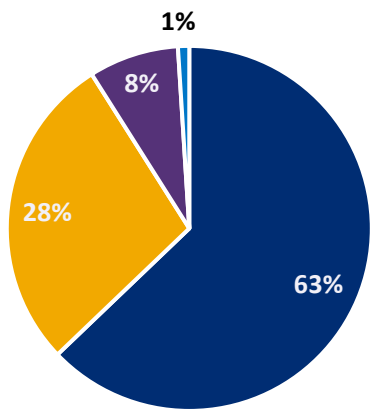


Characteristics of New Diagnoses in Erie County in 2020

Erie county had 85 new HIV diagnoses in 2020, the highest number in the state outside of New York City. The number of diagnoses in Erie county had decreased in 2018 and 2019 but increased in 2020.

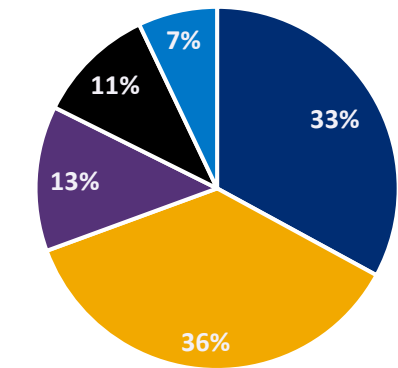
As of 2020, Erie county had 2,261 people living with diagnosed HIV (PLWDH). This was the fourth highest number of PLWDH in a county in the state outside of New York City.

Race/Ethnicity of New Diagnoses



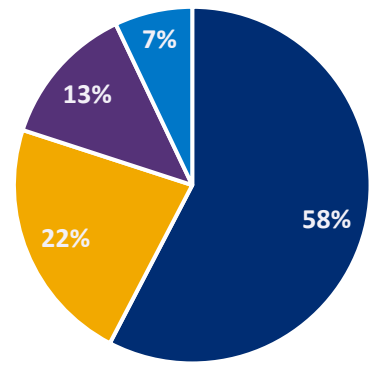
- Non-Hispanic Black
- Non-Hispanic White
- Hispanic
- Asian/Pacific Islander

Age at HIV Diagnosis of New Diagnoses



- 13-24
- 25-34
- 35-44
- 45-54
- 55+

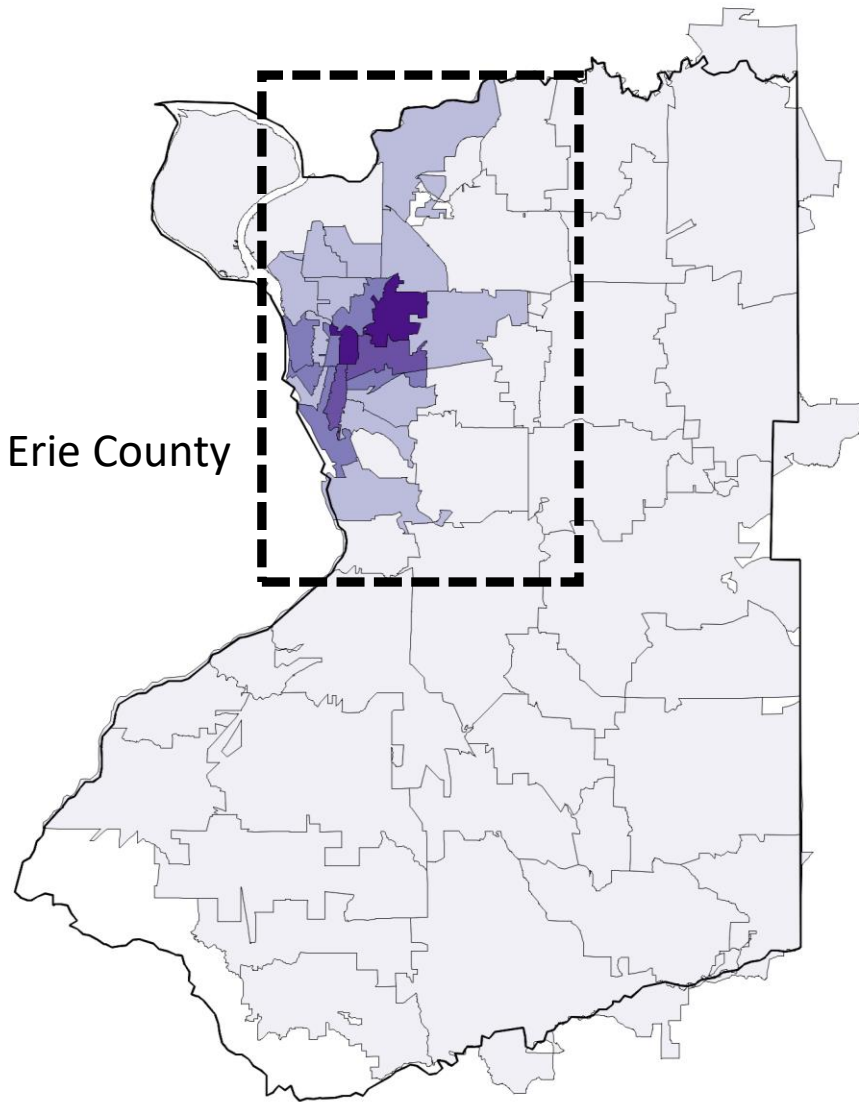
HIV Transmission Risk Group of New Diagnoses



- MSM
- Heterosexual
- Unknown
- MSM/IDU

MSM: men with a history of male-to-male sexual contact
MSM/IDU: MSM with a history of injection drug use

Non-Hispanic Black People as a Percent of Population by Zip code in Erie County



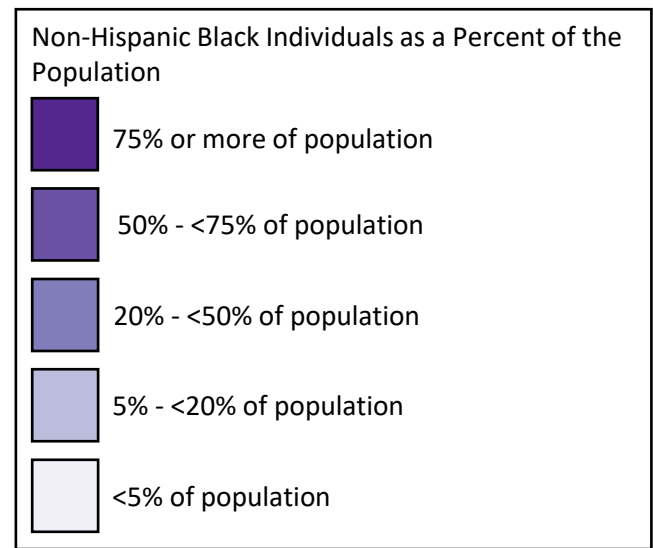
Erie County

There were 53 new HIV diagnoses among non-Hispanic Black individuals in Erie county in 2020.

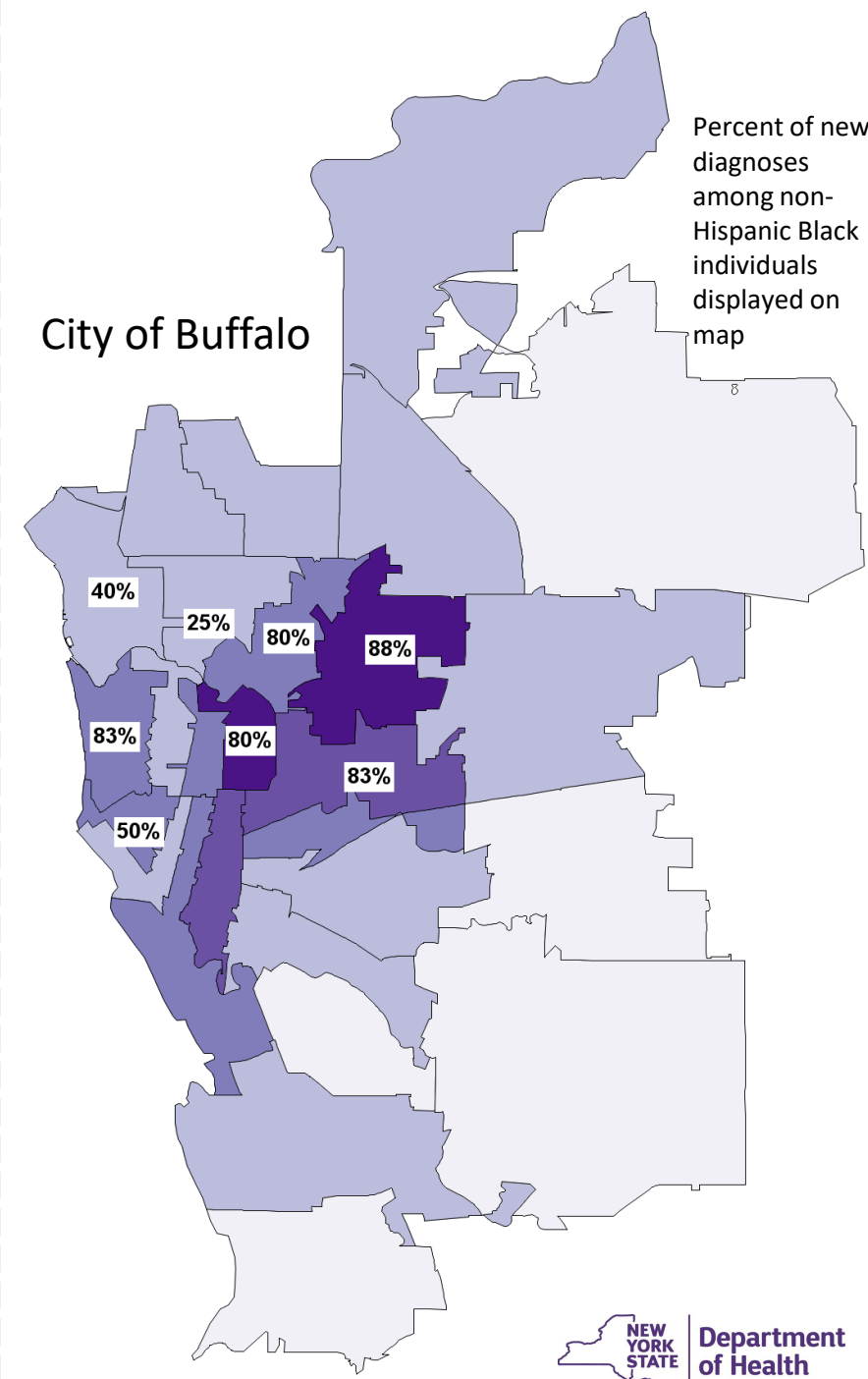
Non-Hispanic Black individuals made up 62% of new diagnoses in Erie county, compared to 46% of diagnoses statewide.

In Erie county, most non-Hispanic Black individuals lived within the city of Buffalo. Several Zip codes within the city had a majority of the non-Hispanic Black population.

Several Zip codes in Buffalo had noticeable disparities between the proportion of the population that was non-Hispanic Black and the proportion of new HIV diagnoses among this population.



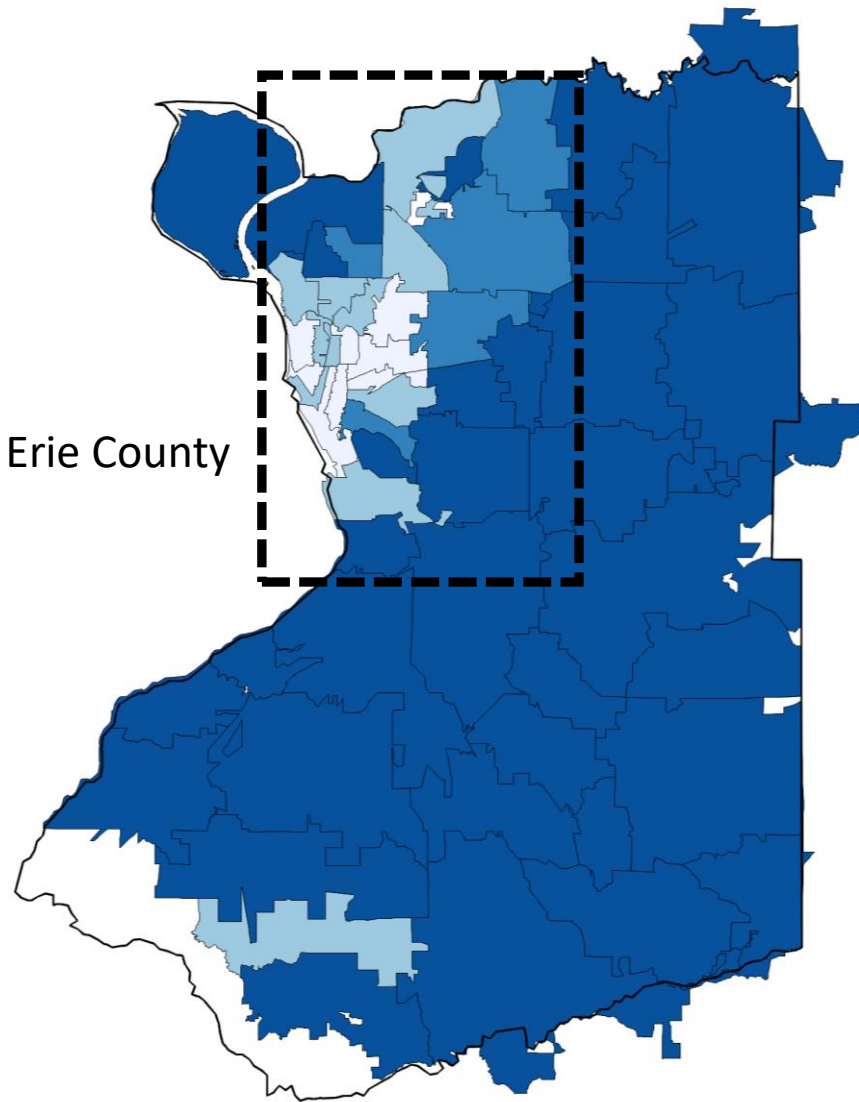
Percent of new diagnoses among non-Hispanic Black individuals displayed on map



City of Buffalo

Percent of new diagnoses among non-Hispanic Black individuals displayed on map

Non-Hispanic White People as a Percent of Population by Zip code in Erie County

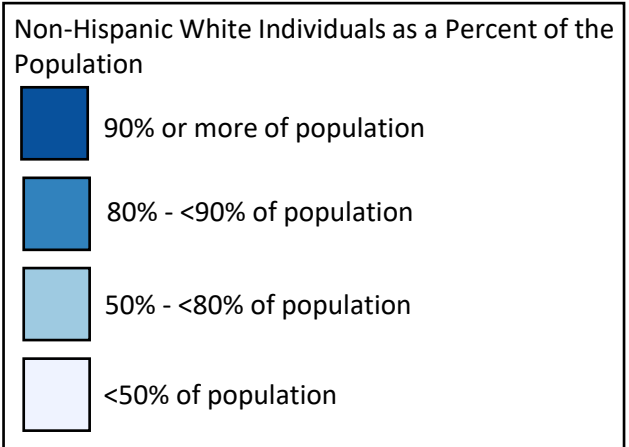


There were 24 new HIV diagnoses among non-Hispanic White individuals in Erie county in 2020.

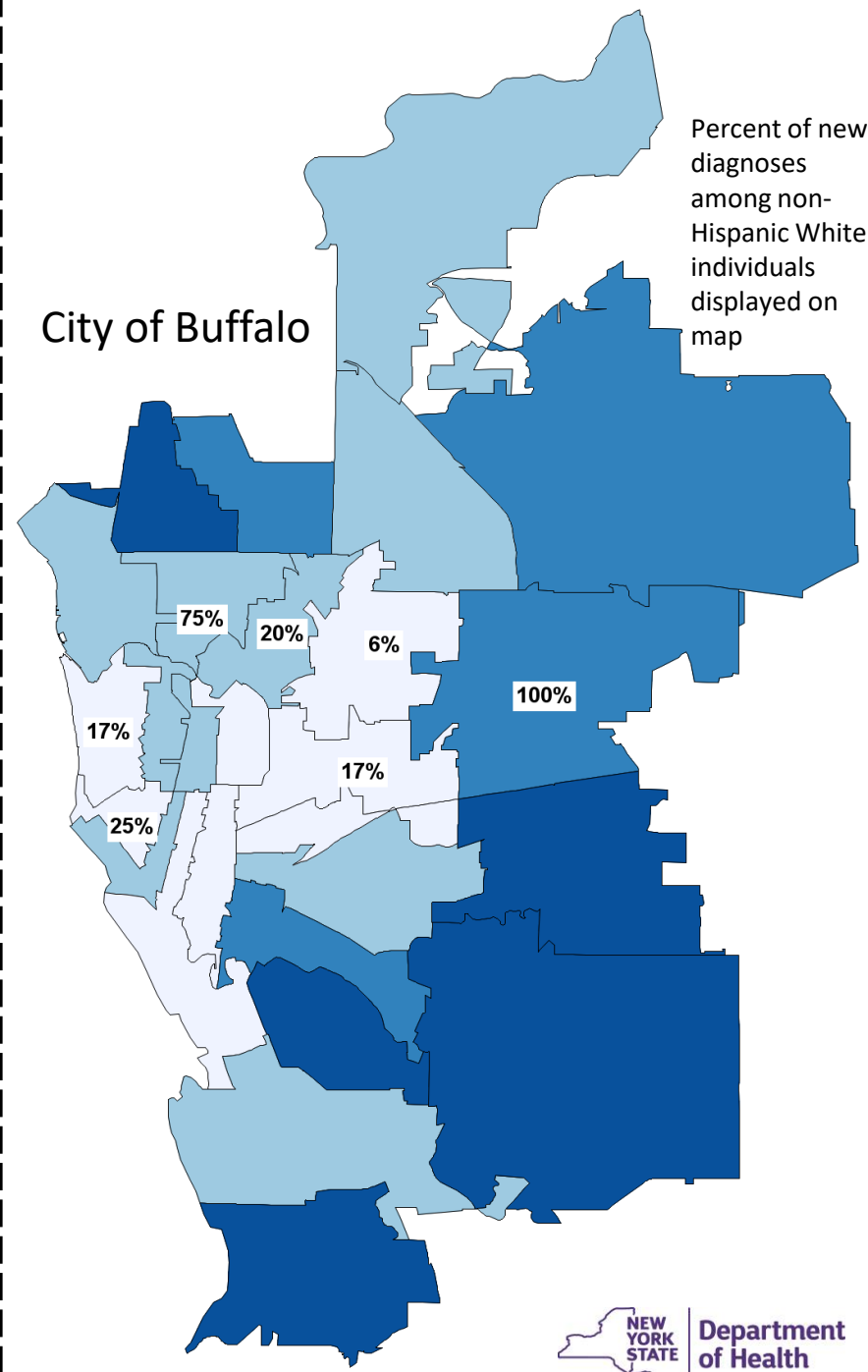
Non-Hispanic White individuals made up 28% of new diagnoses in Erie county, compared to 20% of diagnoses statewide.

While in most Zip codes in Erie county more than 90% of residents were non-Hispanic White individuals, almost all the Zip codes with lower percentages of non-Hispanic White residents were in the Buffalo area.

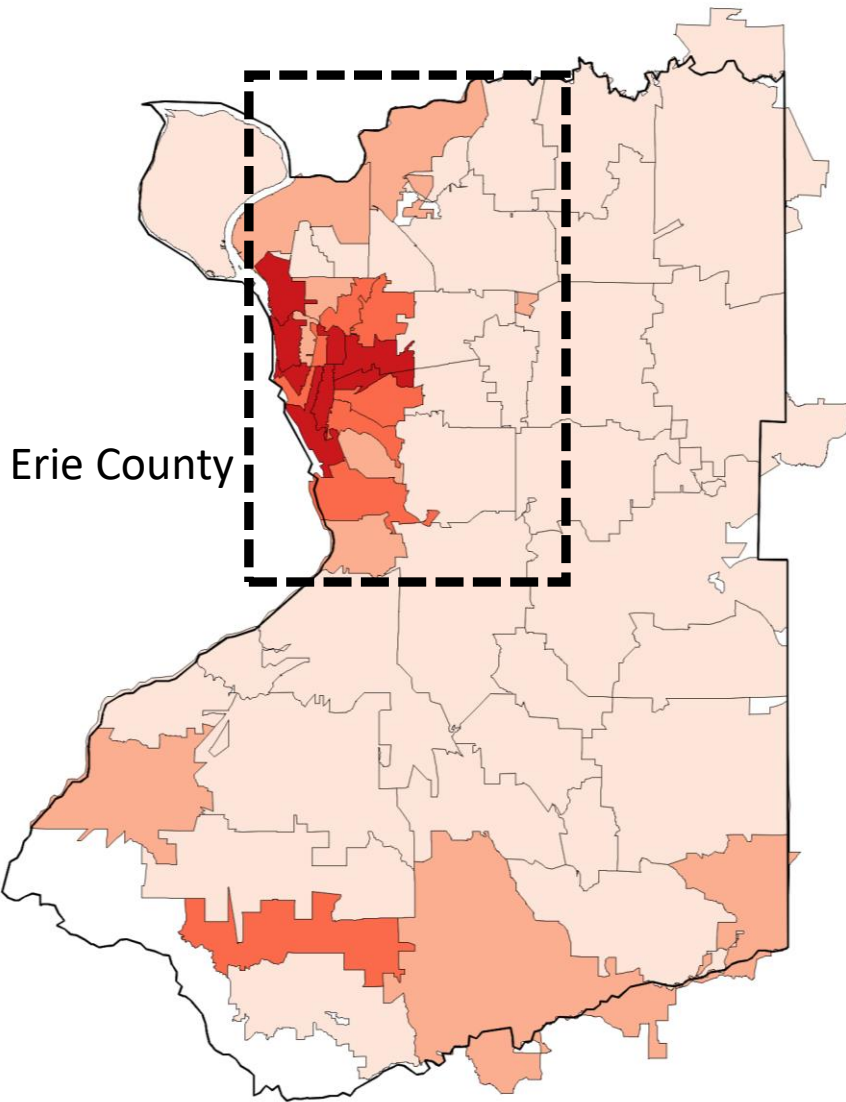
In most Zip codes, the proportion of non-Hispanic White individuals was comparable between the distribution of the populations and the distribution of new HIV diagnoses.



Percent of new diagnoses among non-Hispanic White individuals displayed on map



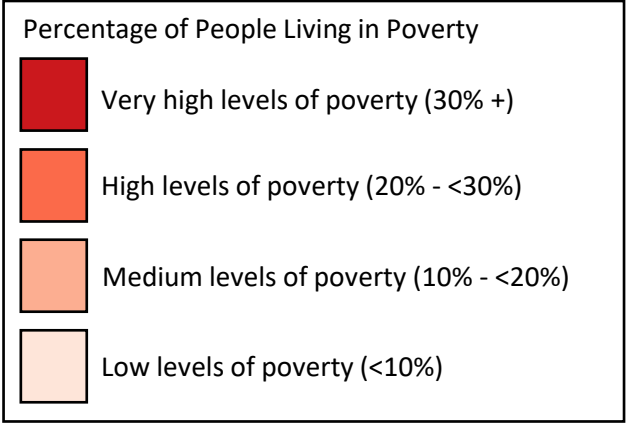
Percent Living in Poverty by Zip code in Erie County



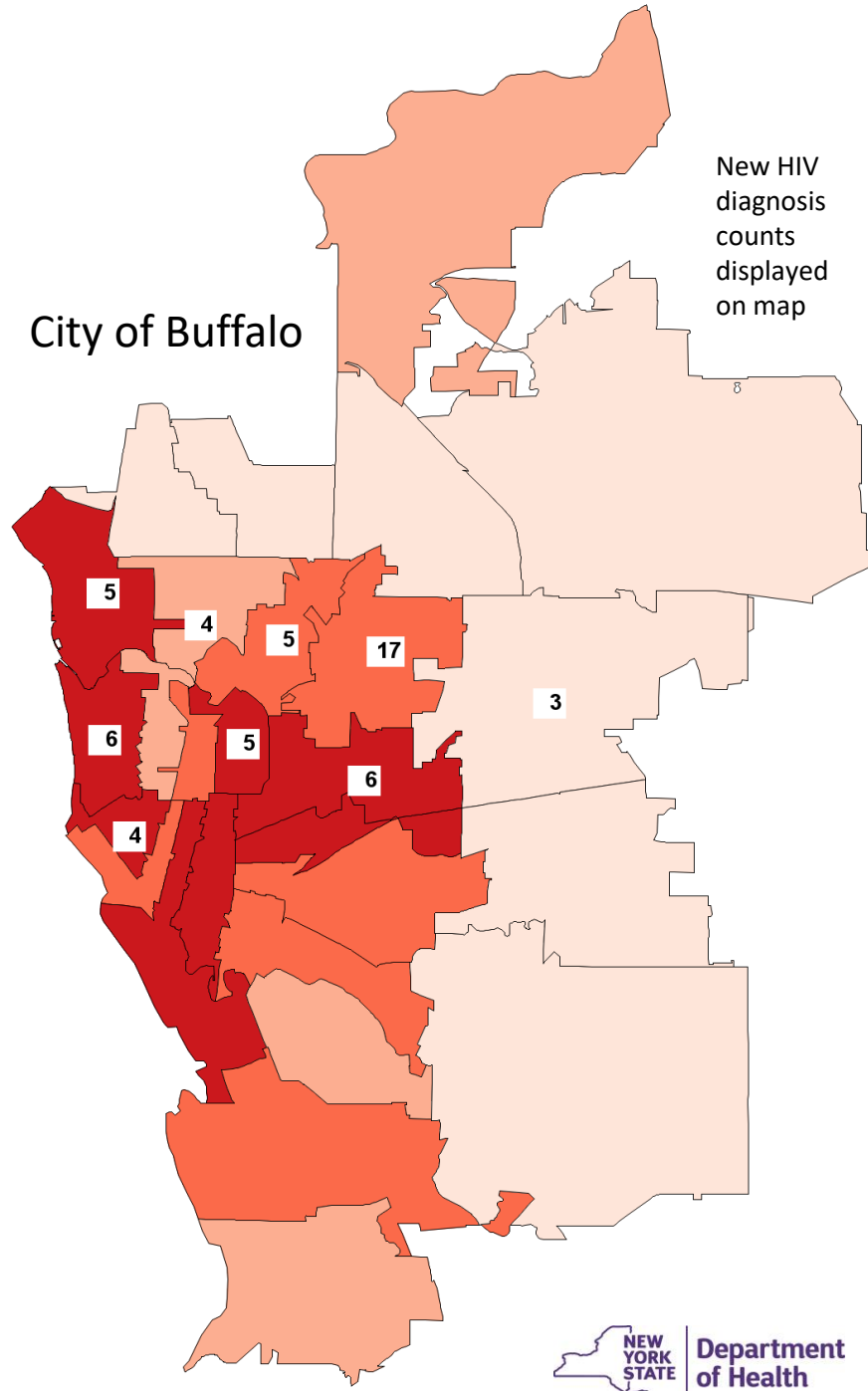
Zip codes with very high levels of poverty were all located within the city of Buffalo.

All Zip codes with five or more new HIV diagnoses had a high or very high poverty level.

Zip codes with higher poverty corresponded with Zip codes that had a higher proportion of non-Hispanic Black residents.



New diagnosis counts displayed on map



New HIV diagnosis counts displayed on map

Rates of New HIV Diagnoses by Area-Based Poverty Level in Erie County, 2016-2020

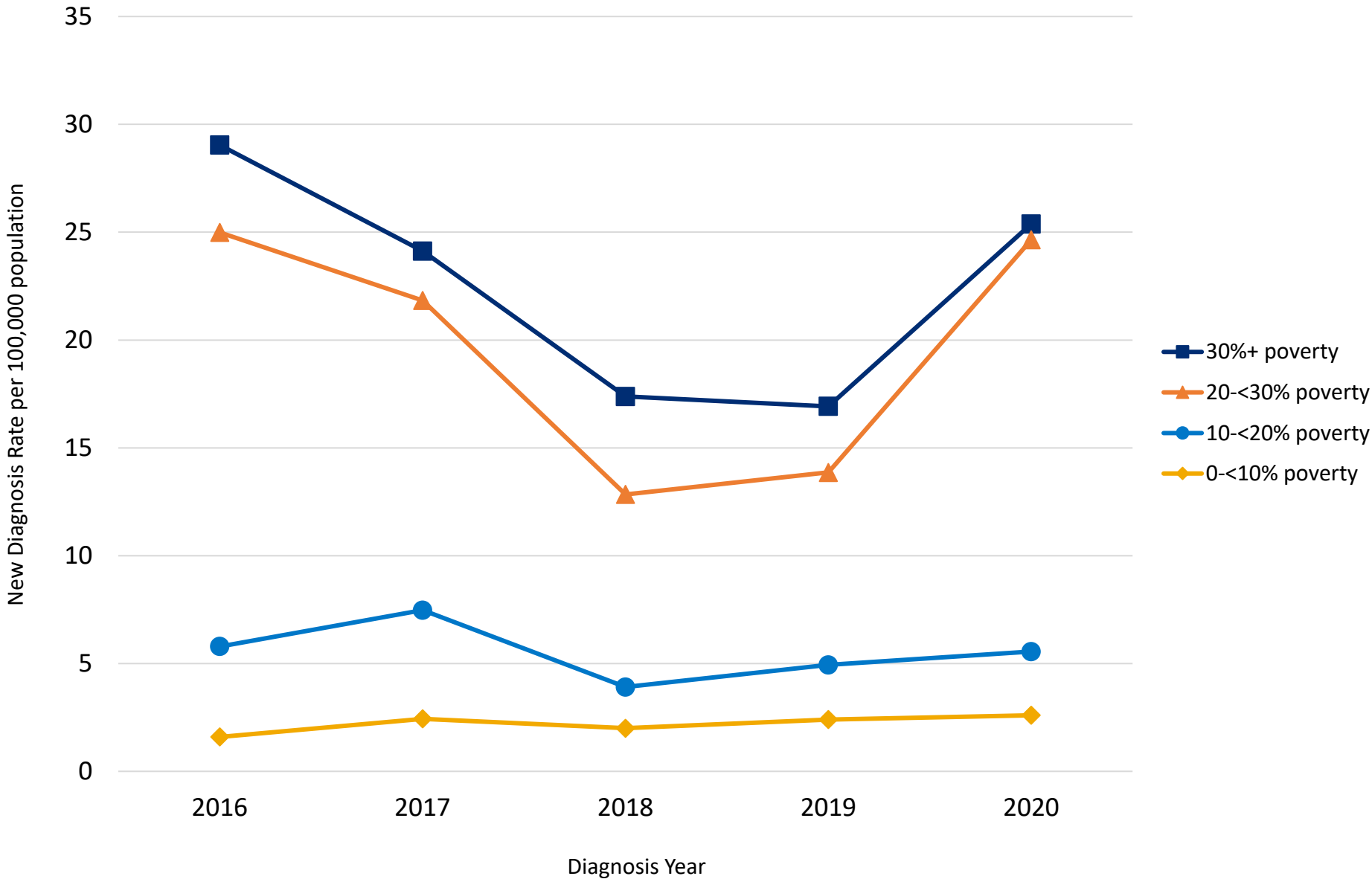
In Erie county, Zip codes with higher levels of poverty had higher rates of new HIV diagnoses.

Zip codes with 20% or higher poverty experienced a large decrease in HIV diagnoses through 2019, before rising again in 2020. This decrease could have been caused by an actual drop in transmission of HIV, or by a drop in HIV testing.

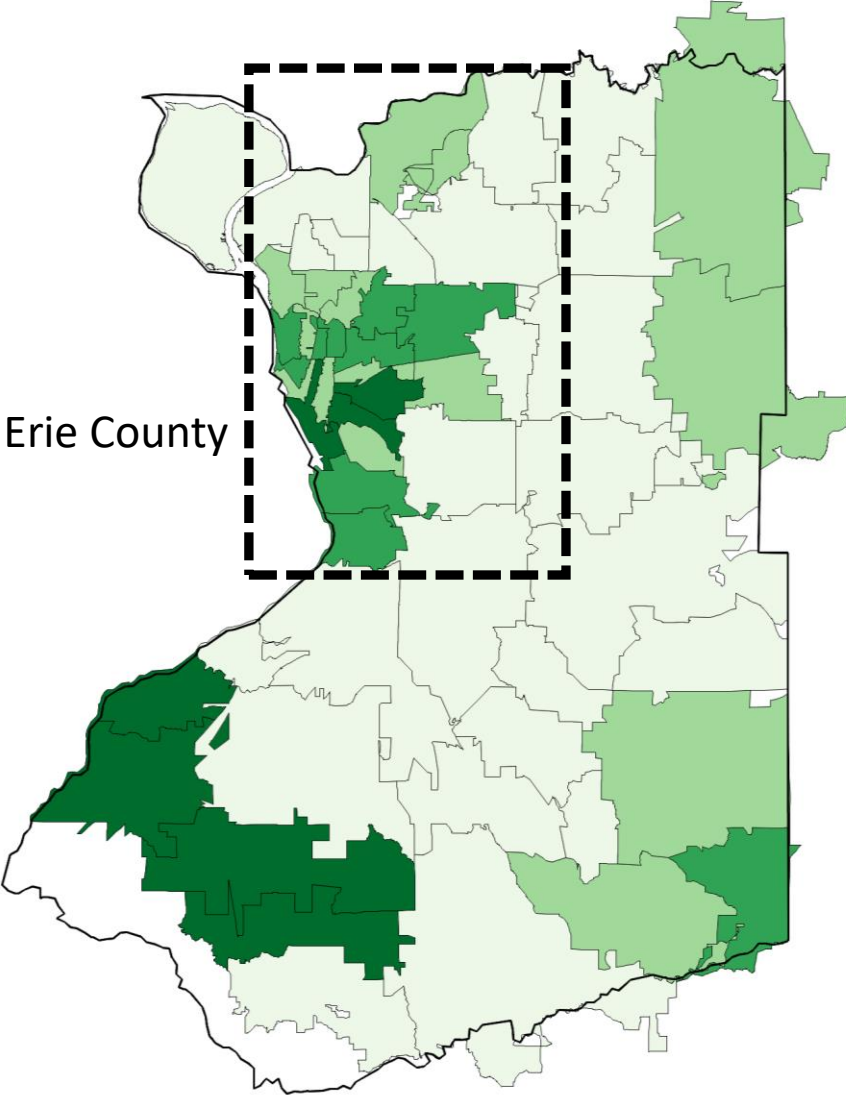
The increase in 2020 led to the release of a Health Alert for the county in 2021.

Zip codes with less than 20% poverty but more than 10% had little change in the HIV diagnosis rate over the five-year period.

Zip codes with less than 10% of the population living in poverty had a very slight increase in the HIV diagnosis rate over the five-year period.



Percent of Individuals who were Uninsured by Zip code in Erie County

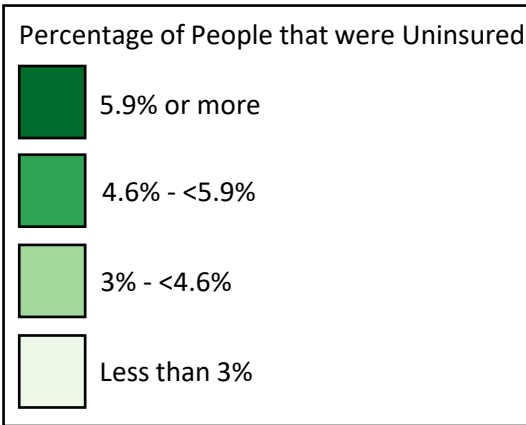


Zip codes that had the highest percentages of individuals who were uninsured were located either within Buffalo or in the southwest part of the county.

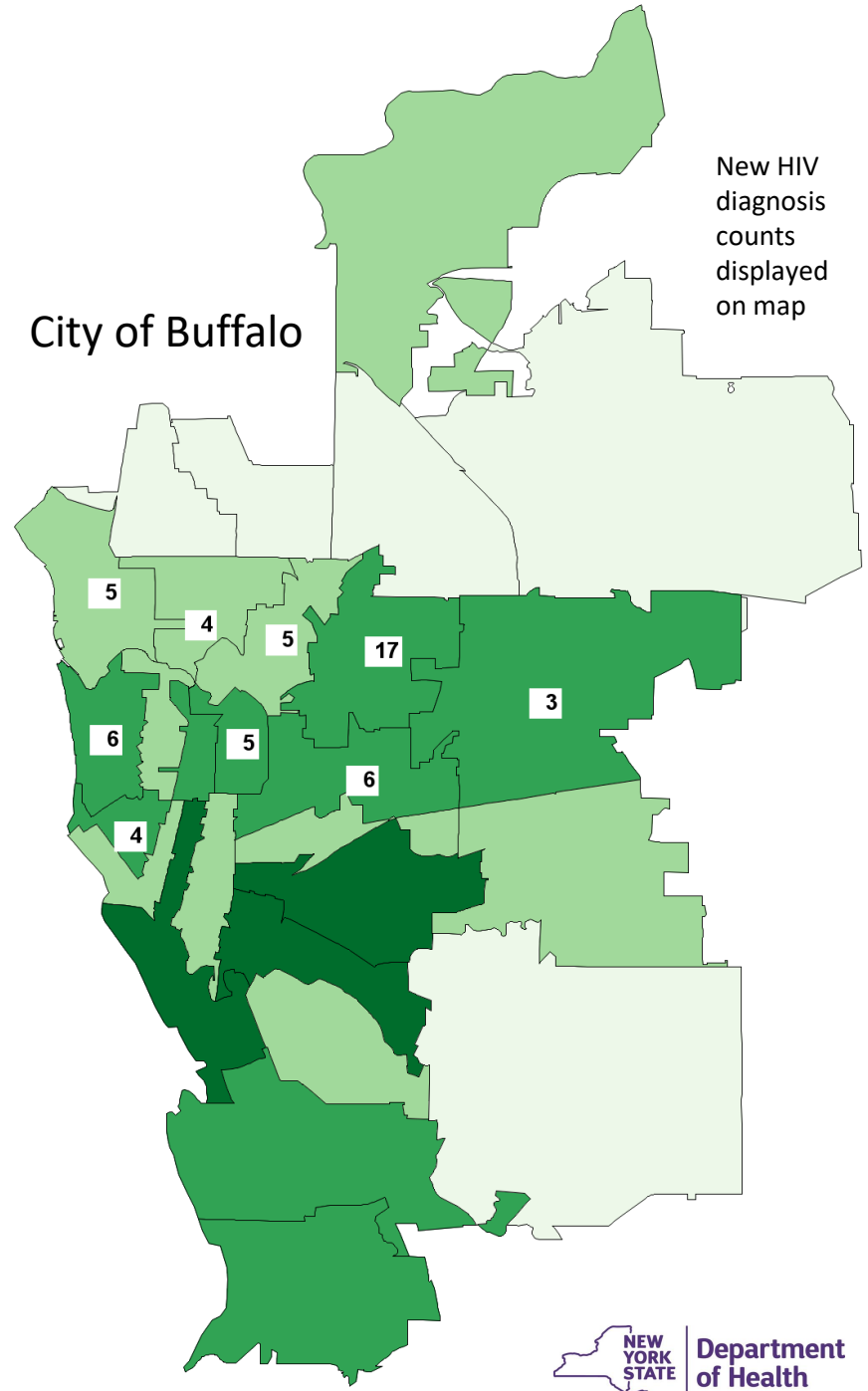
Zip codes that had higher numbers of HIV diagnoses also had higher percentages of individuals who were uninsured.

The Zip codes that had the largest percentages of individuals who were uninsured did not always match the Zip codes with the highest poverty levels.

Zip codes that had the highest number of new HIV diagnoses were not the same Zip codes with the highest proportion of uninsured individuals, suggesting that insurance coverage is not a good predictor of HIV transmission.



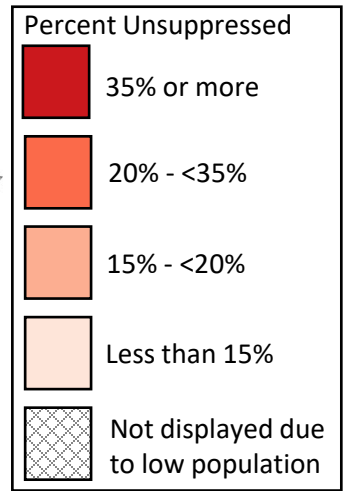
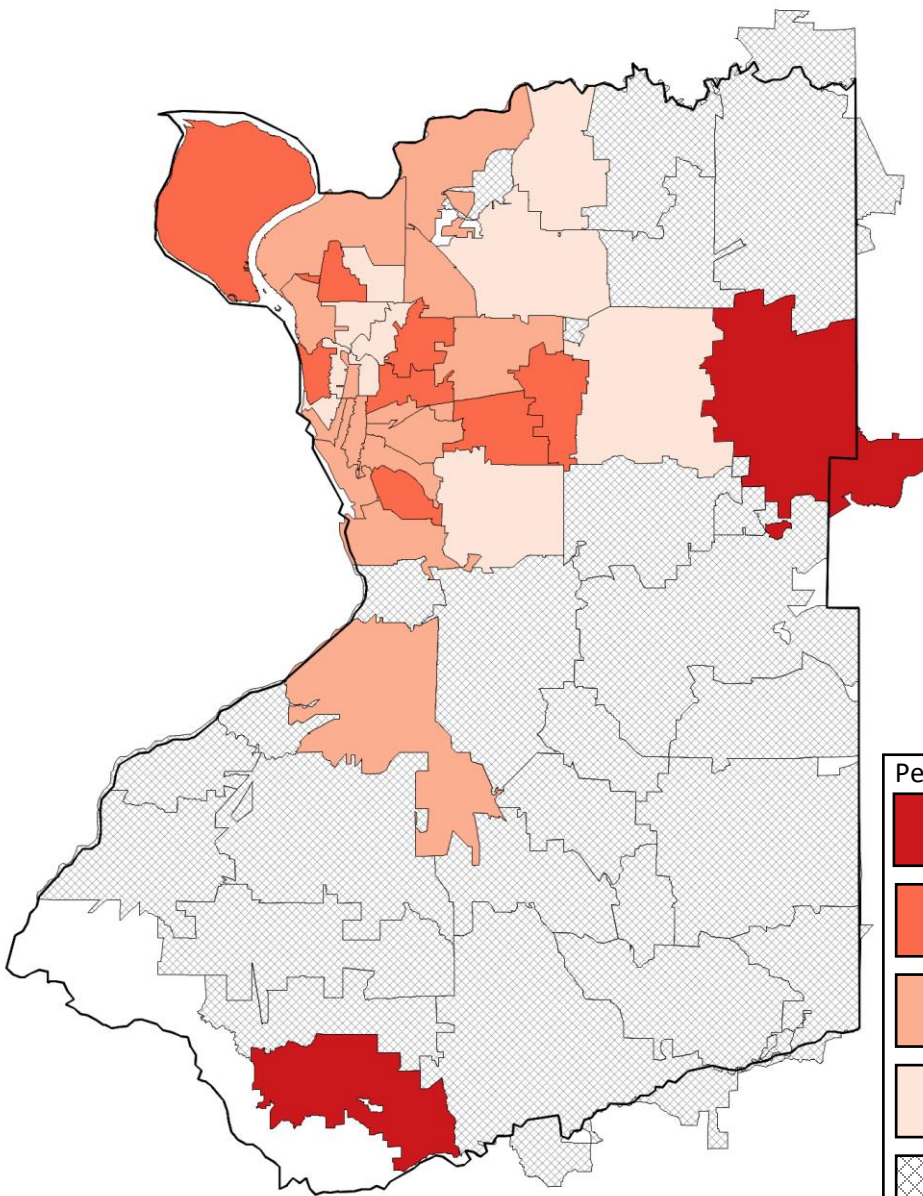
New HIV diagnosis counts displayed on map



New HIV diagnosis counts displayed on map

Percent of PLWDH who were Virally Unsuppressed at the end of 2020 by Zip code in Erie County

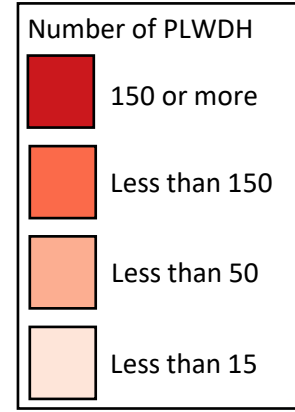
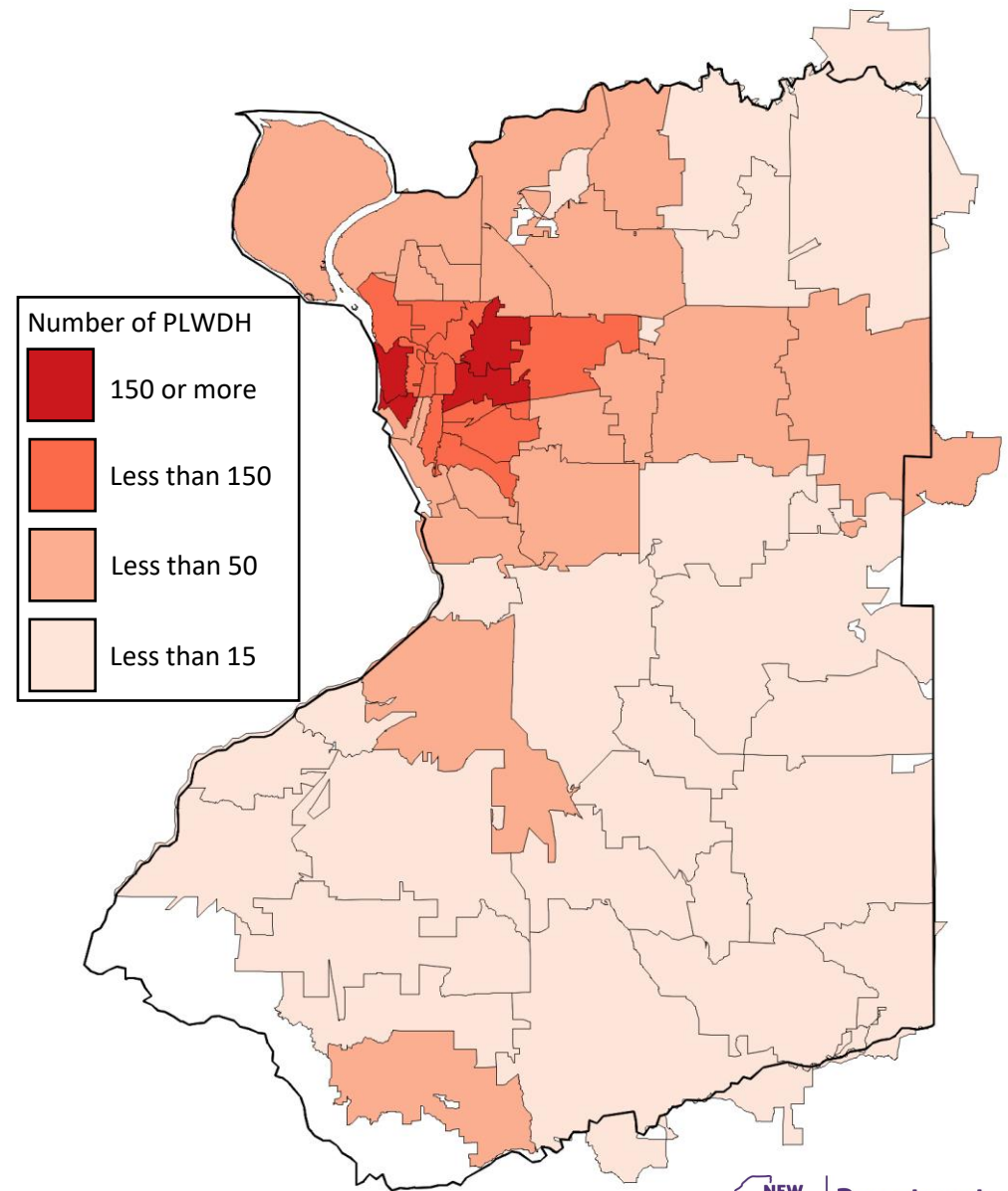
Number of PLWDH by Zip code of Residence in Erie County, 2020

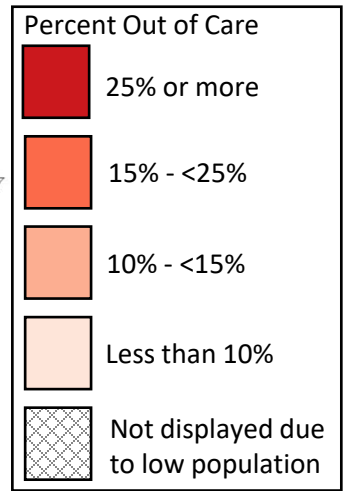
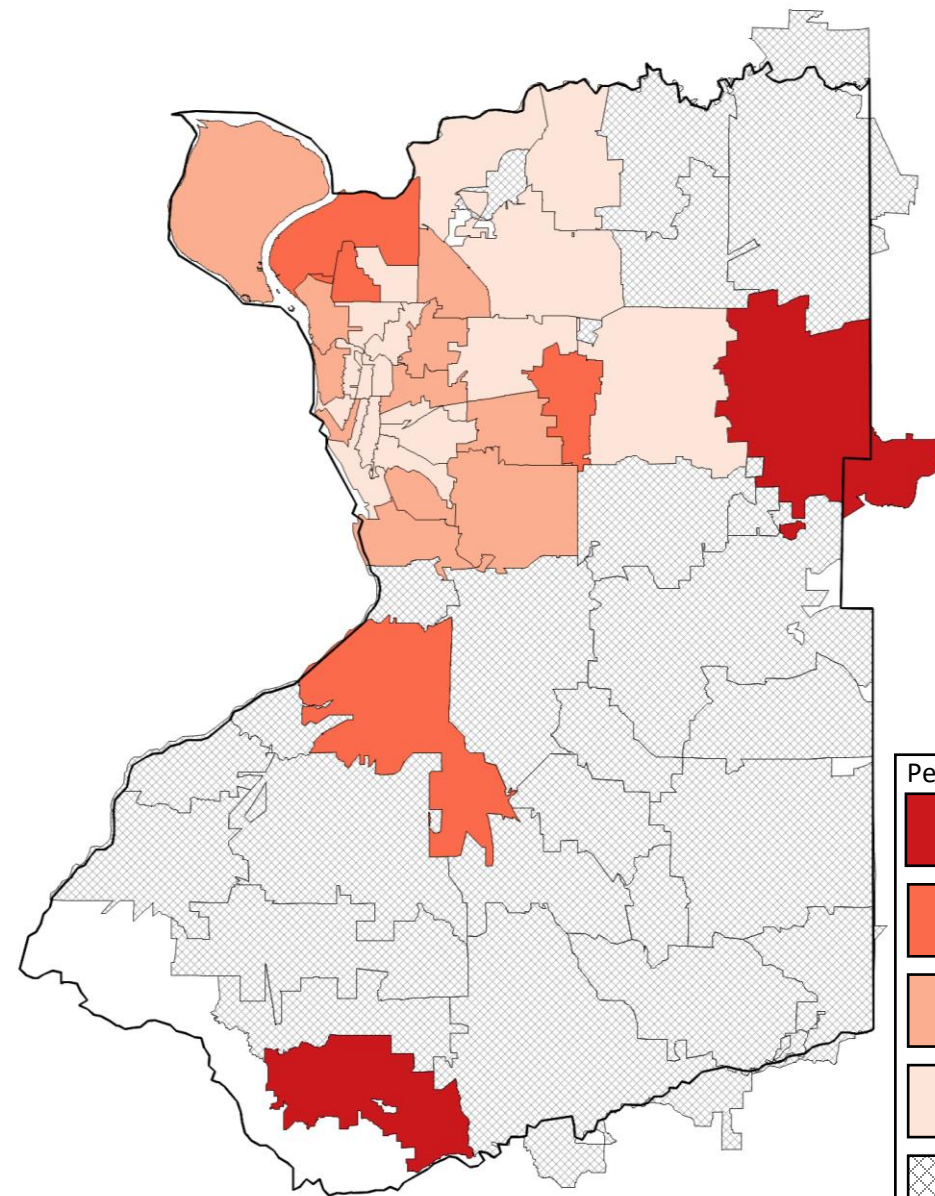


Most PLWDH in Erie county in 2020 resided in the city of Buffalo and were concentrated in the same Zip codes where the majority of new diagnoses were reported.

Rural Zip codes in the eastern and southern parts of the county had the highest proportion of PLWDH who were virally unsuppressed at the end of the year.

Zip codes that had the highest percentages of individuals who were virally unsuppressed tended to have low numbers of PLWDH.

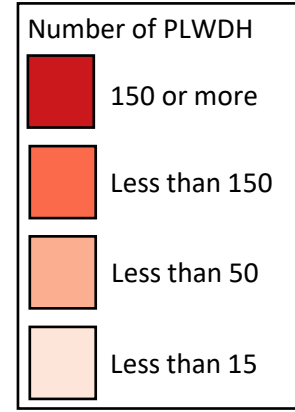
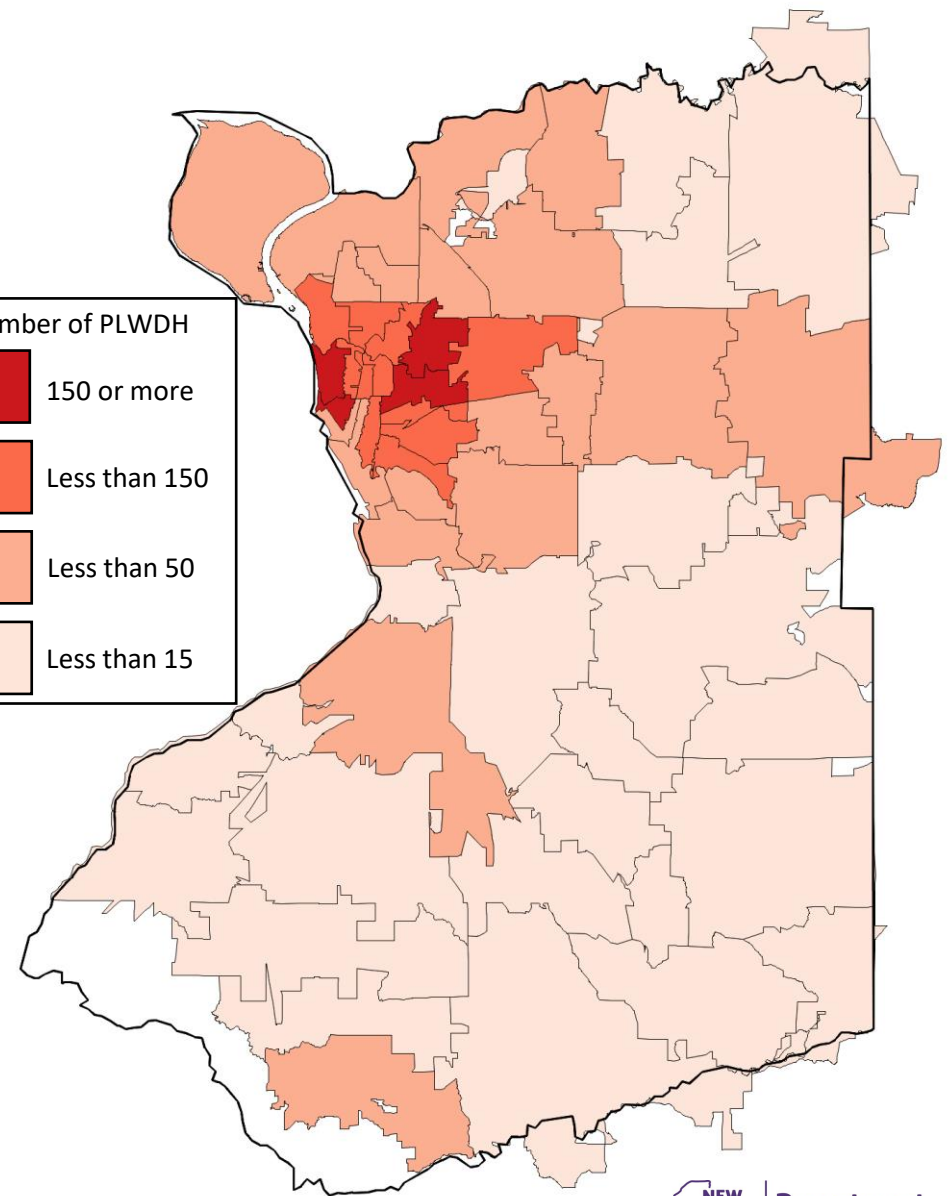




Most PLWDH in Erie county in 2020 resided in the city of Buffalo and were concentrated in the same Zip codes where the majority of new diagnoses were reported.

Zip codes in the Buffalo area had generally lower percentages of people out of care.

The Zip codes that had higher percentages of people out of care were in rural areas, suggesting a potential lack of access to HIV care services.



Data Sources and Methods

New diagnoses were identified using the New York State HIV registry. Diagnoses were assigned to Erie county based on a person's county and Zip code of residence at time of diagnosis. PLWDH were assigned based on the last known address as of the end of 2020.

Demographic information such as age, race/ethnicity, and transmission risk were extracted from the HIV registry. Viral suppression status and care status were calculated based on HIV laboratory records in the HIV registry.

HIV registry data extracted in March 2021.

IDU: history of injection drug use

MSM: history of male-to-male sexual contact

PLWDH: persons living with diagnosed HIV

Zip code level population, poverty, and insurance metrics for all Erie county Zip codes were derived from the 2019 American Community Survey 5-year estimates. This information is representative of the population living within the Zip code and may not specifically represent an individual living in the Zip code.

Maps are generated using United States Census Bureau Zip code Tabulation Areas (ZCTA). Zip codes do not always match ZCTA areas exactly. ZCTAs do not align with county boundaries.

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