



Ending the HIV Epidemic: 2020 Epidemiological Profile

Essex County, New Jersey



New Jersey Department of Health

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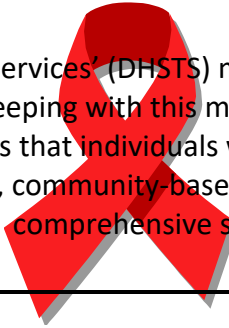
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The Division of HIV, STD, and TB Services

Mission Statement



The Division of HIV, STD, and TB Services' (DHSTS) mission is to prevent, treat, and reduce the spread of HIV in New Jersey. In keeping with this mission, the DHAS will monitor the epidemic and assure through its resources that individuals who are at risk or infected with HIV have access to culturally competent, community-based networks that provide qualitative and comprehensive services.

Vision

Consistent with the mission, the DHSTS vision for providing HIV services is a coordinated community and statewide effort supported by public and private partnerships to provide comprehensive services that assure:

- All residents, regardless of age, race, gender, class, sexual orientation, or ethnic background, provided with accurate and comprehensive risk education to allow them to make the safest decisions regarding their HIV status.
- Support for safe and healthy communities.
- Communities have the necessary resources for prevention, testing, and interventions to reduce the spread of HIV/AIDS, and
- Communities have the necessary comprehensive, community-based, culturally competent, affordable network of care services to maximize the quality of life for those individuals living with HIV/AIDS.

Dedication

This document is dedicated to the many people of New Jersey who lost their lives to HIV/AIDS and/or HIV/AIDS-related complications.

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Abbreviations

ACS	American Community Survey
ART	Antiretroviral Therapy
CDC	Centers for Disease Control and Prevention
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
HRH	High-Risk Heterosexual
ICD-10	International Classification of Diseases Tenth Revision
IDU	Injection Drug Use(r)
MMP	Medical Monitoring Project
MSM	Men who have sex with men
MSM/IDU	Men who have sex with men and who also inject drugs
NHBS	National HIV Behavioral Surveillance
NJ	New Jersey
NJDOH	New Jersey Department of Health
nPEP	Non-Occupational Post-Exposure Prophylaxis
PAAD	Pharmaceutical Assistance to the Aged and Disabled
PLWH	Persons Living with HIV (includes AIDS)
PWID	Persons who inject drugs
PrEP	Pre-Exposure Prophylaxis
RWCA	Ryan White CARE Act
STD	Sexually Transmitted Disease
TB	Tuberculosis
TWSM	Trans Women who have sex with men
UB	Uniform Billing

Executive Summary

The Essex County epidemiologic profile was developed to assist groups planning HIV/AIDS services in the state. It summarizes the socio-demographic characteristics of Essex County - with New Jersey data in the context, describes the scope of the HIV epidemic, identifies those at risk for HIV, examines services that are needed, and highlights our successes and challenges.

The profile addresses the following questions:

- What are the socio-demographic characteristics of the general population in New Jersey and Essex County?
- What is the scope of the HIV epidemic and its impact on communities, families and individuals in New Jersey and Essex County?
- What are the indicators of risk for HIV infection among New Jersey and Essex County residents?
- What is the unmet need for HIV services in New Jersey and Essex County?
- What are the barriers and challenges to preventing the spread of HIV and providing treatment for persons living with HIV in New Jersey and Essex County?

When making planning decisions, it is important to consider the overall strengths and limitations of the cited data.

Some of the strengths of this profile are:

- New Jersey has had a comprehensive HIV reporting system for over 20 years that includes information on demographic characteristics, clinical and laboratory findings, and transmission risk for men, women and children infected with HIV.
- This profile includes a new gender identity category
- New Jersey has had Enhanced Perinatal Surveillance since 1995, a system that follows children born to HIV positive mothers.
- These data constitute the latest data available for the state.

Some of the limitations of this profile are:

- Information is not available on persons who are HIV positive but not reported, or who have not been tested.
- New Jersey's HIV reporting laws or regulations do not mandate the reporting of all CD4, viral loads and genotype tests and are not considered to be complete.
- Incompleteness of laboratory reports and mortality completeness and migration affect these measures of care.
- HIV surveillance data may underestimate the number of infected persons because some infected persons have not been tested, aware of their status or been diagnosed. It is estimated that undiagnosed or unreported cases comprise approximately one tenth of all infection.
- Persons who have tested positive at an anonymous test site and have not sought medical care, during which they would be confidentially tested, are not reported to the surveillance system.

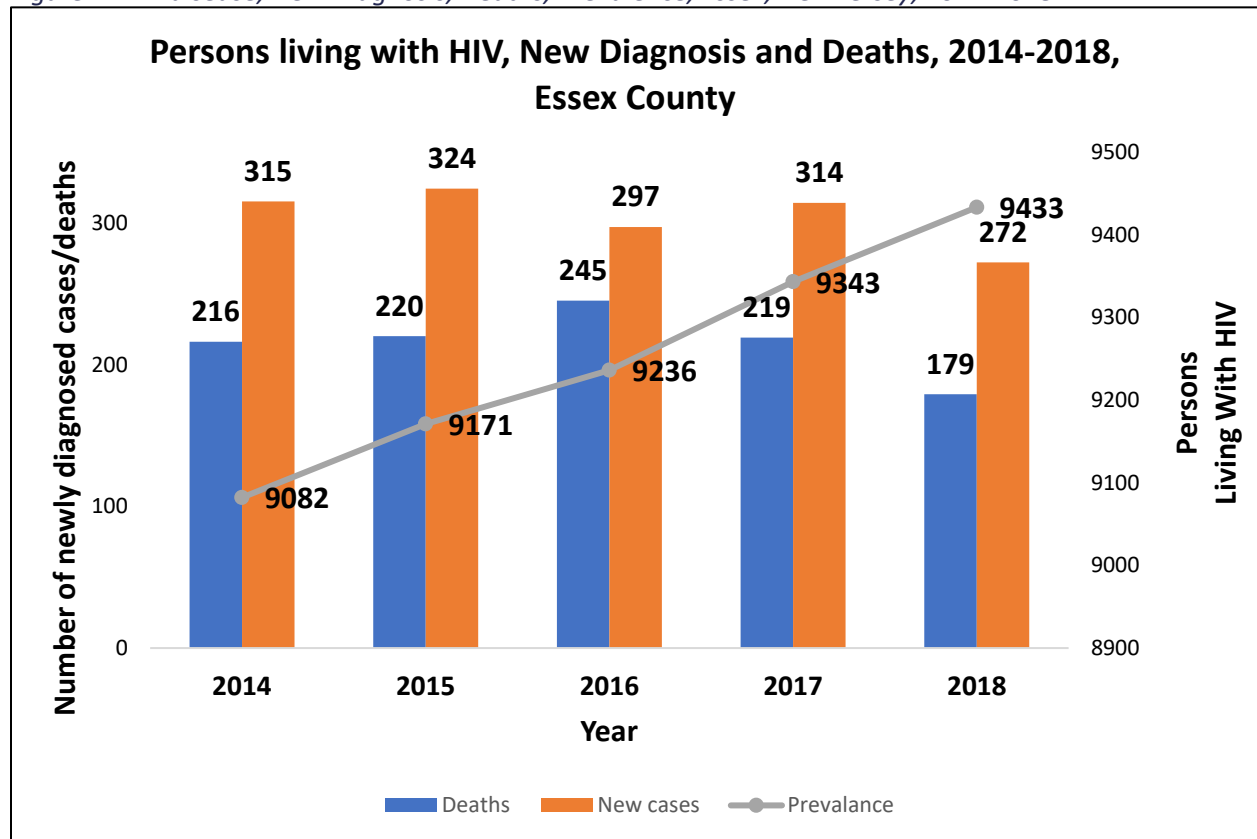
- Reporting of behavioral risk information may not be complete or may not be recent (the latest New Jersey Behavior Risk Factor Survey data set available is for 2017).
- Information may be incomplete due to reporting delays and missing data on a person's exposure to HIV.
- Information may be incomplete on those persons who are diagnosed with HIV in New Jersey and reported to the data system but relocate out-of-state.
- Excluded from the analysis are those who were not NJ residents at diagnosis or who are not currently living in NJ in the year in question and those lost to follow up in the last 10 years.
- In order to present an accurate description of the epidemic, we used data from multiple sources. The most current analysis available is presented for each source of data; however, the time frames differ from one source to another.
- To maintain privacy and confidentiality, data suppression was done where applicable
- COVID-19 caused delays in collecting information from grantee sites and Divisions outside DHSTS. This information will be added in the report later.
- Care sites in Essex County are funded through Ryan White Part A. The data for Ryan White Part A -administered through Newark and Jersey City governments and not by NJDOH - could not be included in the report.
- Despite taking care to use language that is inclusive and non-stigmatizing, specific epidemiological terms might be offensive to certain communities. No offense is intended.

This Epidemiologic Profile represents a commitment by the state of New Jersey to support the federal Ending the Epidemic (EHE) initiative with the goal of the reducing new HIV infections by 75% by 2025 and by 90% by 2030. It will guide the state's efforts to increase the health and wellbeing of persons affected by, living with, and vulnerable to HIV. The document puts forth these goals associated with the four pillars of EHE: 1. Diagnose all people with HIV as early as possible after infection, 2. Treat all people with HIV rapidly and effectively to sustain viral suppression, 3. Prevent HIV transmission by using proven interventions (such as PrEP), and 4. Respond quickly to potential HIV outbreaks to get needed prevention and treatment services to people who need them. Achieving these goals will not eliminate HIV; rather, it will ensure that for the first time since the beginning of the HIV epidemic, HIV acquisition is effectively managed and the prevalence and incidence of HIV in the state decreases over time. This Epidemiologic Profile will serve as a key focal point to guide state and local HIV planning, implementation, and evaluation of the EHE Plan. Epidemiologic Profiles will be shared with local prevention and care planning bodies and community partners to increase their understanding of data in the two counties and to guide local planning activities.

This report is divided into seven parts. The first provides an overview of New Jersey's sociodemographic characteristics as a contextual background for the HIV epidemic in the state. The second presents HIV epidemiologic data to highlight HIV burden in certain populations and communities and corresponds with the first pillar of EHE 'Diagnose'. The third section includes a selection of graphs and figures that addresses the second pillar 'Treat' by identifying the

populations living with the epidemic and the extent to which their healthcare needs are met. The fourth section, relating to the pillar 'Prevent', seeks to identify the risk for co-infections and provide the performance markers of HIV and co-infection such as - sexually transmitted diseases (STDs), tuberculosis, hepatitis C and drug use - prevention strategies in the state. The fifth section provides information collected through Molecular HIV Surveillance to inform 'Respond'. The sixth section addresses the intersections between social determinants of health and HIV burden. Finally, the last section provides data on some of the priority populations that suffer a disproportionate burden nationally and in the state.

Figure 1: HIV disease, New Diagnosis, Deaths, Prevalence, Essex, New Jersey, 2014-2018



- In the state of New Jersey, Essex County ranks first in rate of new diagnosis and in prevalence of HIV
- The county has seen fair progress in the last five years with a decline in new diagnoses and deaths and an increase in the persons living with HIV (Figure 1)
- The epidemic differs geographically and across racial/ethnic groups, gender, age groups and exposure categories
- New HIV diagnoses declined 13.5% from 1,232 diagnoses in 2014 to 1,066 diagnoses in 2018 in New Jersey. New HIV diagnoses declined 13.6% from 315 diagnoses in 2014 to 272 diagnoses in 2018 in Essex County
- Among all age groups, most new diagnoses (32.4%) were among people aged 25-34 years

- Minorities have been disproportionately affected by HIV. Minorities represent 78.1% of persons living with HIV in the state. In Essex County, HIV affects the African American community more than any other racial, ethnic, or demographic group
- Even though African Americans are the largest minority group to be affected by HIV, trends show that new HIV diagnoses has decreased among African Americans but increased among Hispanics and non-Hispanic Whites in Essex County
- As of 2018 Black Non-Hispanics, who represent only 39.3% of the Essex County population, account for 68.8% of the persons living with HIV cases and 61.8% of new HIV infections. Hispanics, who comprise about 20.3% of the Essex County population, account for 19.3% of the persons living with HIV cases and 25.4 % of new HIV infections. White non-Hispanics represented 5.7% of persons living with HIV but represented 33.2% of the total county population
- In New Jersey, whereas women were 22.7% of all newly diagnosed cases, in Essex County the percentage of women among newly diagnosed was 31.9%
- As of 2018 in Essex County, approximately 77.6% of newly diagnosed HIV infections in women was among African Americans as compared to 54.5% of the infections among males
- Between 2014 and 2018, persons exposed through MSM continue to account for a large proportion of new cases (35.2%) in men and those exposed through heterosexual contact account for 22.7% percent of all new cases in Essex County. Injectable Drug Use is not a major risk, accounting for 3.7% of new cases and 18.5% of persons living with HIV
- Deaths among people with HIV has declined between 2014-2018 by 17.1 % (from 216 to 179) in Essex County
- The percentage of persons linked to care within 30 days of HIV diagnosis in Essex in 2019 is comparable to the state (67.7% vs 67.9%) and 49% achieved viral suppression.

HIV/AIDS Data Definitions

Definition of key terms used in this Epidemiologic Profile are provided to assist in understanding HIV/AIDS data and to provide information on why the data are included.

- An **HIV case**: A person diagnosed and reported to the state's enhanced HIV Reporting System (eHARS) with HIV infection.
- An **AIDS case**: A person with HIV infection who has an opportunistic infection or a CD4+ count of less than 200 cells/mm or whose proportion of CD4+ T-lymphocytes is less than 14 percent of their total lymphocytes and who has been reported to the eHARS.

Note: All AIDS cases are persons infected with HIV, but not all persons infected with HIV are AIDS cases. Since the HIV disease may be seen as a continuum, throughout this profile the data will be shown on HIV to include AIDS cases.

- **Cumulative Cases**: Include all cases that have been diagnosed and reported since 1982, including those individuals who have died.
- **New Diagnosis**: Persons newly diagnosed in Essex, New Jersey in the measurement year, regardless of the stage of disease (stage 0, 1, 2, 3 [acquired immunodeficiency syndrome (AIDS)], or unknown) at the time of initial diagnosis.
- **Prevalence**: The total number of individuals who have been diagnosed with HIV/AIDS, minus those who have died. This profile provides data on estimated prevalence by using the number of persons living with HIV or AIDS who have been diagnosed, reported to the eHARS, and are not known to have died. It does not include data on persons who are infected, but who have not been diagnosed and/or reported to eHARS.
- A **rate**: The number of cases (of a condition or event) divided by the total population exposed to the condition or event in a given time period. A rate is often expressed as cases per 100,000. In this profile, estimated **prevalence rates** are based on HIV/AIDS cases that were reported to eHARS and are not known to have died. Actual prevalence rates are reported only for specific sub-populations for which special studies were conducted. Estimated **incidence rates** are based on the number of cases reported as diagnosed during the year. Incident infections can only occur if prevalent infections exist. In other words, the disease must be transmitted from someone who already has it. Although incidence and prevalence are different, they are related and both are important to consider in planning for prevention, as well as, for care and treatment. Note: Because rates account for differences in the size of sub-populations, the use of rates is essential for comparing different population categories at different times or places.

- **Incidence:** The number of new cases diagnosed within a given period of time. This profile includes estimated diagnosed incidence, the number of persons who have been diagnosed during the year and reported to the eHARS. In addition, an incidence estimate is also provided. The incidence estimates project the number of new HIV infections in a year; this measure includes both new diagnoses reported to the state, as well as undetected and unreported diagnoses.
- **Risk exposures:** Although we usually cannot determine exactly how or when a person was infected, it is possible to determine which behaviors put a person at risk for infection. In the 1980s, the Centers for Disease Control and Prevention (CDC) established a hierarchy to categorize modes of exposure for persons reported with AIDS based on their risk exposures. Behaviors most likely to lead to infection are higher in the hierarchy than those less likely to lead to infection.

Individuals are categorized as follows. Men who report sexual contact with other men, and men who report sexual contact with both men and women are placed in the ‘male-to- male sex’ (MSM) category. Persons reporting having injected drugs anytime since 1978 are placed in the “injection drug use” (IDU) category. Men with both a history of sexual contact with other men and injection drug use are placed in the “MSM-IDU” category. Then follows persons with hemophilia/coagulation disorder. Persons who report specific heterosexual sex with a person with, or at increased risk for, HIV infection (e.g., an injection drug user or person known to be infected with HIV) are placed in the “Heterosexual” category. Heterosexual sex with a person of unknown risk or unknown HIV status is reported as “heterosexual sex with partners of unknown HIV risk,” and heterosexual risk with persons of known risk will be reported by the risk status of the partner. Persons who received a transfusion prior to March 1985 are placed in the “other/unknown” category. The ascertainment of exposure category is incomplete, especially for cases reported recently. Some cases currently in the “other/unknown” category may be redistributed later to known exposure as follow-up investigations are completed.

Transmission categories are mutually exclusive, hierarchical risk categories determined by the CDC and system-calculated using sex at birth and risk factor history to determine mode of transmission. A person with multiple risks is only represented in the highest category based on the CDC hierarchical algorithm. Thus, transgender women are included in the MSM transmission category if assigned male at birth and risk factor history indicates sex with males. Please note this is for the categorization of HIV transmission categories only and not to describe sexual orientation.

- **Pediatric Cases:** Individuals diagnosed under the age of 13 are considered pediatric cases. Mother-to-child transmission occurs when the virus is passed from mother to child during pregnancy or delivery.

- **Knowledge of Status:** Knowledge of status (also known as percentage diagnosed or percentage aware) is determined by dividing the number of persons with diagnosed HIV by the total HIV prevalence for each year. Knowledge (or awareness) of HIV-positive status occurs when a person with HIV is tested and diagnosed with HIV infection.
- **Linkage to Care:** People diagnosed with HIV in a given calendar year who had one or more documented viral load or CD4 tests within three months of diagnosis. Numerator: Number of persons with a routine HIV medical care visit within 3 months of HIV diagnosis. Denominator: Number of persons with an HIV diagnosis in 12-month measurement period.
- **Retained in any HIV care:** Numerator: Number of persons that have ≥ 1 CD4 or VL or Antiretroviral drug in the year in question. Denominator: Number of persons living with an HIV diagnosis in that same year.
- **Retention in Care/ Continuously retained in care:** Persons who have 2 or more CD4 or viral loads during the calendar year, at least 90 days apart. Numerator: HIV diagnosed persons with at least 2 CD4/VL tests within 90 days in a year. Denominator: Those living with HIV disease in that same year.
- **Viral Suppression:** The most recent VL result ≤ 200 Copies/ML in the year in question. Numerator: persons with a most recent VL of less than 200 copies/ML in the measurement year. Denominator: Persons living in Essex, New Jersey in the measurement year.
- **Late diagnosed cases** are defined as the number of people with late diagnosed HIV in the most recent calendar year based on residence at time of diagnosis. Late diagnosed HIV is based on the first CD4 test result (<200 cells/mL or a CD4 percentage of total lymphocytes of <14) or documentation of an AIDS-defining condition ≤ 3 months after a diagnosis of HIV infection.
- **Unmet Need** - Numerator: Percentage of persons living with HIV disease who are not in HIV care i.e., do not have a CD4/VL/ARV in the same year. Denominator: Persons living in Essex, New Jersey in the measurement year.
- **Race/Ethnicity:** Except where noted, race/ethnicity is presented using the following categories: American Indian/Alaska Native; Asian/Pacific Islander; Black/African American; Hispanic; Non-Hispanic White; and multi-race. Hispanic/Latinx may be of any race. Persons with a race of American Indian/Alaska Native, Asian/Pacific Islander, Black/African American, White, or multi-race are not Hispanic. Asian/Pacific Islander includes native Hawaiian

Ending the HIV Epidemic Goal Dashboard

GOALS	BASELINE	1-YEAR BENCHMARK	5-YEAR BENCHMARK
INCIDENCE: To reduce new HIV infections in Essex County by 75% in five years	220* (2018)	To be determined (TBD) in consultation with Planning Groups	80 (2025)
KNOWLEDGE OF STATUS: To increase the estimated percentage of people with HIV who have received an HIV diagnosis to 95%	90.8%* (2018)	TBD	95% (2025)
NEW DIAGNOSES: To decrease the number of people with HIV diagnosed in a given year confirmed by laboratory or clinical evidence by 75%	272 [†] (2018)	TBD	78 (2025)
LINKAGE TO MEDICAL CARE: To increase the percentage of people diagnosed with HIV in a given year who have received medical care for their HIV infection within one month of diagnosis to 95%	67.7% [†] (2017)	TBD	95% (2025)
VIRAL SUPPRESSION: To increase the percentage of people living with diagnosed HIV infection who have an amount of HIV that is less than 200 copies per	49% [†] (2019)	TBD	95% (2025)

milliliter of blood, in a given year to 95%			
PrEP: To increase the estimated percentage of individuals prescribed PrEP among those who need it to 50%	31.5%* (2018)	TBD	50% (2025)
HOMELESSNESS: To reduce homelessness among people with diagnosed HIV by 50%	77 ^a (2017)	TBD	38 (2025)
STIGMA: To decrease stigma among people with diagnosed HIV by 50% from a 2018 baseline median score of 31.2 on a 10-item questionnaire	35.1% ^b (2015-2018)	TBD	17.5% (2025)

Source:

*America's HIV Epidemic Analysis Dashboard - [AHEAD Dashboard \(U.S. Department of Health and Human Services \(HHS\), 2020\)](#)

[†] New Jersey Enhanced HIV AIDS Reporting System (eHARS) data, 2020

^a Newark/Essex County CoC (US Department of Housing and Urban Development, 2020)

^b Medical Monitoring Project, Essex and Hudson Counties, NJ, 2015-2018: Ten-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma, disclosure concerns, negative self-image, and perceived public attitudes about people living with HIV.

Background: Essex County at a Glance



Community Served: Located in north-eastern part of New Jersey, Essex County has a land area of 126.08 square miles and is the state’s third most populous county. The population density for this area is estimated at 6,293.8 persons per square mile. Of the total population, 99.9% of the population is classified urban while 0.01% is rural. According to the United States Census Bureau Decennial Census, between 2000 and 2010, the population in Essex County fell by -9,664 persons, a change of -1.22%.



Population Served: In 2018, Essex County’s population had a median age of 37.3 years and a median household income of \$59,302. In Essex County, 13.1% of the population are 65 years and above. 34.7% of the population aged 25 and older have obtained a Bachelor level degree or higher and 14.2% of the population is without a high school diploma. Among county residents, 3.1% have veteran status. As of June 2019, the percent of households with a broadband internet access is 99.1%.



Households Served: There are 5.7% single family households, 35.5% non-family households, 11.9% of households with children. 16.4% individuals are living in households with income below the Federal Poverty Level (FPL) and 23.0% children aged 0-17 are living in households with income below the FPL. 67.1% of these children are Black or African Americans. 22.5% Hispanic population live in poverty as compared to 14.6% of non-Hispanic population.



Households with disparity: The percentage of the households where housing costs exceed 30% of total household income stands at 46.7% and the percentage of rental households that are cost burdened in Essex County are 53.33%. The percentage of households without a motor vehicle is 22.2%. About 35.1% of the people in Essex County speak a non-English language, and 26.5% are foreign born.



Employment: According to the 2014–2018 ACS, of the 624,970 working age population, 411,521 are included in the labor force. The labor force participation rate is 65.8%. Total unemployment in the Essex County stands at 16.3% of the civilian non-institutionalized population age 16 and older. The county has a total population of 40,039 between the ages 16-19, of which 9.3% are not in school.



Disability: The percentage of the total civilian non-institutionalized population with a disability is 11.5%.



Access to Healthcare: In Essex County, there is one primary care physician for 1,197 patients in 2017. More people have premature deaths in Essex County than New Jersey (Years of Potential Life Lost in Essex County is 7,289 potential years life lost per every 100,000 population as compared to 5,906 for New Jersey). The uninsured population among males is 13.8% and among females is 10.9%. Among 18-65 years age group, 17.2% are uninsured.

Section A. Sociodemographic Characteristics of Essex County, New Jersey

The following section explores the demographic profile of Essex County. Demographics are an integral part of describing the community and its population, and critical to forming further insights into the health needs of the community in order to best plan for improvement. Different race/ethnic, age, and socioeconomic groups may have unique needs and require varied approaches to health improvement efforts.

All demographic estimates are sourced from the U.S. Census Bureau, American Community Survey 5-year estimates. Sections of this chapter have been retrieved from the Standard Report Essex County, Community Commons. Periods of measurement and sources for the data discussed are given in these sections if they are not mentioned elsewhere in the tables and figures enclosed within the report.

I. Demographics

i. Total Population

This indicator reports the total population of Essex County. Table 1 illustrates the population size in Essex County. The most populated zip codes in the county are 07111 Irvington (47,210 population total), 07003 Bloomfield (45,650 population total), and 07052 West Orange (44,750 population total). Newark is the biggest city and consists of 10 zip codes with a total population of 217,681.

Table 1: Total Population, Essex County, New Jersey, 2014-2018

Report Area	Total Population	Total Land Area (Square Miles)	Population Density (Per Square Mile)
New Jersey	8,881,845	7,355.54	1,207.50
Essex County	793,555	126.08	6,293.83

ii. Population by Sex Assigned at Birth

This indicator reports the total population of Essex County by sex assigned at birth.

Table 2: Total Population by Sex Assigned at Birth, Essex County, New Jersey, 2014-2018

Report Area	Male	Female	Male, Percent	Female, Percent
New Jersey	4,335,930	4,545,915	48.8%	51.1%
Essex County	381,576	411,979	48.0%	51.9%

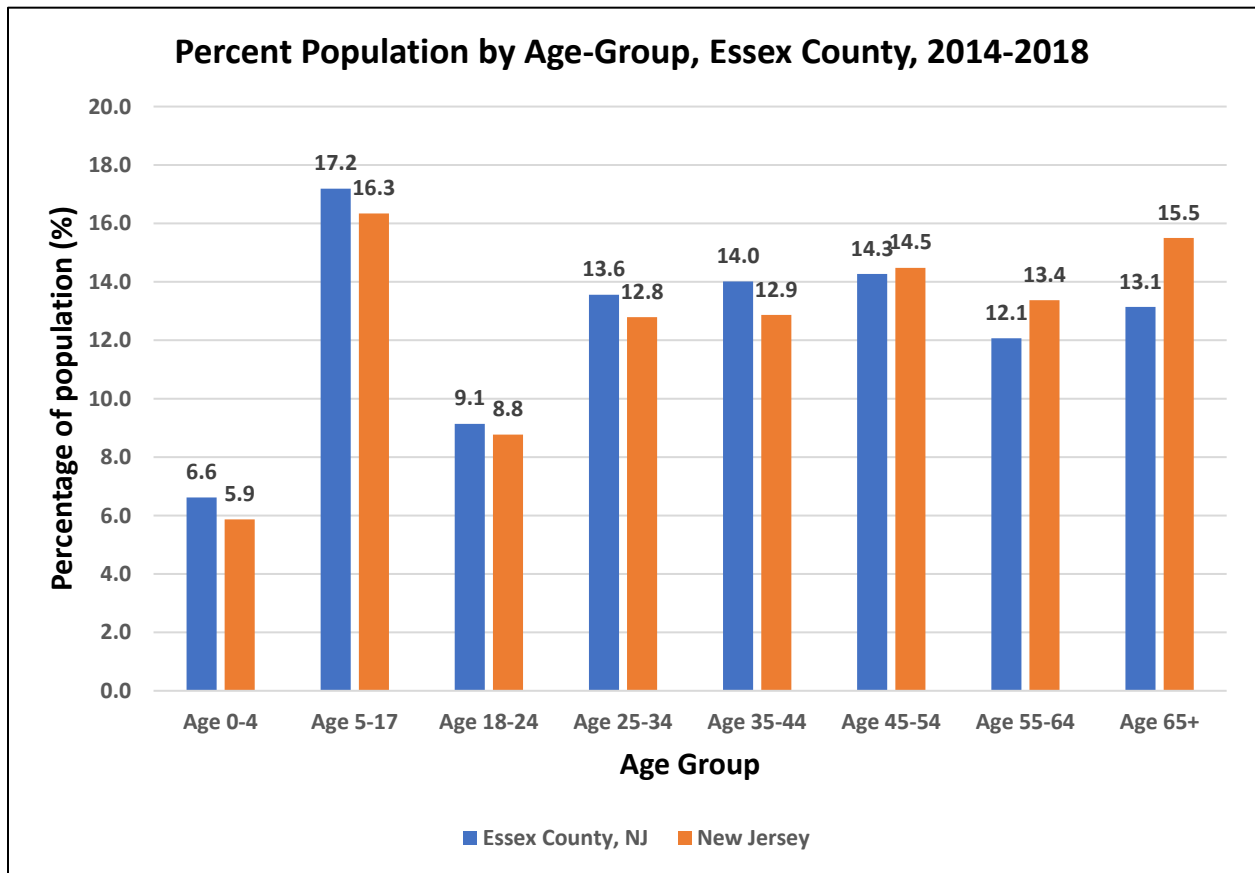
iii. Total Population by Age Groups, Percent

This indicator reports the percentage of age groups in the population of Essex County.

Table 3: Total Population by Age Groups, Percent, Essex County, New Jersey, 2014-2018

Report Area	Age 0-4	Age 5-17	Age 18-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65+
New Jersey	5.8%	16.3%	8.7%	12.7%	12.8%	14.4%	13.3%	15.5%
Essex County	6.6%	17.1%	9.1%	13.5%	14.0%	14.2%	12.0%	13.1%

Figure 2: Percent Population by Age-Group, Essex County, 2014-2018



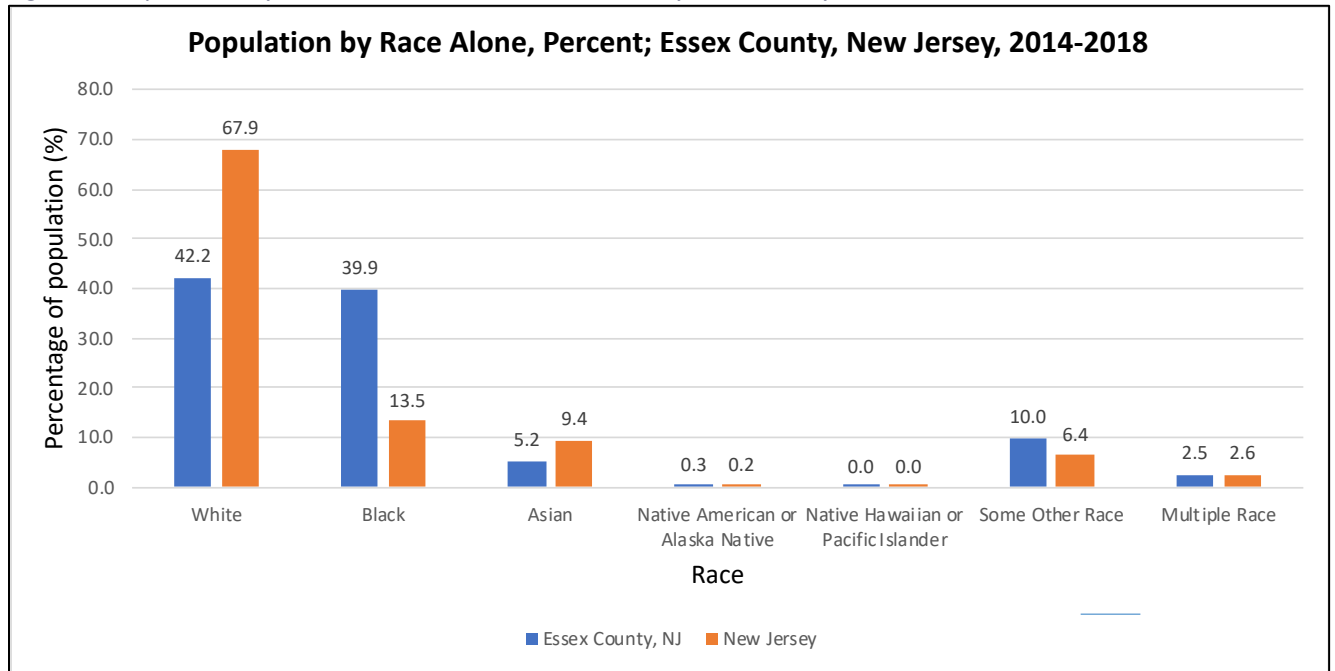
iv. Population by Race Alone, Percent

This indicator reports the percentage of population by race alone in Essex County.

Table 4: Population by Race Alone, Percent, Essex County, New Jersey, 2014-2018

Report Area	White	Black/African American	Asian	Native American or Alaska Native	Some Other Race	Multiple Race
New Jersey	67.9%	13.4%	9.3%	0.2%	6.3%	2.6%
Essex County	42.1%	39.8%	5.2%	0.2%	10.0%	2.4%

Figure 3: Population by Race Alone, Percent; Essex County, New Jersey, 2014-2018



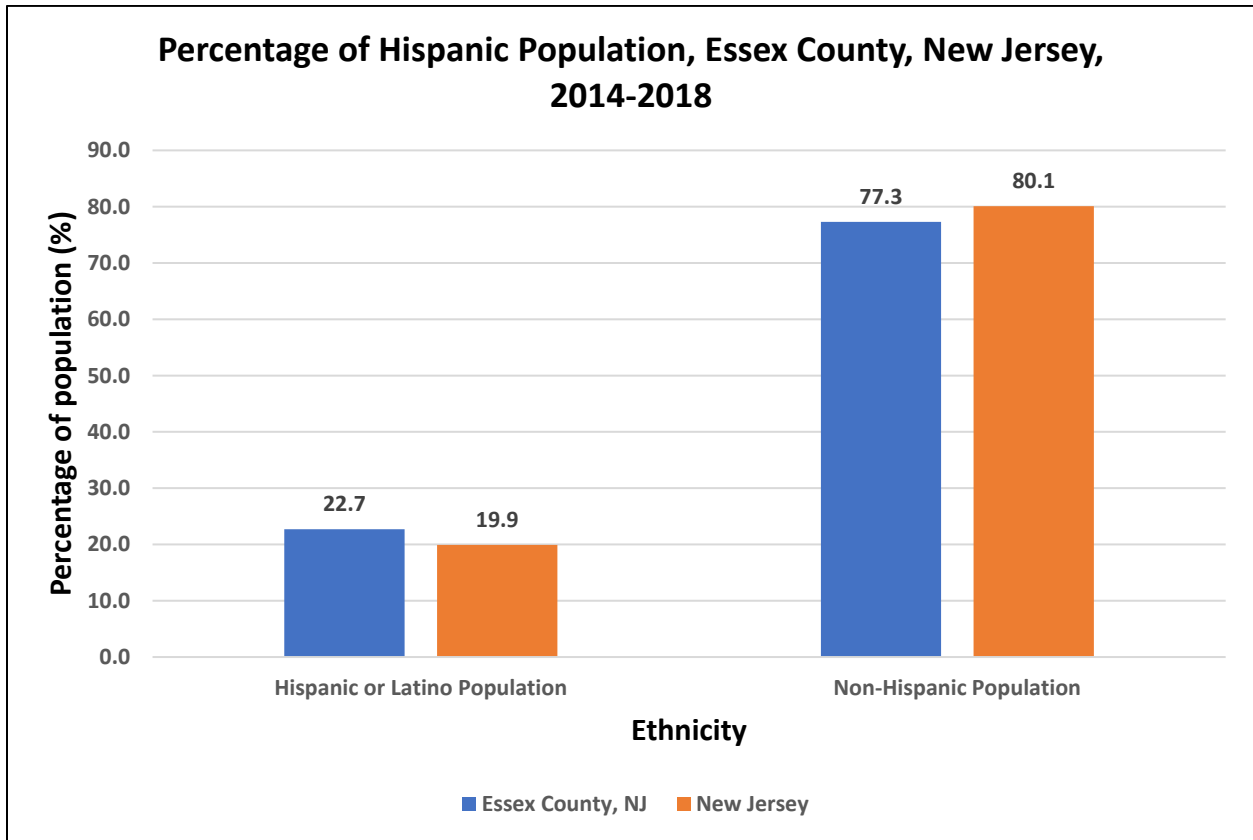
v. Total Population by Ethnicity Alone

This indicator reports the total population of Essex County by ethnicity alone.

Table 5: Total Hispanic Population, Percent, Essex County, New Jersey, 2014-2018

Report Area	Total Population	Hispanic Population	Hispanic Population, Percent	Non-Hispanic (NH) Population	Non-Hispanic (NH) Population, Percent
New Jersey	8,881,845	1,768,020	19.9%	7,113,825	80.0%
Essex County	793,555	180,241	22.7%	613,314	77.2%

Figure 4: Percentage of Hispanic Population, Essex County, New Jersey, 2014-2018



vi. Hispanic Population by Race Alone, Percent

This indicator reports the percentage of Hispanic or Latino population in Essex County by race alone.

Table 6: Hispanic Population by Race Alone, Percent, Essex County, New Jersey, 2014-2018

Report Area	White	Black/African American	Asian	Native American or Alaska Native	Native Hawaiian or Pacific Islander	Some Other Race	Multiple Races
New Jersey	60.6%	3.8%	0.3%	0.5%	0.1%	30.0%	4.6%
Essex County	49.8%	5.3%	0.1%	0.4%	0.1%	39.8%	4.4%

vii. Population with Any Disability by Ethnicity Alone, Percent

This indicator reports the percentage of the total civilian non-institutionalized population with a disability by ethnicity alone.

Table 7: Population with Disability by Ethnicity Alone, Essex County, New Jersey, 2014-2018

Report Area	Hispanic or Latino	Not Hispanic or Latino	Hispanic or Latino, Percent	Not Hispanic or Latino, Percent
New Jersey	148,444	765,237	3.2%	10.8%
Essex County	20,835	69,658	11.6%	11.5%

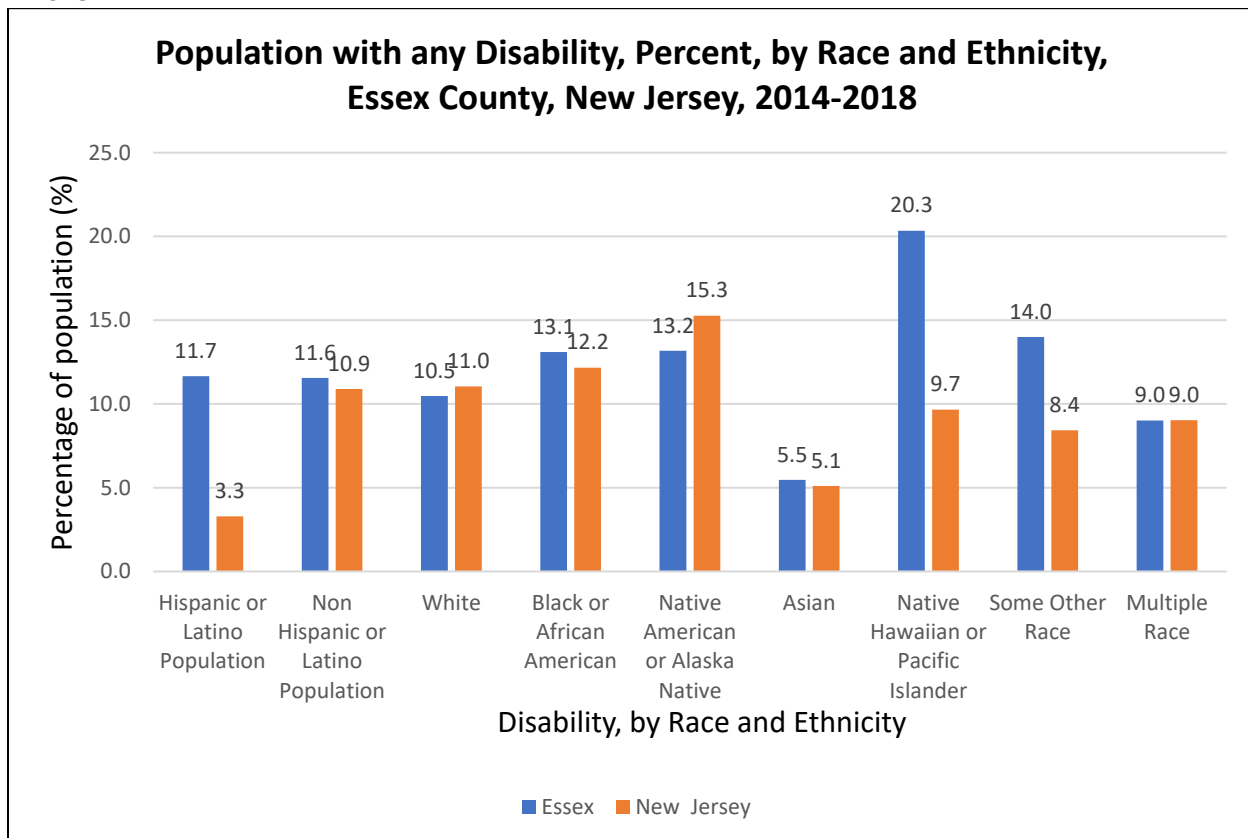
viii. Population with Any Disability by Race Alone, Percent

This indicator reports the percentage of the total civilian non-institutionalized population with a disability by race alone.

Table 8: Population with Disability by Race Alone, Essex County, New Jersey, 2014-2018

Report Area	White	Black/African American	Native American or Alaska Native	Asian	Native Hawaiian or Pacific Islander	Some Other Race	Multiple Race
New Jersey	11.0%	12.1%	15.2%	5.1%	9.6%	8.4%	9.0%
Essex County	10.4%	13.1%	13.1%	5.4%	20.3%	14.0%	9.0%

Figure 5: Population with any Disability, Percent, by Race and Ethnicity, Essex County, New Jersey, 2014-2018



ix. Population with Limited English Proficiency

This indicator reports the percentage of the population aged 5 and older who speak a language other than English at home and speak English less than "very well."

Table 9: Population with Limited English Proficiency, Essex County, New Jersey, 2014-2018

Report Area	Population Age 5+	Population Age 5+ with Limited English Proficiency	Population Age 5+ with Limited English Proficiency, Percent
New Jersey	8,360,161	1,012,899	12.1%
Essex County	741,002	110,351	14.8%

x. Population with Limited English Proficiency by Race Alone, Percent and by Language Spoken at Home (4-Category)

A higher percentage of Whites constitute the population aged 5 and older who speak a language other than English at home and speak English less than "very well" in Essex County as compared to the state. Spanish followed by Indo-European languages are the languages spoken most by limited English proficiency speakers.

Figure 6: Population with Limited English Proficiency, Percent, Essex County, New Jersey, 2014-2018

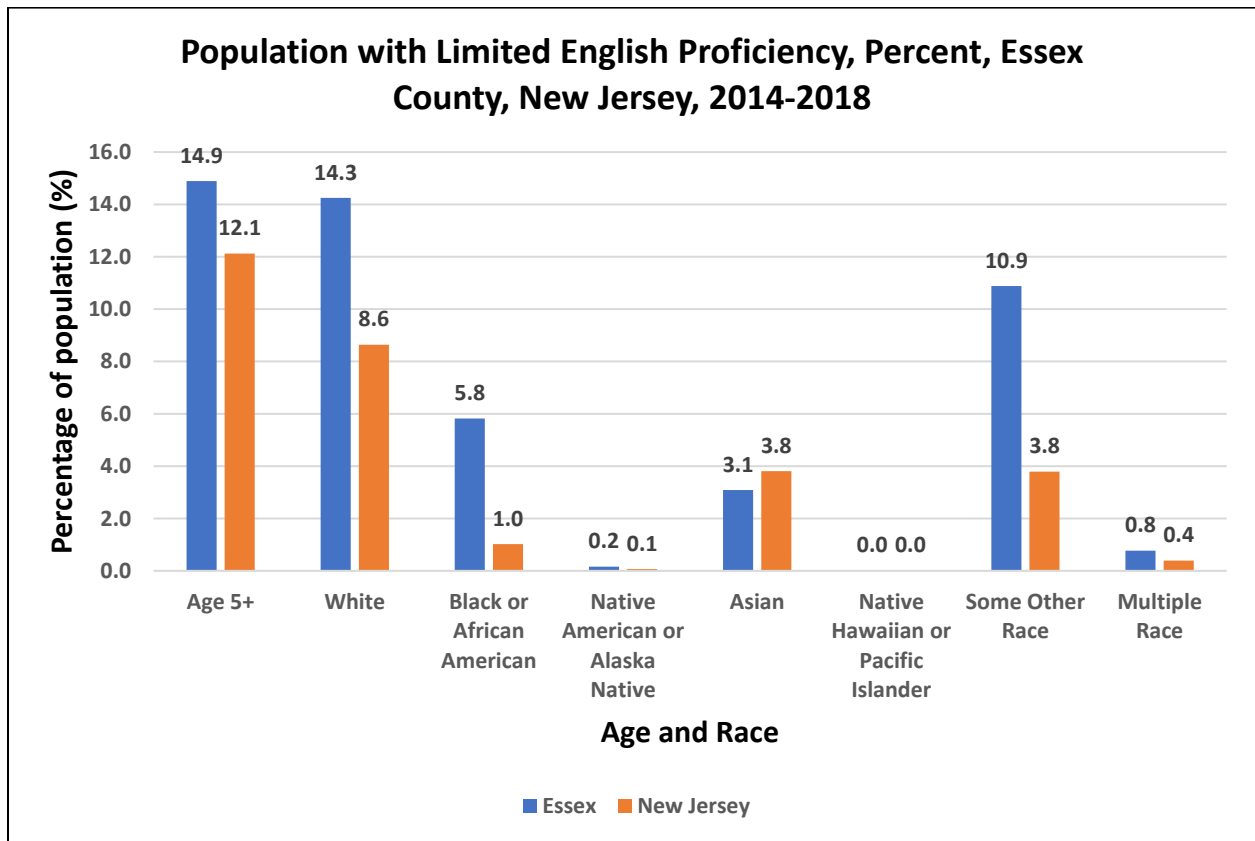


Table 10: Population with Limited English Proficiency by 4 Categories of Language Spoken at Home, Essex County, New Jersey, 2014-2018

Report Area	Spanish	Other Indo-European Languages	Asian and Pacific Island Languages	Other Languages
New Jersey	592,567	228,268	153,043	39,021
Essex County	66,768	31,414	7,313	4,856

xi. Foreign-Born Population

This indicator reports the percentage of the population in Essex County that is foreign-born. The foreign-born population includes anyone who was not a U.S. citizen or a U.S. national at birth.

Table 11: Foreign Born Population, Essex County, New Jersey, 2014-2018

Report Area	Total Population	Naturalized U.S. Citizens	Population Without U.S. Citizenship	Total Foreign-Birth Population	Foreign-Birth Population, Percent of Total Population
New Jersey	8,881,845	1,098,338	869,722	1,968,060	22.1%
Essex County	793,555	113,570	96,422	209,992	26.4%

i. Citizenship Status

The table below shows the numbers and percent of population by citizenship status for Essex County.

Table 12: Population with Citizen Status, Essex County, New Jersey, 2014-2018

Report Area	Native	Born in a US Territory	Born Abroad to US Citizens	Naturalized	Non-Citizen	Non-Citizen, Percent
New Jersey	6,701,634	132,257	79,894	1,098,338	869,722	9.7%
Essex County	557,770	17,816	7,977	113,570	96,422	12.1%

II. Economic Indicators

i. Employment - Unemployment Rate

A high rate of unemployment has personal and societal effects. During periods of unemployment, individuals may feel severe economic strain and mental stress. Unemployment is also related to access to health care, as many individuals receive health insurance through their employer. This indicator represents the total unemployment in Essex County.

Table 13: Unemployment Figures, Essex County, New Jersey, 2014-2018

Report Area	Labor Force	Number Employed	Number Unemployed	Unemployment Rate
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New Jersey	4,505,921	3,832,673	673,248	14.9%
Essex County	372,772	312,031	60,741	16.3%

ii. Median Household Income by Race/Ethnicity of Householder

Median household income reflects the relative affluence and prosperity of an area. Areas with higher median household incomes are likely to have a greater share of educated residents and lower unemployment rates. This indicator reports the median household income of Essex County by race/ethnicity of householder.

Table 14: Median Household Income by Race and Ethnicity of Householder, Essex County, New Jersey, 2014-2018

Report Area	Non-Hispanic White	Black/African American	Asian	American Indian or Alaska Native	Native Hawaiian or Pacific Islander	Other Race	Multiple Race	Hispanic or Latino
New Jersey	\$90,860	\$51,309	\$116,131	\$53,507	\$48,429	\$47,407	\$68,823	\$54,160
Essex County	\$104,252	\$41,677	\$118,048	\$37,216	No data	\$36,769	\$53,063	\$44,065

iii. Poverty - Children Below 100% FPL

In 2020, the federal poverty guideline was \$26,200 for a family of four in New Jersey (Department of Human Services, 2020). Federal assistance programs use the guidelines (or percentage multiples of the guidelines) in determining eligibility for the NJ FamilyCare. This indicator represents children aged 0-17 are living in households with income below the Federal Poverty Level (FPL).

Table 15: Children below 100% Federal Poverty Limit, Essex County, New Jersey, 2014-2018

Report Area	Total Population	Population Under 18 year	Population Under 18 year in Poverty	Percent Population Under 18 year in Poverty
New Jersey	8,707,826	1,949,764	288,675	14.8%
Essex County	774,125	186,527	42,922	23.0%

iv. Poverty - Population Below 100% FPL

This indicator represents individuals living in households with income below the Federal Poverty Level (FPL).

Table 16: Population Living in Poverty, Essex County, New Jersey, 2014-2018

Report Area	Total Population	Population in Poverty	Population in Poverty, Percent
Essex County	774,125	127,250	16.4%

New Jersey	8,707,826	904,132	10.3%
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III. Other Social & Economic Factors

i. Insurance - Uninsured Population

The lack of health insurance is considered a key driver of health status. Access to primary care providers is governed largely by insurance status which increases the likelihood that community members will have routine checkups and screenings. Moreover, those with access to primary care are more likely to know where to go for treatment in acute situations. In Essex County 12.34% of the total civilian non-institutionalized population are without health insurance coverage.

Table 17: Uninsured Population, Essex County, New Jersey, 2014-2018

Report Area	Total Population (For Whom Insurance Status is Determined)	Uninsured Population	Uninsured Population, Percent
New Jersey	8,776,839	743,045	8.4%
Essex County	781,825	96,506	12.3%

ii. Uninsured Population by Age Group, Percent

This indicator reports the percentage of uninsured population by age group.

Table 18: Uninsured Population by Age Group, Essex County, New Jersey, 2014-2018

Report Area	Under 18 year	18-64 year	65+ year
New Jersey	4.0%	12.0%	1.1%
Essex County	5.6%	17.2%	2.1%

iii. Uninsured Population by Ethnicity Alone

This indicator reports the uninsured population by ethnicity alone.

Table 19: Uninsured Population by Ethnicity, Essex County, New Jersey, 2014-2018

Report Area	Hispanic or Latino	Not Hispanic or Latino	Hispanic or Latino, Percent	Not Hispanic or Latino, Percent
New Jersey	347,632	395,413	19.84%	5.6%
Essex County	40,042	56,464	22.40%	9.3%

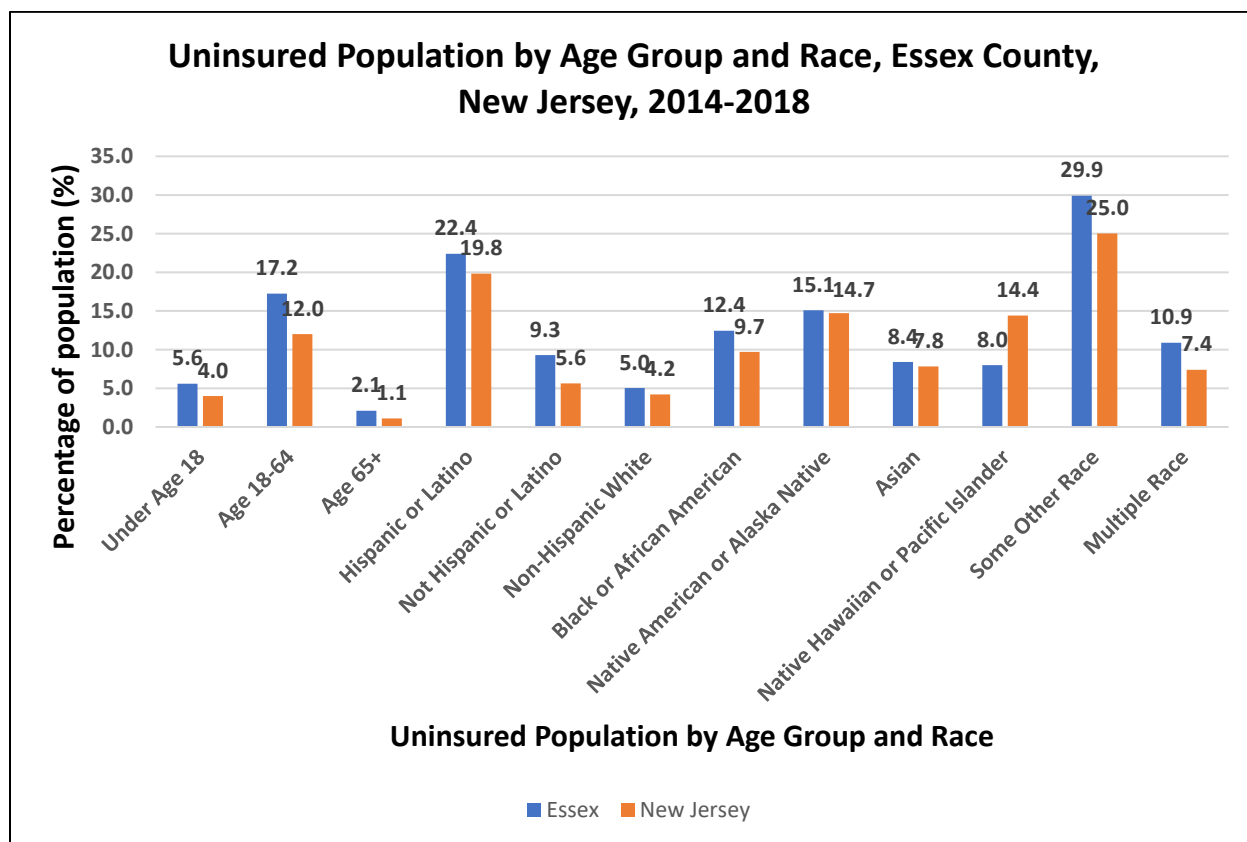
iv. Uninsured Population by Race Alone, Percent

This indicator reports the percentage of uninsured population by race alone.

Table 20: Uninsured Population by Race; Essex County, New Jersey, 2014-2018

Report Area	White	Black/African American	Native American or Alaska Native	Asian	Native Hawaiian or Pacific Islander	Some Other Race	Multiple Race
New Jersey	4.2%	9.7%	14.7%	7.8%	14.4%	25.0%	7.4%
Essex County	5.0%	12.4%	15.1%	8.4%	8.0%	29.9%	10.9%

Figure 7: Uninsured Population by Age Group and Race, Essex County, New Jersey, 2014-2018



v. Homelessness

Affordable housing and housing stability are important drivers of positive health outcomes. Stable housing is associated with economic stability and quality of life. Between 2007 and 2019, New Jersey's total homeless population fell by 49% (National Alliance to End Homelessness, 2019). Per the Homeless Management Information System data of the United States Department of Housing and Urban Development (HUD), the one-year estimate of homeless in Newark/Essex County Continuum of Care (U.S. Department of Housing and Urban Development, 2019), the point-in-time (PIT) estimates (January 2019) for homeless populations was 2235 persons. These included 1,337 households without children, 291 households with at

least one adult and one child, and 3 households with only children. Of the homeless population documented, the numbers of African American homeless were 1,787, White were 391, Asian were 2, American Indian or Alaska Native were 26, Native Hawaiian or Other Pacific Islander were 16, and Multiple Races were 13. Per the PIT estimates, at least 68 persons with HIV were homeless in 2019.

Table 21: Point in Time Homeless by Gender, Newark, Essex Continuum of Care, 2019

Gender	Emergency Shelter	Transitional Housing	Unsheltered	Total
Female	639	221	89	949
Male	732	298	247	1,277
Transgender	6	0	2	8
Gender Non-Conforming	1	0	0	1

Table 22: Characteristics of Homeless, Essex County, New Jersey, 2019

Characteristics of Homeless	Emergency Shelter	Transitional Housing	Unsheltered	Total
Severely Mentally Ill	188	74	115	377
Chronic Substance Abuse	121	117	102	340
Veterans	60	14	14	88
HIV	39	21	8	68
Victims of Domestic Violence	36	5	6	47
Unaccompanied Youth	99	16	15	130
Unaccompanied Youth Under 18	3	0	0	3
Unaccompanied Youth 18-24	96	16	15	127
Parenting Youth	38	28	1	67
Children of Parenting Youth	54	29	1	84

vi. Transportation

Of the 282,502 total households in the county, 62,834 or 22.2% are without a motor vehicle. In comparison, 11.4% (367,761 households) have no motor vehicle. Only 5.2% of Owner-Occupied Households in Essex County do not own motor vehicles, compared to 45/1% of Renter-Occupied Households.

vii. Area Deprivation Index

This indicator reports the average (population weighted) Area Deprivation Index (ADI) for the selected area. The ADI is a metric used to rank neighborhoods by socioeconomic status disadvantage in a region of interest (e.g., at the state or national level). ADI scores range from 1 to 100, with 1 representing the least disadvantaged areas.

Table 23: Area Deprivation Index, Essex County, New Jersey, 2014-2018

Report Area	Total Population	State Percentile	National Percentile
New Jersey	8,771,528	No data	27
Essex County	776,092	62	36

viii. Social Vulnerability Index

The social vulnerability index is a measure of the degree of social vulnerability in counties and neighborhoods across the United States, where a higher score indicates higher vulnerability. Essex County has a social vulnerability index score of 0.84, which is almost double the state average of 0.44.

Table 24: Social Vulnerability Index, Essex County, New Jersey, 2014-2018

Report Area	Total Population	Socio-economic Theme Score	Household Composition Theme Score	Minority Status Theme Score	Housing & Transportation Theme Score	Social Vulnerability Index Score
New Jersey	8,881,845	0.28	0.18	0.87	0.62	0.44
Essex County	793,555	0.57	0.41	0.98	0.94	0.84

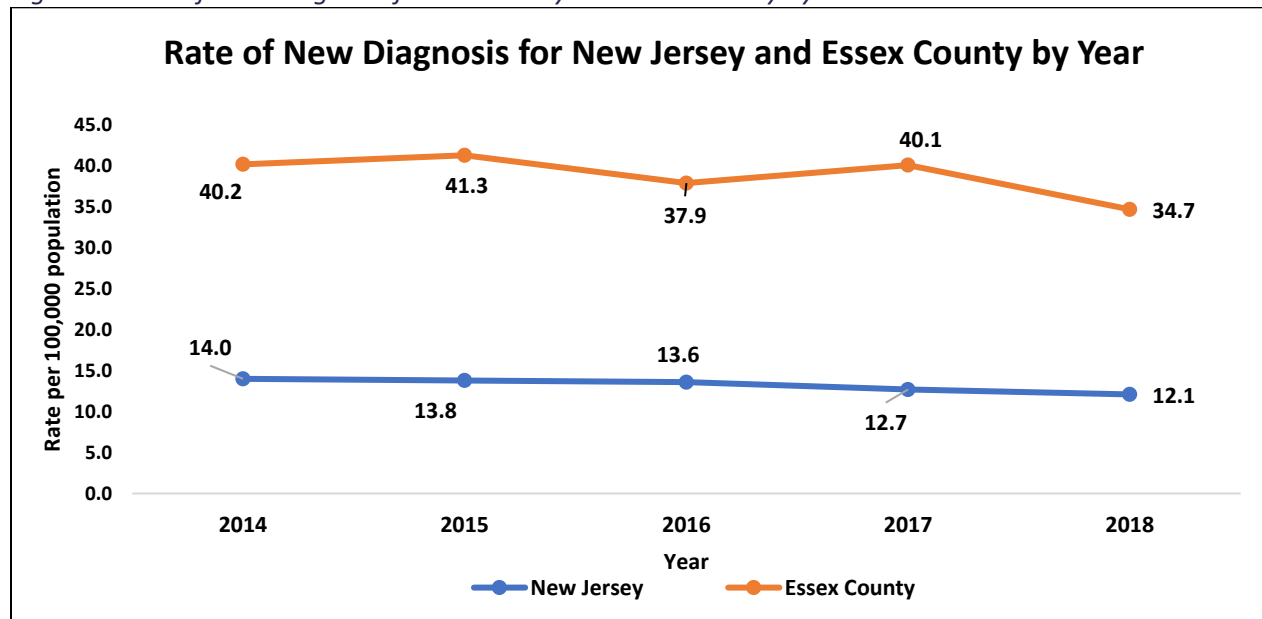
Section B. EHE Pillar 1 'Diagnose'

I. Rate of New Diagnoses

i. Rate of new diagnoses for New Jersey and Essex County

In 2018, the rate of newly diagnosed cases for HIV was 12.1 per 100,000 in New Jersey. In Essex County, the rate of newly diagnosed cases for HIV was nearly triple that of the State's at 34.7 per 100,000 in 2018. Since 2014, there has been a steady decrease in the rate of newly diagnosed HIV cases (Figure 8).

Figure 8: Rate of New Diagnosis for New Jersey and Essex County by Year



ii. Rate of new diagnosis by Race/Ethnicity for New Jersey and Essex County

In 2018, the rate of diagnosed cases for HIV was highest for Black/African Americans (36.6/100,000) and Hispanics (25/100,000) compared to other races (6.7/100,000) and Whites (3.9/100,000) in New Jersey (Figure 9). In Essex County, the rate of diagnosed cases for HIV was also highest for Black/African Americans (54.5/100,000) and Hispanics (43.4/100,000) compared to other races (17.8/100,000) and Whites (9.6/100,000) (Figure 10). Rates were noticeably higher in Essex County when compared to the state overall

Figure 9: Rate of New Diagnosis by Race/Ethnicity in New Jersey, 2014-2018

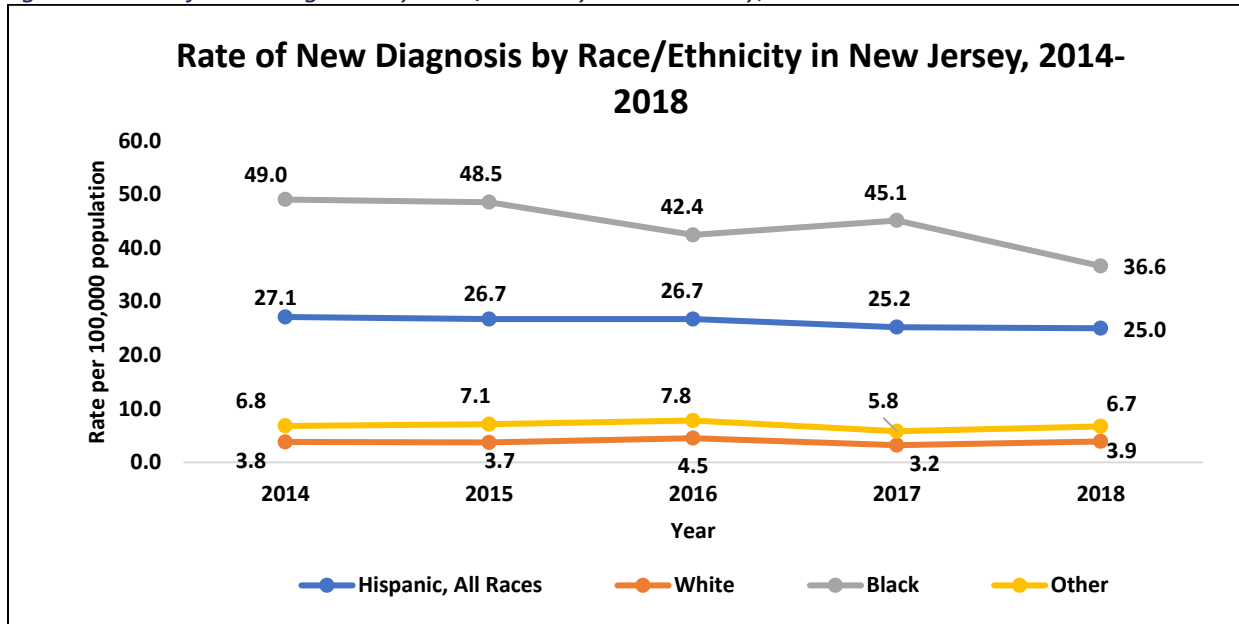
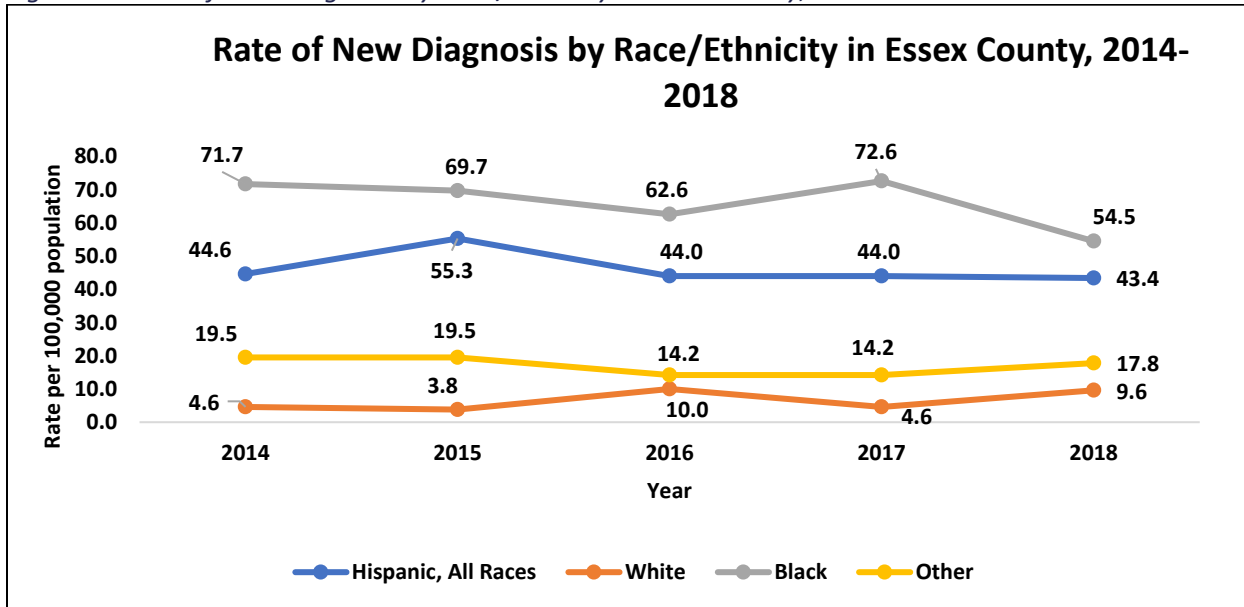


Figure 10: Rate of New Diagnosis by Race/Ethnicity in Essex County, 2014-2018



II. Persons Newly Diagnosed With HIV

i. Newly Diagnosed HIV Cases by Year and Sex at Birth, New Jersey and Essex County
 The majority of diagnoses of HIV infection were and continue to be among males. In 2018, males greatly outnumbered females for newly diagnosed HIV cases almost 3:1 (77.3% compared with 22.7%) (Figure 11). Between 2014-2018, the total number of newly diagnosed cases is decreasing in both New Jersey and Essex County.

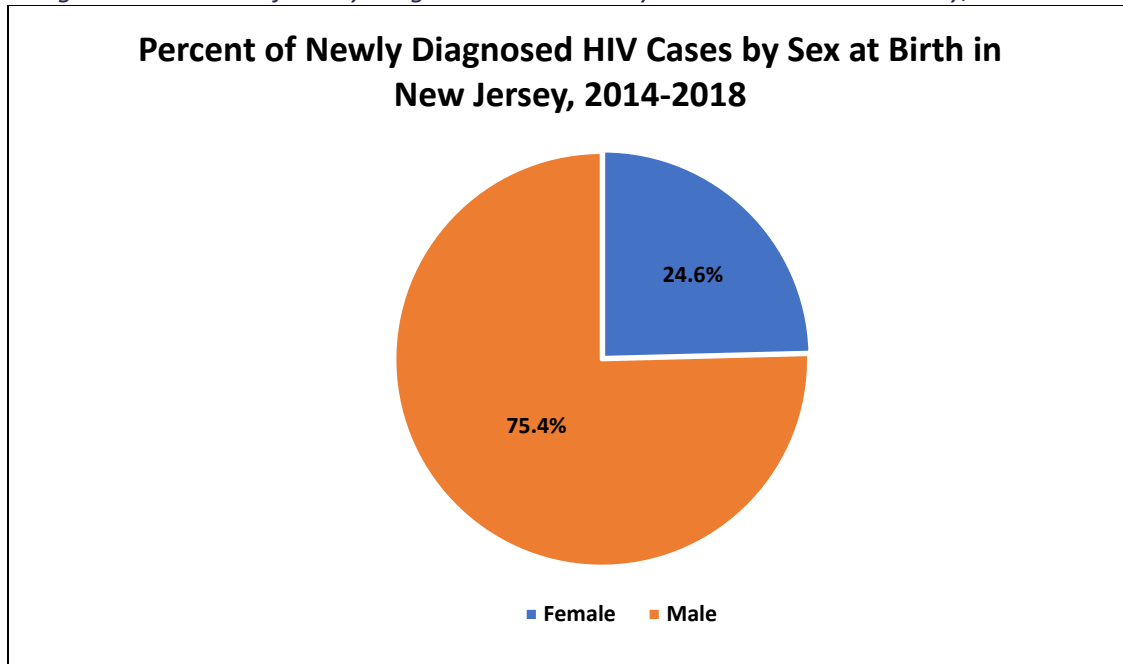
Table 25: New Diagnosed HIV Cases by Year and Sex at Birth, New Jersey and Essex County, 2014-2018

Newly Diagnosed HIV Cases in New Jersey by Year and Sex at Birth										
Sex at birth	2014		2015		2016		2017		2018	
	N	%	N	%	N	%	N	%	N	%
Female	325	26.4	291	23.9	290	24.3	288	25.7	242	22.7
Male	907	73.6	926	76.1	905	75.7	831	74.3	824	77.3
Total	1232	100	1217	100	1195	100	1119	100	1066	100

Newly Diagnosed HIV Cases in Essex County by Year and Sex at Birth										
Female	102	32.4	106	32.7	81	27.3	112	35.7	85	31.3
Male	213	67.6	218	67.3	216	72.7	202	64.3	187	68.8
Total	315	100	324	100	297	100	314	100	272	100

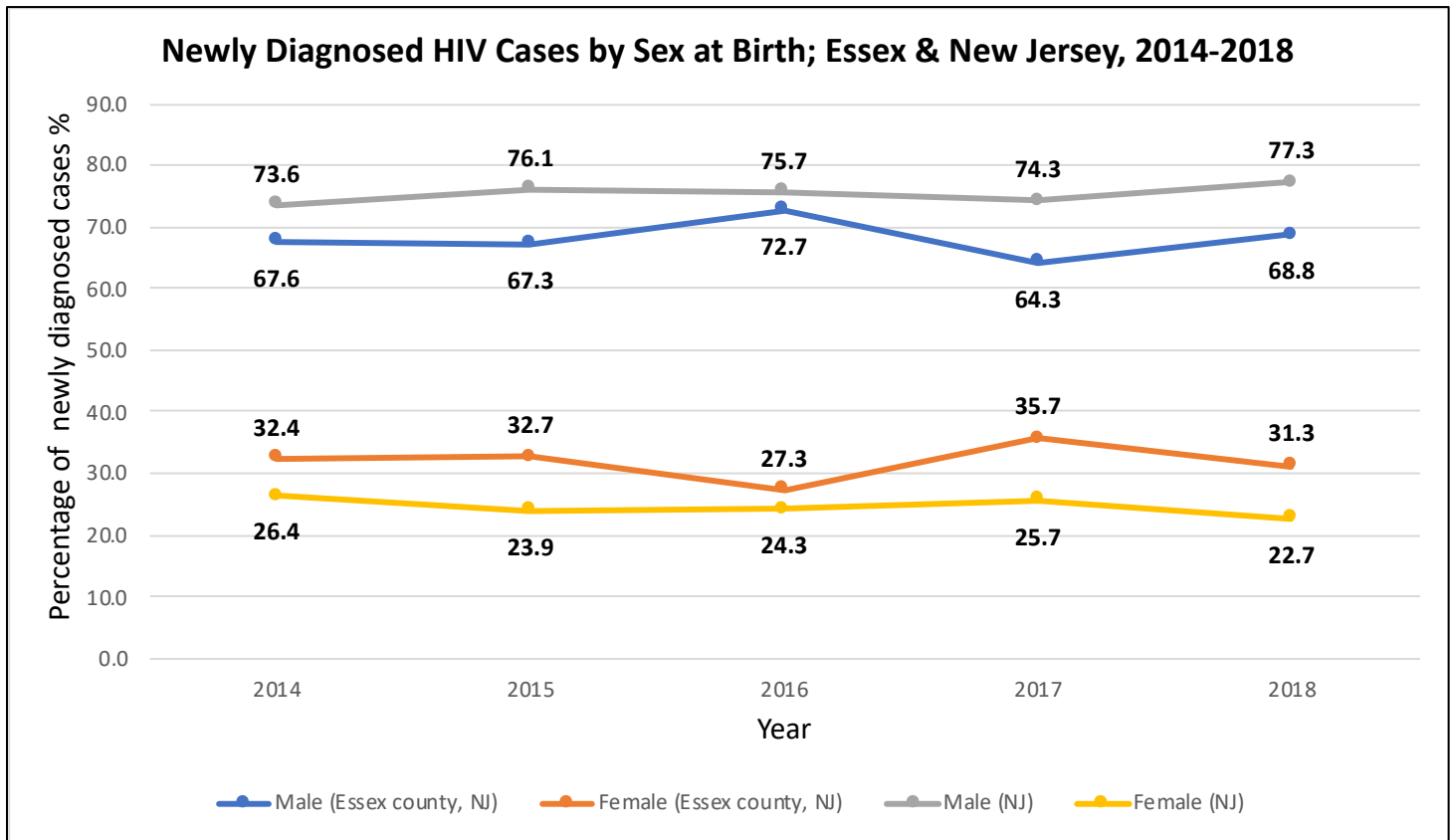
These are actual numbers of persons living with HIV disease that have been reported.
 Diagnosed HIV disease cases include persons diagnosed with HIV and an absent, later, or concurrent diagnosis of AIDS.

Figure 11: Percent of Newly Diagnosed HIV Cases by Sex at Birth in New Jersey, 2014-2018



In Essex County, the trends of newly diagnosed cases by sex at birth in Essex County show that the proportion of diagnoses among males have remained stable for all years between 2014-2018 with the exception of 2016. The proportion of newly diagnosed HIV cases for males and females was approximately 2:1 (68.8% compared with 31.3%). Between 2014 and 2018, the percentage of females among newly diagnosed HIV cases in Essex County was 8-10 percentage points higher than in the state (Figure 12).

Figure 12: Newly Diagnosed HIV Cases by Sex at Birth; Essex & New Jersey, 2014-2018



When gender identity was considered, similar findings were seen.

Table 26: New Diagnosed HIV Cases by Year and Gender, New Jersey and Essex County, 2014-2018

Newly Diagnosed HIV Cases in New Jersey by Year and Gender										
Gender identity	2014		2015		2016		2017		2018	
	N	%	N	%	N	%	N	%	N	%
Men	901	73.1	917	75.3	890	74.5	820	73.3	817	76.6
Women	325	26.4	291	23.9	289	24.2	288	25.7	240	22.5
Transgender ^{aa}	6	0.5	9	0.7	15	1.3	11	1.0	7	0.7
Transgender ^{bb}	†	†	†	†	†	†	†	†	†	†
Newly Diagnosed HIV Cases in Essex County by Year and Gender										
Men	211	67.0	217	67.0	212	71.4	195	62.1	186	68.4
Women	102	32.4	106	32.7	81	27.3	112	35.7	85	31.3
Transgender ^{aa}	†	†	†	†	†	†	†	†	†	†
Transgender ^{bb}	†	†	†	†	†	†	†	†	†	†

† Data are suppressed

These are actual numbers of persons living with HIV disease that have been reported.

Diagnosed HIV disease cases include persons diagnosed with HIV and an absent, later, or concurrent diagnosis of AIDS.

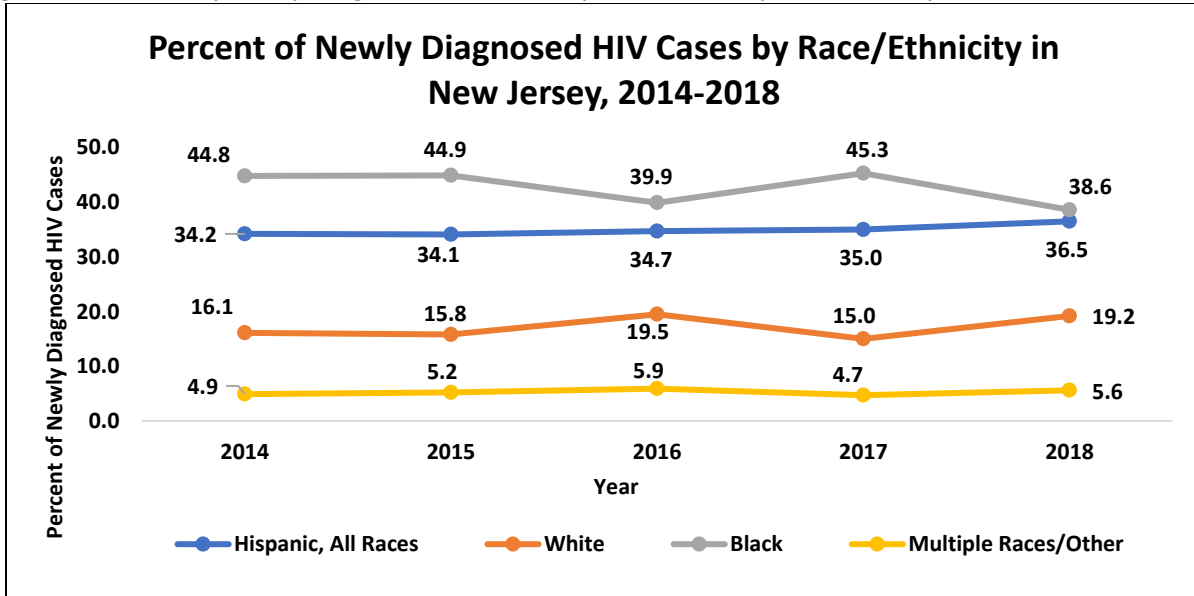
aa "Transgender male-to-female" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender.

bb "Transgender female-to-male" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender.

ii. Newly Diagnosed HIV Cases by Year and Race/Ethnicity, New Jersey and Essex County

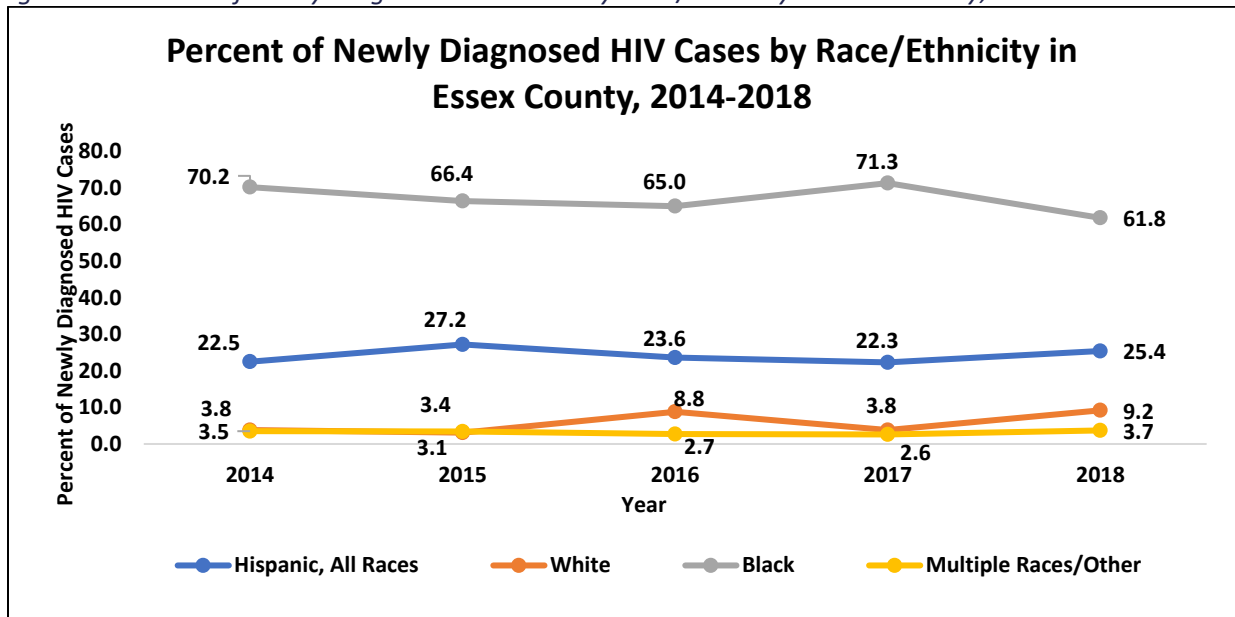
In New Jersey, the higher percentages of newly diagnosed HIV cases were observed for Black/African Americans (38.6%) and Hispanics (36.5%) compared to Whites (19.2%) and other races combined (5.6%) in 2018 (Figure 13), whereas the rates have been steadily increasing among non-Hispanic Whites, multiple races and other races from 2014-2018 and decreasing in non-Hispanic Black/African Americans.

Figure 13: Percent of Newly Diagnosed HIV Cases by Race/Ethnicity in New Jersey, 2014-2018



The same trend was observed in the county in the same time period. In Essex County, the proportion of newly diagnosed HIV cases among Black/African Americans was between 1.5 to 2 times as compared to New Jersey. Hispanics also comprised 25.4% of newly diagnosed HIV cases in Essex County (Figure 14).

Figure 14: Percent of Newly Diagnosed HIV Cases by Race/Ethnicity in Essex County, 2014-2018

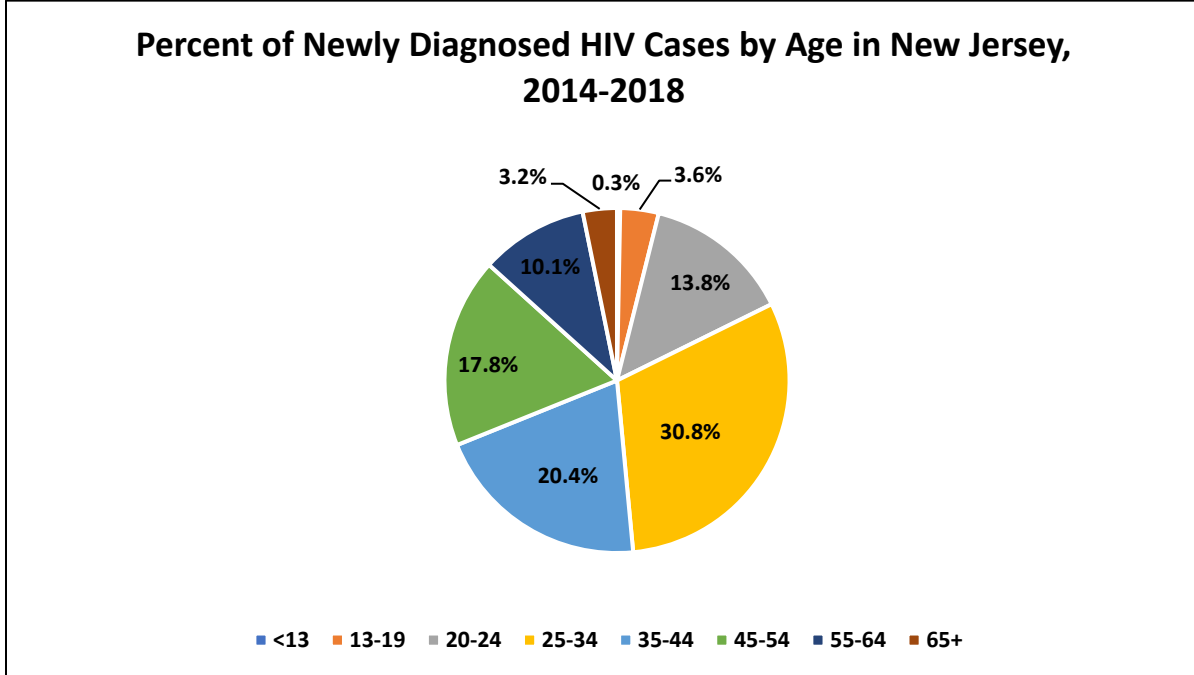


iii. Newly Diagnosed HIV Cases by Year and Age at Diagnosis, New Jersey and Essex County

In 2018, a diagnosis of HIV was made for 1,066 persons in New Jersey. More than half of the diagnoses (51.9%) were for those aged 25–44 years. Since 2014, there has been a steady increase in the new cases among 25-34 years age group. In Essex County, 272 persons received a diagnosis of HIV in 2018. More than half of these diagnoses (54.8%) were for those aged 25-44 years. There has been a steady decrease in the proportion of newly diagnosed HIV cases since 2014. There has been a steady decrease in the number of newly diagnosed HIV cases from 2014 to 2018.

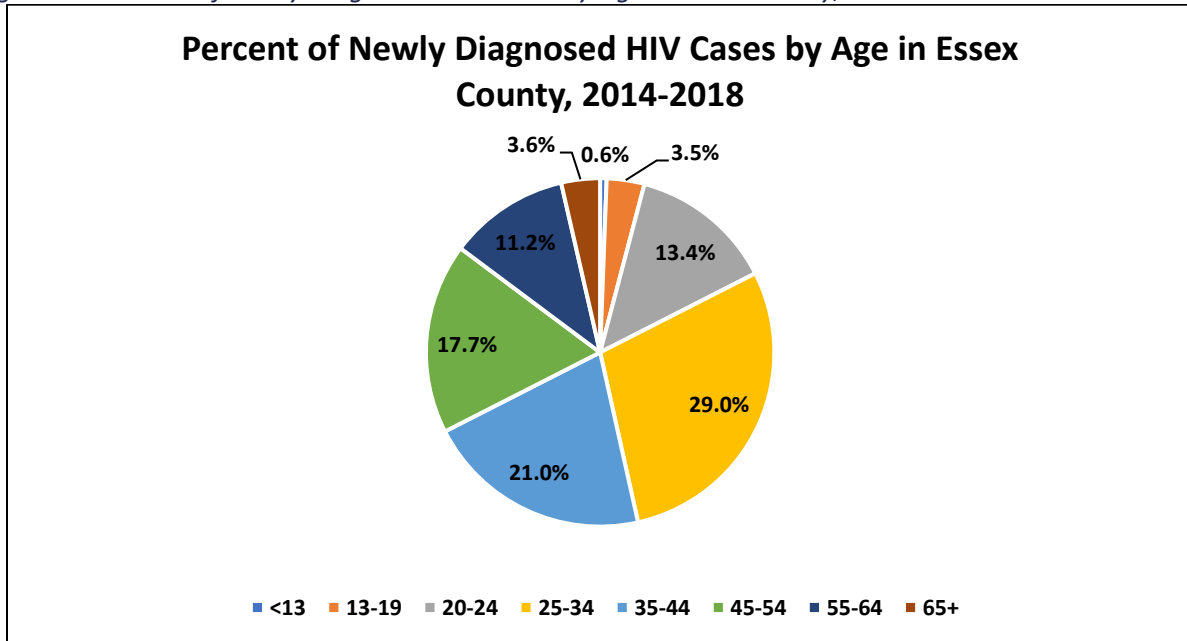
Between 2014-2018, more newly diagnosed HIV cases (30.8%) were among those aged 25-34 years of age in New Jersey (Figure 15).

Figure 15: Percent of Newly Diagnosed HIV Cases by Age in New Jersey, 2014-2018



Between 2014-2018, more newly diagnosed HIV cases (29%) were also among those aged 25-34 years of age in Essex County (Figure 16).

Figure 16: Percent of Newly Diagnosed HIV Cases by Age in Essex County, 2014-2018



iv. Newly Diagnosed HIV Cases by Year and Transmission Risk, New Jersey

New diagnoses among MSM greatly outnumbered those in other risk categories. In New Jersey, by transmission category, 458 (43%) persons reported transmission through MSM contact, 337 (31.6%) through other/unknown adult risk, 192 (18%) through heterosexual contact, 60 (5.6%) through IDU, 13 (1.2%) through MSM/IDU, and 6 (0.6%) through mother-to-child transmission in 2018.

When the aggregate of all cases between 2014-2018 was considered, more newly diagnosed HIV Cases were reported among MSM (41.7%) followed by those with other/unknown adult risk factors (34%) and heterosexual contact (18.6%) in New Jersey (Figure 17).

In Essex County, 110 (40.4%) persons reported transmission through MSM contact, 87 (62%) through other/unknown adult risk, 61 (22.4%) through heterosexual contact, and 9 (3.3%) through IDU in 2018 (Figure 18). Heterosexual contact was a greater risk factor in Essex County when compared to New Jersey. Transmission through MSM contact has steadily increased in New Jersey as well as Essex County since 2014.

Table 27: Newly Diagnosed HIV Cases in New Jersey and Essex County by Year and Transmission Category, 2014-2018

Newly Diagnosed HIV Cases in New Jersey by Year and Transmission Category										
Transmission Category	2014		2015		2016		2017		2018	
	N	%	N	%	N	%	N	%	N	%
MSM	486	39.4	518	42.6	486	40.7	482	43.1	458	43.0
IDU	54	4.4	45	3.7	30	2.5	52	4.6	60	5.6
MSM/IDU	17	1.4	16	1.3	11	0.9	10	0.9	13	1.2
Heterosexual contact	188	15.3	235	19.3	259	21.7	211	18.9	192	18.0
Other/Unknown Adult Risk	484	39.3	396	32.5	402	33.6	362	32.4	337	31.6
Mother-to-child transmission	†	†	7	0.6	7	0.6	†	†	6	0.6
Newly Diagnosed HIV Cases in Essex County by Year and Transmission Category										
MSM	94	29.8	120	37.0	116	39.1	95	30.3	110	40.4
IDU	17	5.4	13	4.0	†	0.7	16	5.1	9	3.3
MSM/IDU	†	†	†	†	†	†	†	†	†	†
Heterosexual contact	51	16.2	69	21.3	74	24.9	91	29.0	61	22.4
Other/Unknown Adult Risk	149	47.3	116	35.8	102	34.3	111	35.4	87	32.0

Mother-to-Child Transmission	†	†	†	†	†	†	†	†	†	†
Transmission category data presented by sex at birth and include transgender persons. † Data are suppressed										
These are actual numbers of persons living with HIV disease that have been reported.										
Diagnosed HIV disease cases include persons diagnosed with HIV and an absent, later, or concurrent diagnosis of AIDS.										
Other/unknown- transmission category includes hemophilia, blood transfusion, perinatal, and risk not reported or not identified.										

Figure 17: Percent of Newly Diagnosed HIV Cases by Transmission Category in New Jersey, 2014-2018

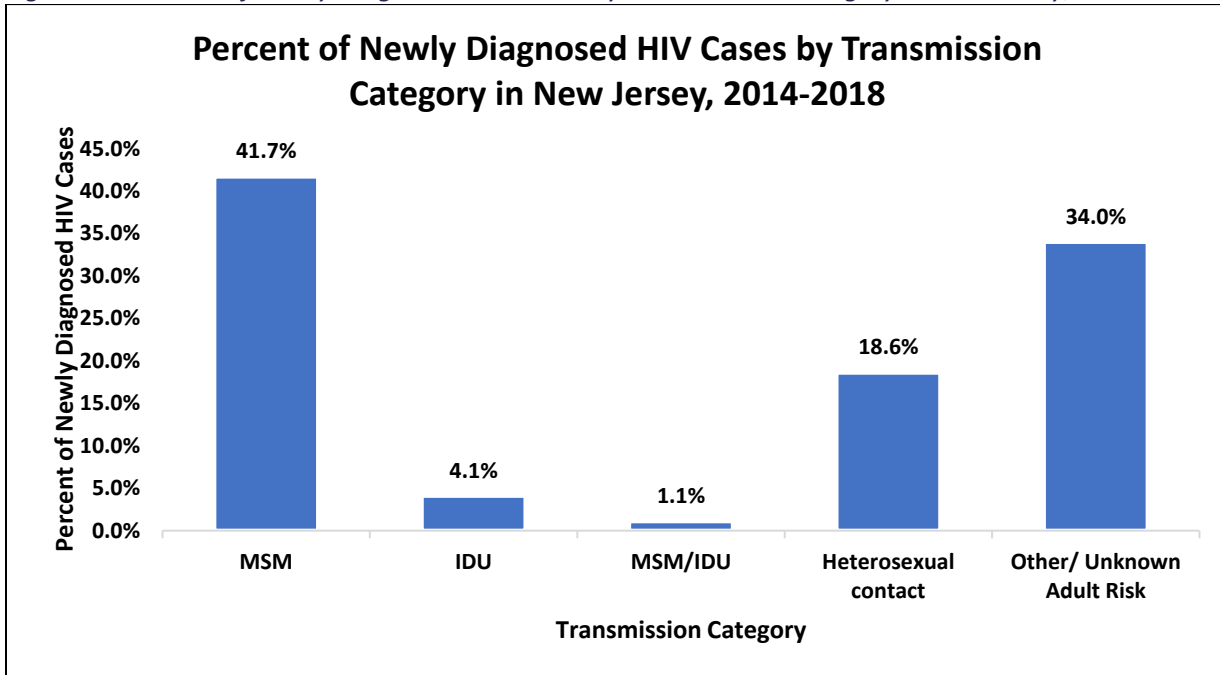
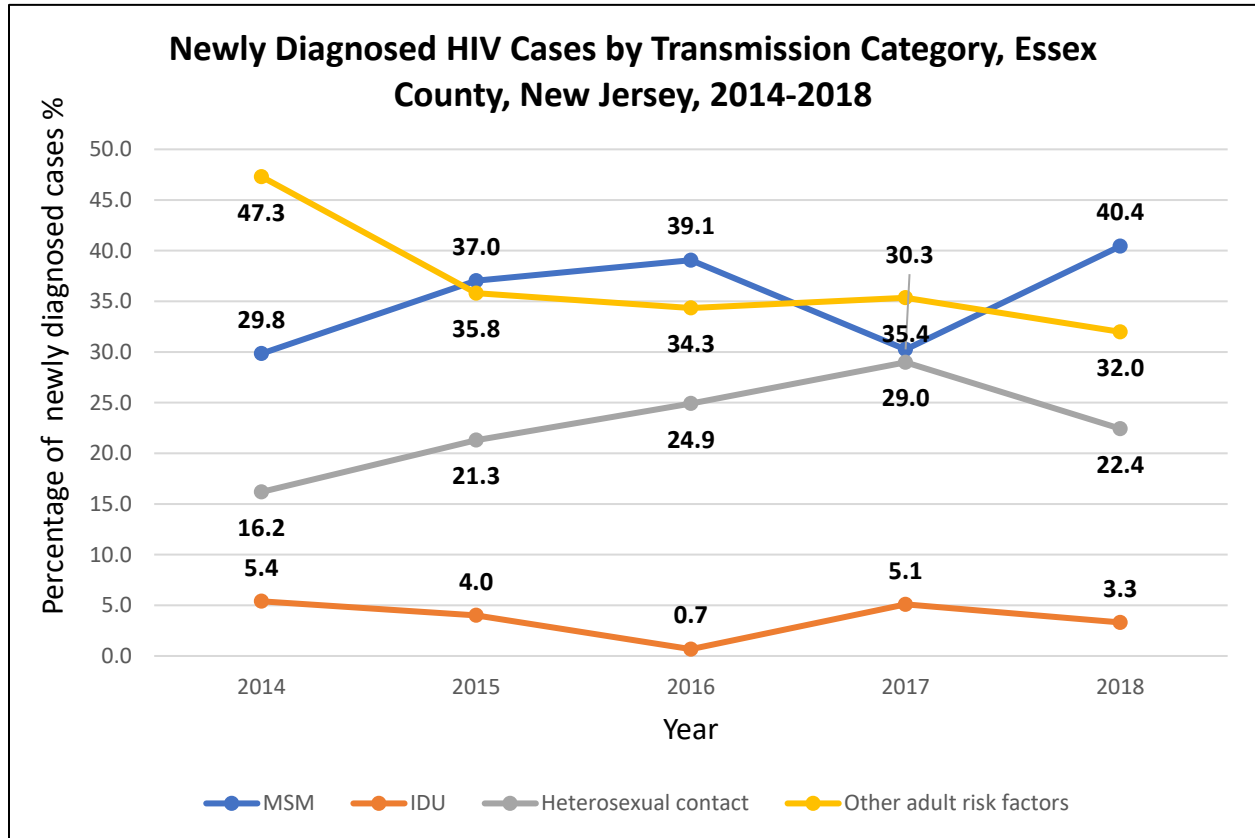
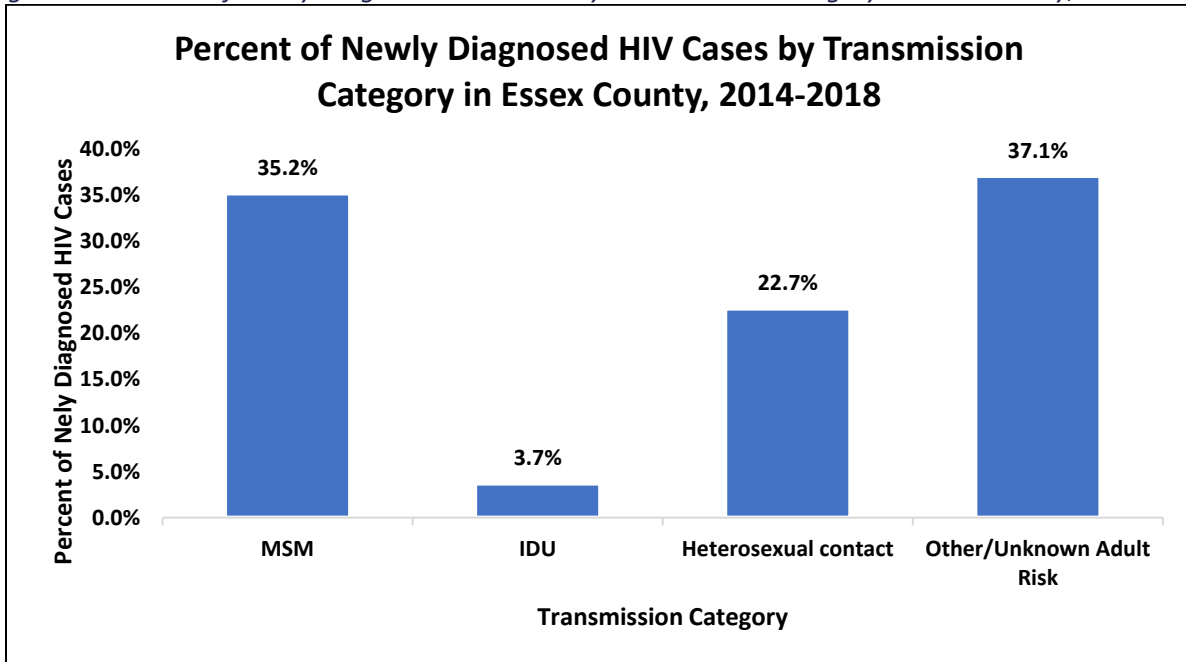


Figure 18: Newly Diagnosed HIV Cases by Transmission Category, Essex County, New Jersey, 2014-2018



In Essex County, from 2014 to 2018, new cases on account of MSM contact increased by 10.6 percentage points and heterosexual contact by 6.2 points respectively. By contrast, new cases on account of IDU fell slightly (Figure 18). Between 2014-2018, more than a third (37.1%) of newly diagnosed HIV cases accounted of other/unknown adult risk factors followed by MSM (35.3%) and heterosexual contact (22.7%). IDU comprised 3.7% of newly diagnosed HIV cases as well (Figure 19).

Figure 19: Percent of Newly Diagnosed HIV Cases by Transmission Category in Essex County, 2014-2018



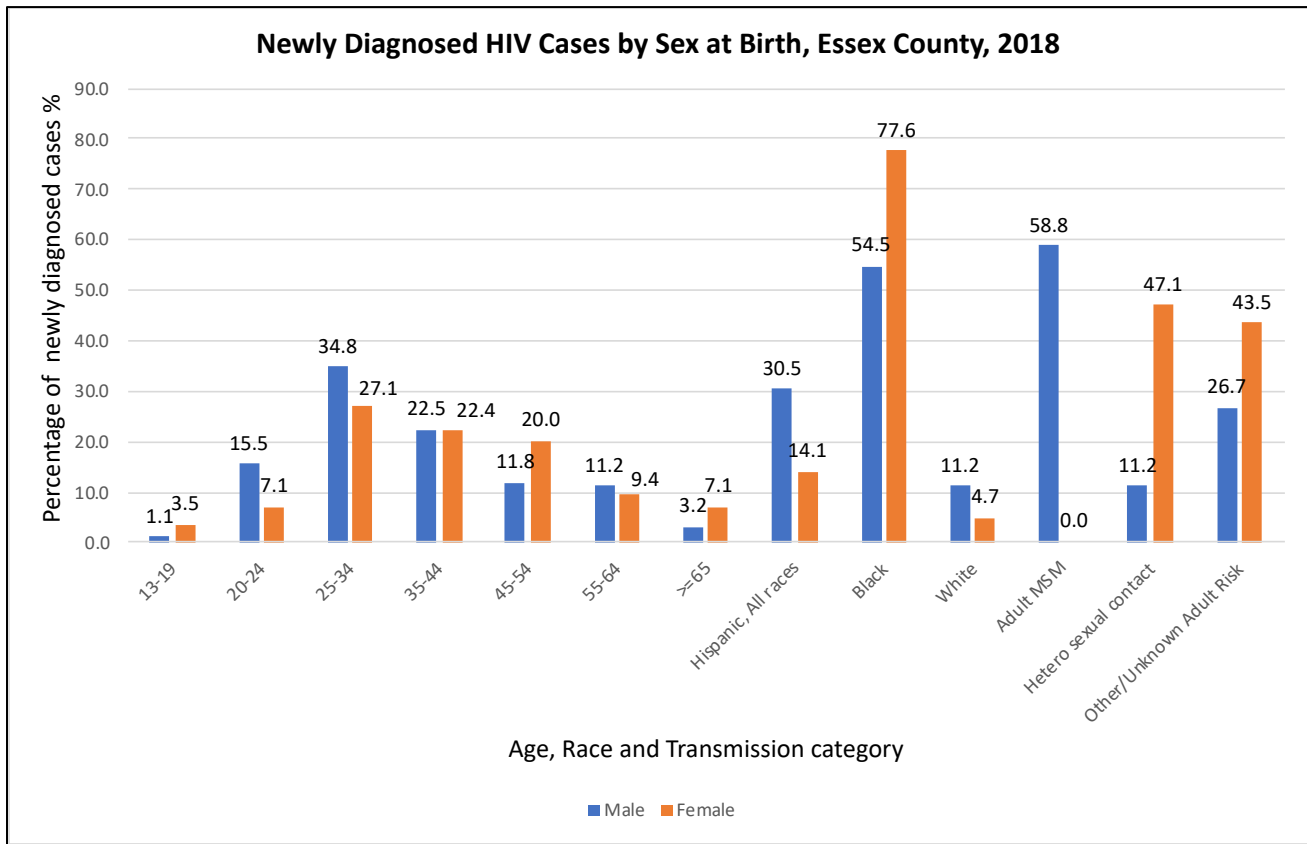
v. **Newly Diagnosed HIV Cases by Sex at Birth and Selected Characteristics, New Jersey**
 In 2018, HIV was newly diagnosed for 1,066 persons of whom 824 (77.3%) were male and 242 (22.7%) were female in New Jersey. By race/ethnicity, almost two in five (328) of males were Hispanic, one in three (273) were Black/African American, slightly more than one in five (175) were White, and one in twenty (48) were another/multiple race. More than half (139) of females were Black/African American, one in four (61) were Hispanic, slightly more than one in ten (30) were White, and one in twenty (12) were another/multiple race. Most newly diagnosed HIV cases for males were aged 25-34 years (28) and classified as MSM (458). Most female newly diagnosed HIV cases were also aged 25-34 years (59) and classified another/unknown risk factor (113) followed by heterosexual contact (101) as an exposure for transmission. In 2018, both males and females newly diagnosed with HIV were concentrated in the 25-34 years age group (28 and 59, respectively). Males tended to be younger at diagnosis than females.

vi. **Newly Diagnosed HIV Cases by Sex at Birth and Selected Characteristics, Essex County**
 In Essex County, in 2018, HIV was diagnosed for 272 persons of whom almost seven in ten (187) were males and three in ten (85) were females. By race/ethnicity, more than half (102) of males were Black/African American, almost one in three (57) were Hispanic, 21 were White, and 7 were of another/multiple race. More than three in four (66) of females were Black/African American, 12 were Hispanic, 4 were White, and 3 were another/multiple race. Most newly diagnosed cases for males and females were aged 25-34 years. In Essex, men were diagnosed earlier than women; more than half the men were younger than 35 years at diagnosis as compared to women. The dominant mode of transmission was MSM for men and whereas it was heterosexual contact for women.

Table 28: Newly Diagnosed HIV Cases by Sex at Birth, Essex County, 2018

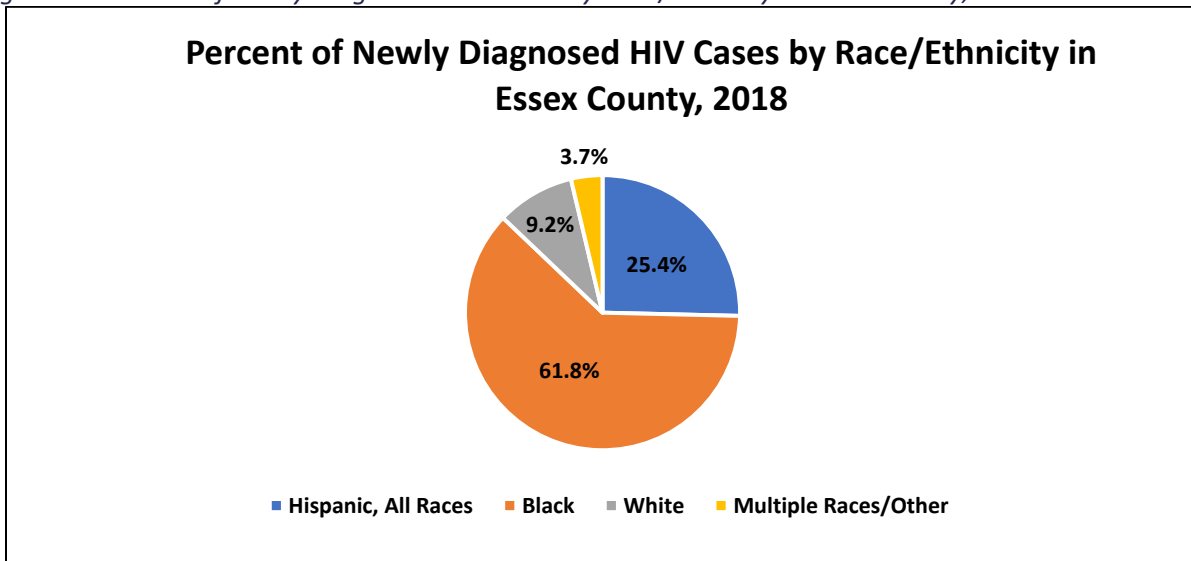
Newly Diagnosed HIV Cases by Sex at Birth, Essex County, 2018					
Race/Ethnicity		Male		Female	
		N	%	N	%
	Hispanic, All races	57	30.5	12	14.1
	Asian	†	†	†	†
	Black/African American	102	54.5	66	77.6
	White	21	11.2	†	†
	Multiple Race	†	†	†	†
	Other*	†	†	†	†
Age Category					
	<13	†	†	†	†
	13-19	†	†	†	†
	20-24	29	15.5	6	7.1
	25-34	65	34.8	23	27.1
	35-44	42	22.5	19	22.4
	45-54	22	11.8	17	20.0
	55-64	21	11.2	8	9.4
	>=65	6	3.2	6	7.1
Transmission Category					
	MSM	110	58.8	0	0.0
	IDU	†	†	†	†
	MSM/IDU	†	†	†	†
	Heterosexual contact	21	11.2	40	47.1
	Other/Unknown Adult Risk	50	26.7	37	43.5
	Mother-to-child transmission	†	†	†	†
	Total	187	100	85	100
Transmission category data presented by sex at birth and include transgender persons. † Data are suppressed					
These are actual numbers of persons living with HIV disease that have been reported.					
Diagnosed HIV disease cases include persons diagnosed with HIV and an absent, later, or concurrent diagnosis of AIDS.					
Other/unknown- transmission category includes hemophilia, blood transfusion, perinatal, and risk not reported or not identified.					
Other*- This category is made up of American Indian/Alaska native, native Hawaiian/other pacific islander, legacy Asian/pacific islander and unknown in an effort to prevent data suppression from needing to be applied					

Figure 20: Newly Diagnosed HIV Cases by Sex at Birth, Essex County, 2018



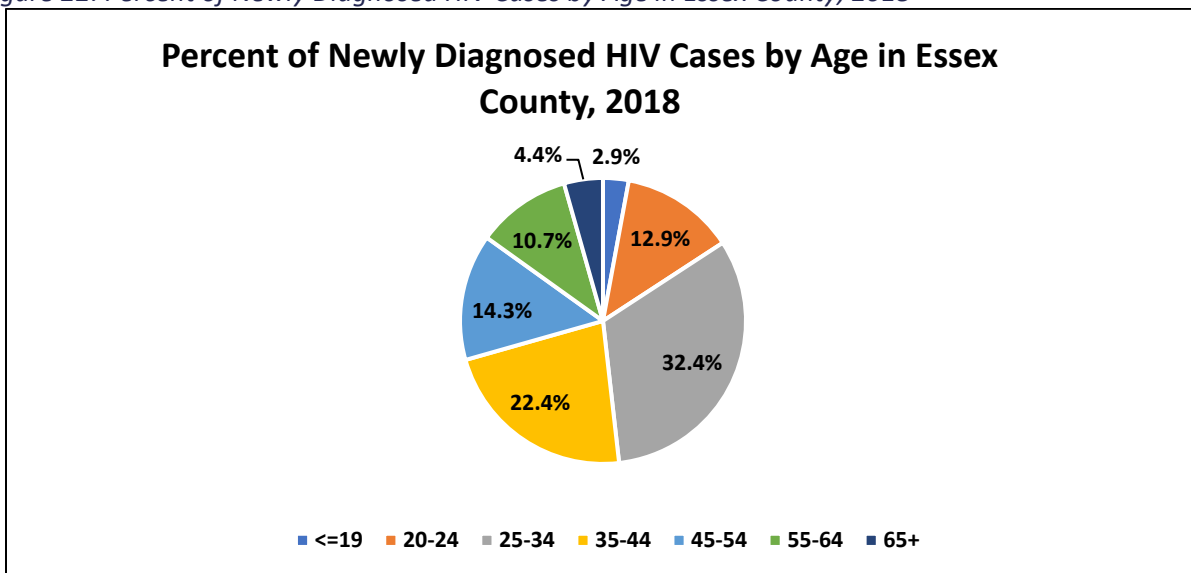
In 2018, in New Jersey, the most affected transmission category among males was MSM (55.6%) and among females was heterosexual contact (47.1%). Black/African Americans were the most affected among both males (33.1%) and females (54.7%). In Essex in 2018, more than half (58.8%) of newly diagnosed HIV cases in males were among MSM. Heterosexual contact and other unknown risks accounted for 47.1% and 43.5%, respectively, of HIV transmission in females. (Figure 20). In 2018, almost two-third (61.8%) of newly diagnosed HIV cases were among Hispanics. Approximately, quarter (25.4%) of cases were among Black/African Americans with 9.2% among Whites in Essex County (Figure 21).

Figure 21: Percent of Newly Diagnosed HIV Cases by Race/Ethnicity in Essex County, 2018



In 2018, in Essex County, roughly one third (32.4%) of newly diagnosed HIV cases were among those aged 25-34 years (Figure 22).

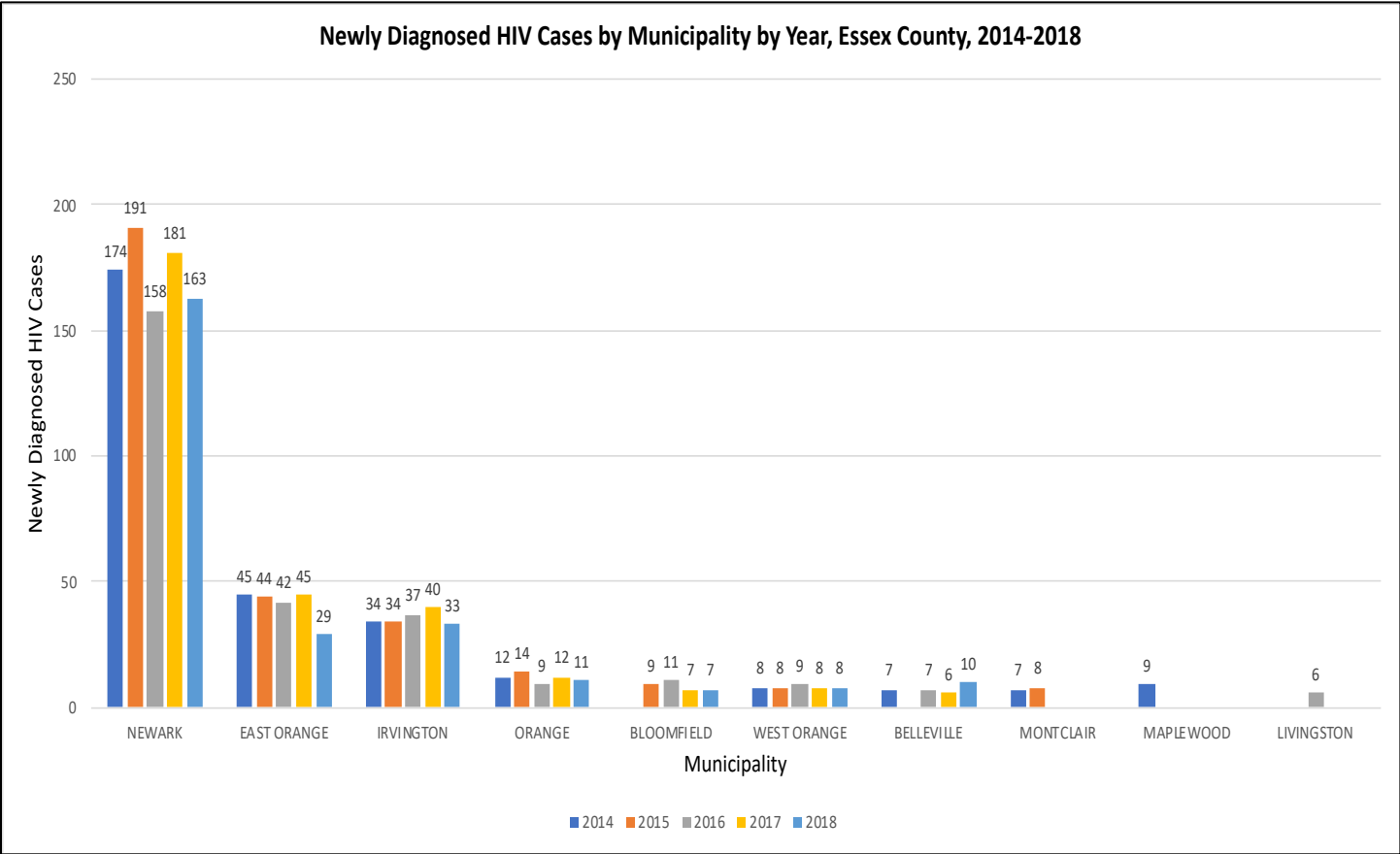
Figure 22: Percent of Newly Diagnosed HIV Cases by Age in Essex County, 2018



vii. Newly Diagnosed Cases by Municipality and Zip Code, Essex County

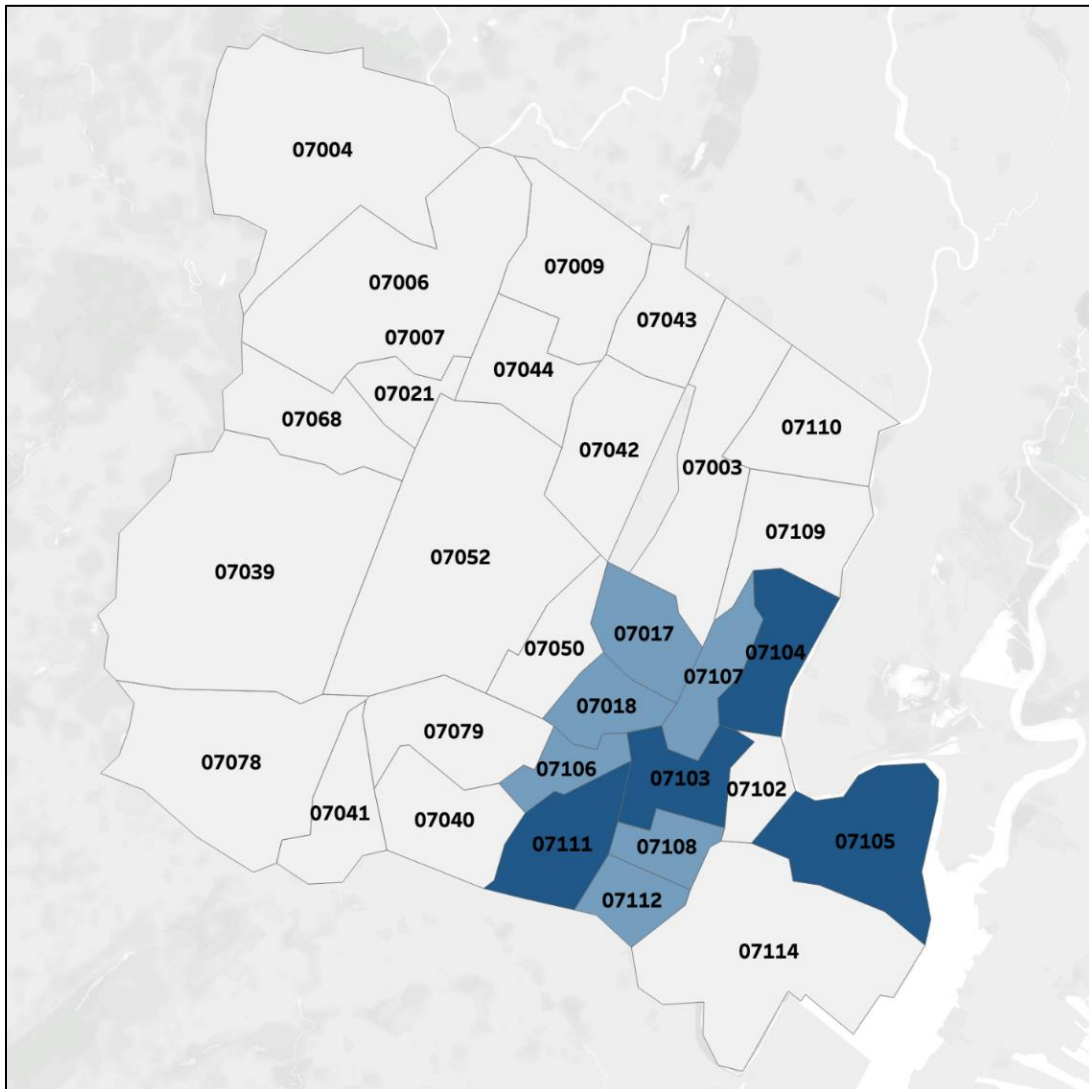
Between 2014-2018, most newly diagnosed HIV cases (867) were reported in Newark and towards the southern section of Essex County as a whole. On an average, 173.4 cases were newly diagnosed in Newark yearly between 2014 and 2018 (Figure 23). The following zip codes had the largest count of newly diagnosed cases: 07111 (Irvington), 07104 (Newark), 07103 (Newark), 07105 (Newark), 07018 (East Orange).

Figure 23: Newly Diagnosed HIV Cases by Municipality by Year, Essex County, 2014-2018



In Essex County, between 2014-2018, the highest percentages (8-12%) of newly diagnosed HIV cases were reported in four municipalities – three of which were in Newark (07103, 07104, 07105) - and Irvington (07111). Six additional municipalities made up 4-8% of newly diagnosed HIV cases – three of which were in East Orange (07017, 07018, 07107) and three of which were in Newark (07106, 07108, 07112) (Figure 24).

Figure 24: Percentage of newly diagnosed cases, Essex County, New Jersey, 2014-2018



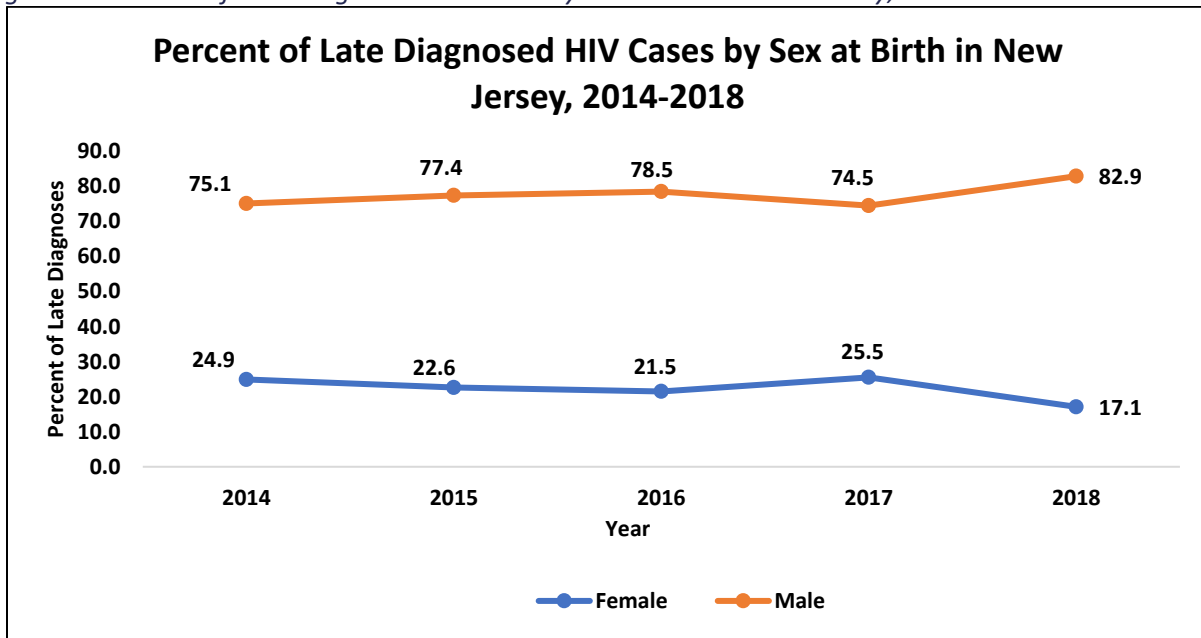
Percentage of newly diagnosed cases, Essex County	
0%-4%	
4%-8%	
8%-12%	

III. Late Diagnosis

i. Late Diagnosed Cases by Year and Sex at Birth, New Jersey

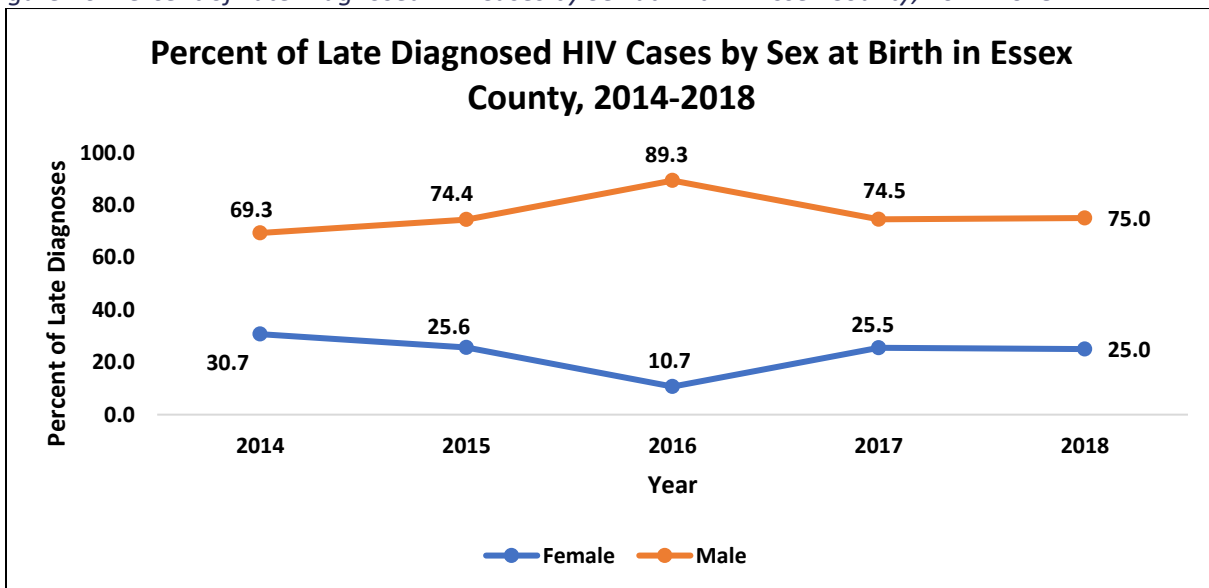
Between 2014-2018, the proportion of late diagnosed HIV cases were inversely impacted in New Jersey. There was an increase in late HIV diagnoses among males (from 75.1% to 82.9%, respectively) and a decrease among females (from 24.9% to 17.1%, respectively) (Figure 25).

Figure 25: Percent of Late Diagnosed HIV Cases by Sex at Birth in New Jersey, 2014-2018



In Essex County, the same trend was observed. There was also an increase in late HIV diagnosis among males (from 69.3% to 75.0%, respectively) and a decrease among females (from 30.7% to 25.0%, respectively) (Figure 26). Even though late HIV diagnoses increased among males in Essex County, less males (75.0%) were diagnosed late with HIV in 2018 compared to males living in New Jersey (82.9%) overall.

Figure 26: Percent of Late Diagnosed HIV Cases by Sex at Birth in Essex County, 2014-2018



ii. Late Diagnosed Cases by Year and Gender, New Jersey

When observing late diagnosed HIV cases by gender identity, a similar trend was seen.

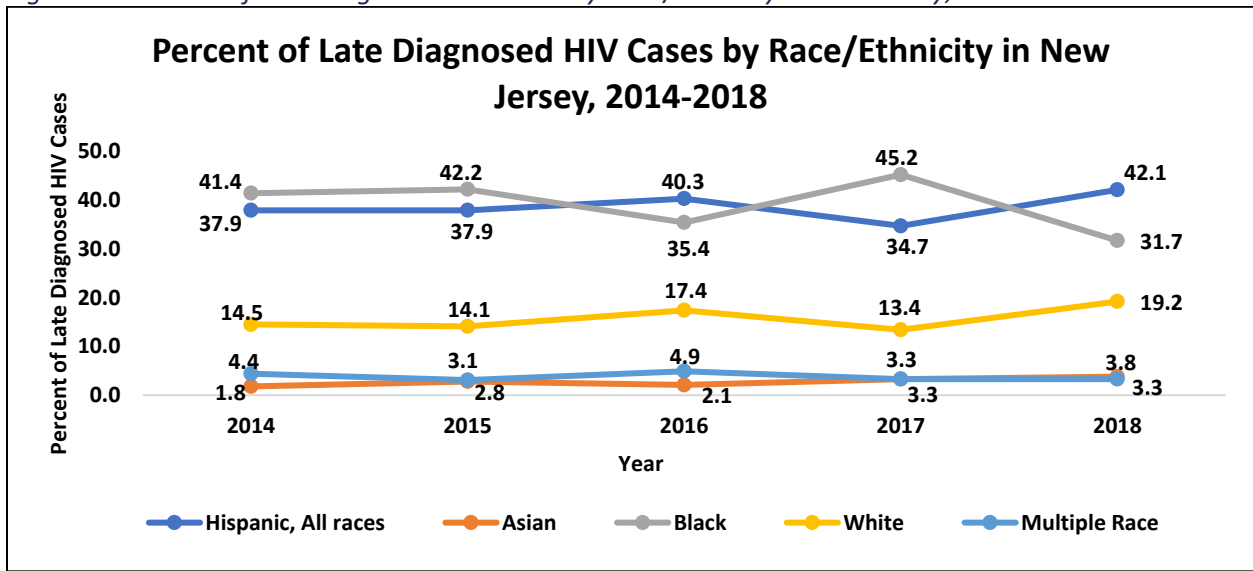
Between 2014-2018, more late diagnosed HIV cases were among men (76.8%) compared to women (22.5%) in New Jersey. Due to data suppression, no other gender identity other than male and female can be given for the county making data visualization meaningless.

Table 29: Late Diagnosed Cases in New Jersey and Essex County by Year and Gender, 2014-2018

Late Diagnosed Cases in New Jersey by Year and Gender										
Gender identity	2014		2015		2016		2017		2018	
	N	%	N	%	N	%	N	%	N	%
Men	254	75.1	252	77.1	223	77.4	175	73.2	196	81.7
Women	84	24.9	74	22.6	62	21.5	61	25.5	41	17.1
Transgender ^{aa}	†	†	†	†	†	†	†	†	†	†
Transgender ^{bb}	†	†	†	†	†	†	†	†	†	†
Total	338	100	327	100	288	100	239	100	240	100
Late Diagnosed Cases in Essex County, by Year and Gender										
Men	61	69.3	50	64.1	49	87.5	39	70.9	45	75.0
Women	27	30.7	20	25.6	6	10.7	14	25.5	15	25.0
Transgender ^{aa}	†	†	†	†	†	†	†	†	†	†
Transgender ^{bb}	†	†	†	†	†	†	†	†	†	†
Total	88	100	70	100	55	100	53	100	60	100
These are actual numbers of persons living with HIV disease that have been reported.										
Diagnosed HIV disease cases include persons diagnosed with HIV and an absent, later, or concurrent diagnosis of AIDS.										
aa "Transgender male-to-female" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender.										
bb "Transgender female-to-male" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender.										

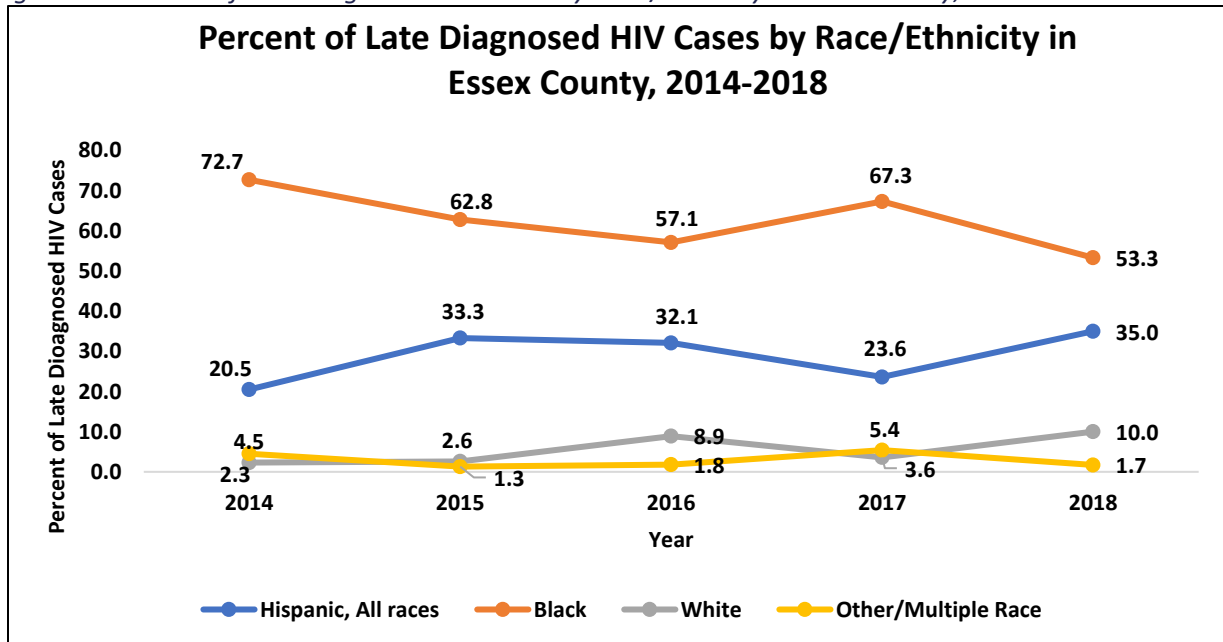
iii. Late Diagnosed Cases by Year and Race/Ethnicity, New Jersey and Essex County
 In New Jersey, late diagnosed HIV cases were more prevalent among Hispanics (42.1%) and Black/African Americans (31.7%) compared to Whites (19.2%) and other racial/ethnic (7.1%) groups in 2018. Between 2014-2018, there was an increase in late diagnosed HIV cases among Hispanics and Whites but a decrease among Black/African Americans (Figure 27).

Figure 27: Percent of Late Diagnosed HIV Cases by Race/Ethnicity in New Jersey, 2014-2018



In Essex County, late diagnosed HIV cases were more prevalent among Black/African Americans (53.3%) and Hispanics (35.0%) compared to Whites (10%) and other racial/ethnic (1.7%) groups in 2018. Between 2014-2018, there was an increase in late diagnosed HIV cases among Hispanics, but a decrease among Black/African Americans (Figure 28).

Figure 28: Percent of Late Diagnosed HIV Cases by Race/Ethnicity in Essex County, 2014-2018



iv. Late Diagnosed Cases by Year and Age at Diagnosis, New Jersey

In New Jersey, more late diagnosed HIV cases (28.3%) were for those aged 35-44 years in 2018. In Essex County, most late diagnosed HIV cases (31.7%) were also among this age group. The

percentage of late diagnosed cases in Essex County was 3.4% greater than the percentage observed in New Jersey overall.

Table 30: Late Diagnosed Cases in New Jersey and Essex County by Year and Age at Diagnosis, 2014-2018

Late Diagnosed Cases in New Jersey by Year and Age at Diagnosis										
Age at diagnosis (years)	2014		2015		2016		2017		2018	
	N	%	N	%	N	%	N	%	N	%
<13	†	†	†	†	†	†	†	†	†	†
13-19	†	†	†	†	†	†	†	†	†	†
20-24	18	5.3	25	7.6	19	6.6	12	5.0	14	5.8
25-34	69	20.4	86	26.3	83	28.8	67	28.0	59	24.6
35-44	95	28.1	73	22.3	70	24.3	55	23.0	68	28.3
45-54	88	26.0	72	22.0	59	20.5	52	21.8	55	22.9
55-64	50	14.8	50	15.3	37	12.8	36	15.1	30	12.5
>=65	14	4.1	18	5.5	17	5.9	12	5.0	10	4.2
Late Diagnosed Cases in Essex County by Year and Age at Diagnosis										
<13	†	†	†	†	†	†	†	†	†	†
13-19	†	†	†	†	†	†	†	†	†	†
20-24	6	6.8	8	10.3	7	12.5	7	12.7	†	†
25-34	16	18.2	20	25.6	14	25.0	15	27.3	15	25.0
35-44	32	36.4	15	19.2	11	19.6	13	23.6	19	31.7
45-54	17	19.3	15	19.2	14	25.0	11	20.0	13	21.7
55-64	11	12.5	17	21.8	7	12.5	6	10.9	7	11.7
>=65	†	†	†	†	†	†	†	†	†	†
† Data are suppressed										
These are actual numbers of cases diagnosed with HIV disease that have been reported.										
Diagnosed HIV disease cases include persons diagnosed with HIV and an absent, later, or concurrent diagnosis of AIDS.										

Between 2014-2018, half (50.6%) of late diagnosed HIV cases were among those aged 25-44 years in New Jersey. Nearly one quarter (22.8%) of these cases were among those aged 45-54 years as well. Between 2014-2018, more than half (50.4%) of late diagnosed HIV cases were among those aged 25-44 years in Essex County. Approximately 20.8% of the cases were among those aged 45-54 years as well.

v. Late Diagnosed Cases by Year and Transmission Risk, New Jersey

In 2018, in New Jersey nearly 39.2% of the late diagnosed HIV cases were through MSM contact, 37.1% through other/unknown adult risk, 21.3% through heterosexual contact, and 2.1% through IDU. There has been a gradual increase in late diagnosed HIV cases among MSM

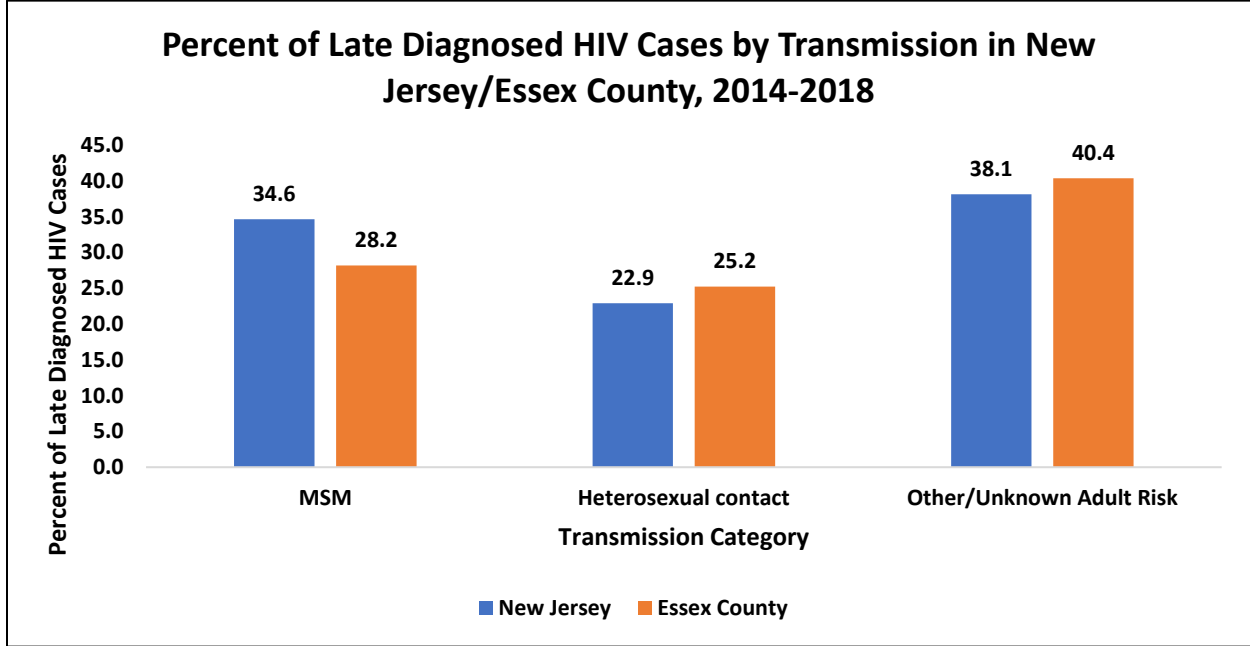
since 2014 in the state. In Essex County, an inverse trend was observed. 40% of the late diagnosed HIV cases were through MSM contact, 31.7% through other/unknown adult risk, and 26.7% through heterosexual contact in 2018.

Table 31: Late Diagnosed Cases in New Jersey by Year and Transmission Category, 2014-2018

Late Diagnosed Cases in New Jersey by Year and Transmission Category										
Transmission Category	2014		2015		2016		2017		2018	
	N	%	N	%	N	%	N	%	N	%
MSM	108	32.0	108	33.0	98	34.0	88	36.8	94	39.2
IDU	16	4.7	17	5.2	†	†	6	2.5	†	†
MSM/IDU	†	†	†	†	†	†	†	†	†	†
Heterosexual contact	64	18.9	61	18.7	84	29.2	68	28.5	51	21.3
Other/Unknown Adult Risk	147	43.5	134	41.0	100	34.7	76	31.8	89	37.1
Mother-to-child transmission	†	†	†	†	†	†	†	†	†	†
Late Diagnosed Cases in Essex County by Year and Transmission Category										
MSM	18	20.5	20	25.6	21	37.5	12	21.8	24	40.0
IDU	7	8.0	†	†	†	†	†	†	†	†
MSM/IDU	†	†	†	†	†	†	†	†	†	†
Heterosexual contact	15	17.0	12	15.4	20	35.7	22	40.0	16	26.7
Other/Unknown Adult Risk	46	52.3	38	48.7	13	23.2	20	36.4	19	31.7
Mother-to-child transmission	†	†	†	†	†	†	†	†	†	†
Transmission category data presented by sex at birth and include transgender persons. † Data are suppressed										
These are actual numbers of persons living with HIV disease that have been reported.										
Diagnosed HIV disease cases include persons diagnosed with HIV and an absent, later, or concurrent diagnosis of AIDS.										
Other/unknown- transmission category includes hemophilia, blood transfusion, perinatal, and risk not reported or not identified.										

Between 2014-2018, fewer late diagnosed HIV cases were reported among MSM in Essex County (28.2%) compared to MSM in New Jersey (34.6%). More late diagnosed HIV cases were observed among those with other/unknown adult risk factors in Essex County (40.4%) compared to those in New Jersey (38.1%) (Figure 29).

Figure 29: Percent of Late Diagnosed HIV Cases by Transmission in New Jersey and Essex County, 2014-2018



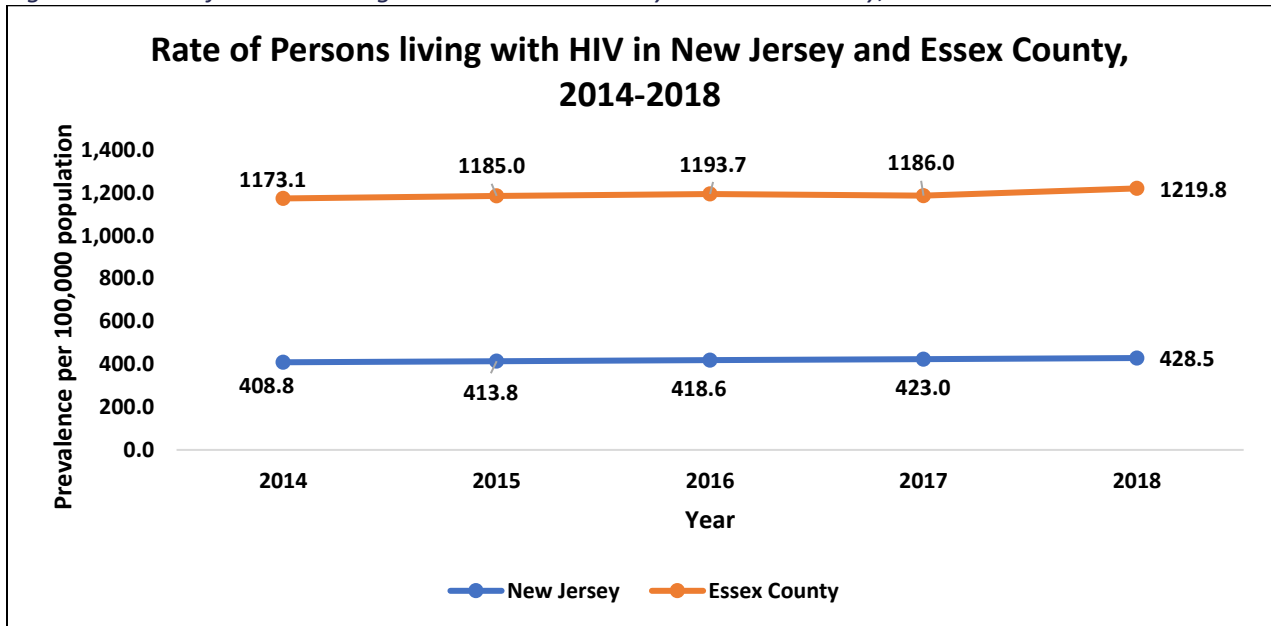
Section C: EHE Pillar 2 'Treat'

I. Prevalence Rate for New Jersey and Essex County

i. Prevalence Rate for New Jersey and Essex County

In 2018, the prevalence rate of living HIV cases was 428.5 per 100,000 in New Jersey. The rate in Essex County was 1,219.8 per 100,000. Essex County has consistently had a rate more than double that of New Jersey's since 2014. There has been a gradual increase in the prevalence of living HIV cases in New Jersey and Essex County since 2014 (Figure 30).

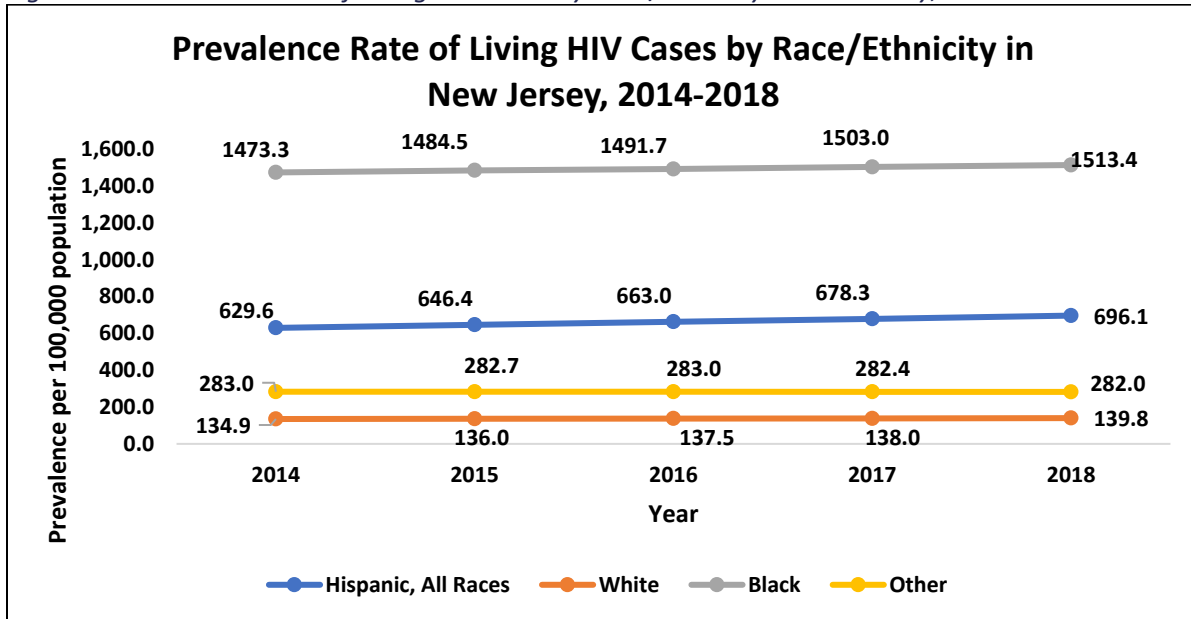
Figure 30: Rate of Persons Living with HIV in New Jersey and Essex County, 2014-2018



ii. Prevalence Rate by Race/Ethnicity for New Jersey and Essex County

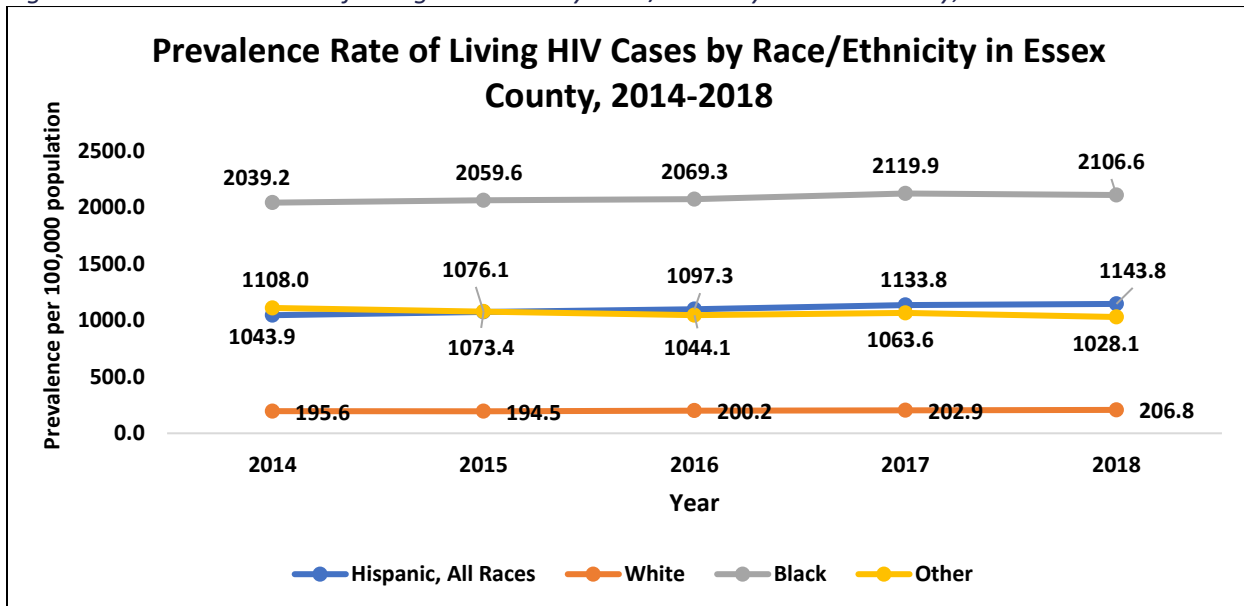
In 2018, the prevalence rate of living HIV cases was greater for Black/African Americans (1,513.4/100,000) and Hispanics (696.1/100,000) compared to Whites (139.8/100,000) and other races (282/100,000) in New Jersey (Figure 31).

Figure 31: Prevalence Rate of Living HIV Cases by Race/Ethnicity in New Jersey, 2014-2018



In Essex County, the prevalence rate of living HIV cases was greater for Black/African Americans (2,106.6/100,000), Hispanics (1,143.8/100,000), and other races (1,028.1/100,000) compared to Whites (206.8/100,000). Prevalence rates of living HIV cases in Essex County for Black/African Americans and Hispanics were nearly 1.5 times that of the prevalence rates observed in all of New Jersey whereas the prevalence rate for other races was 3.6 times that of the prevalence rate observed in New Jersey (Figure 32).

Figure 32: Prevalence Rate of Living HIV Cases by Race/Ethnicity in Essex County, 2014-2018

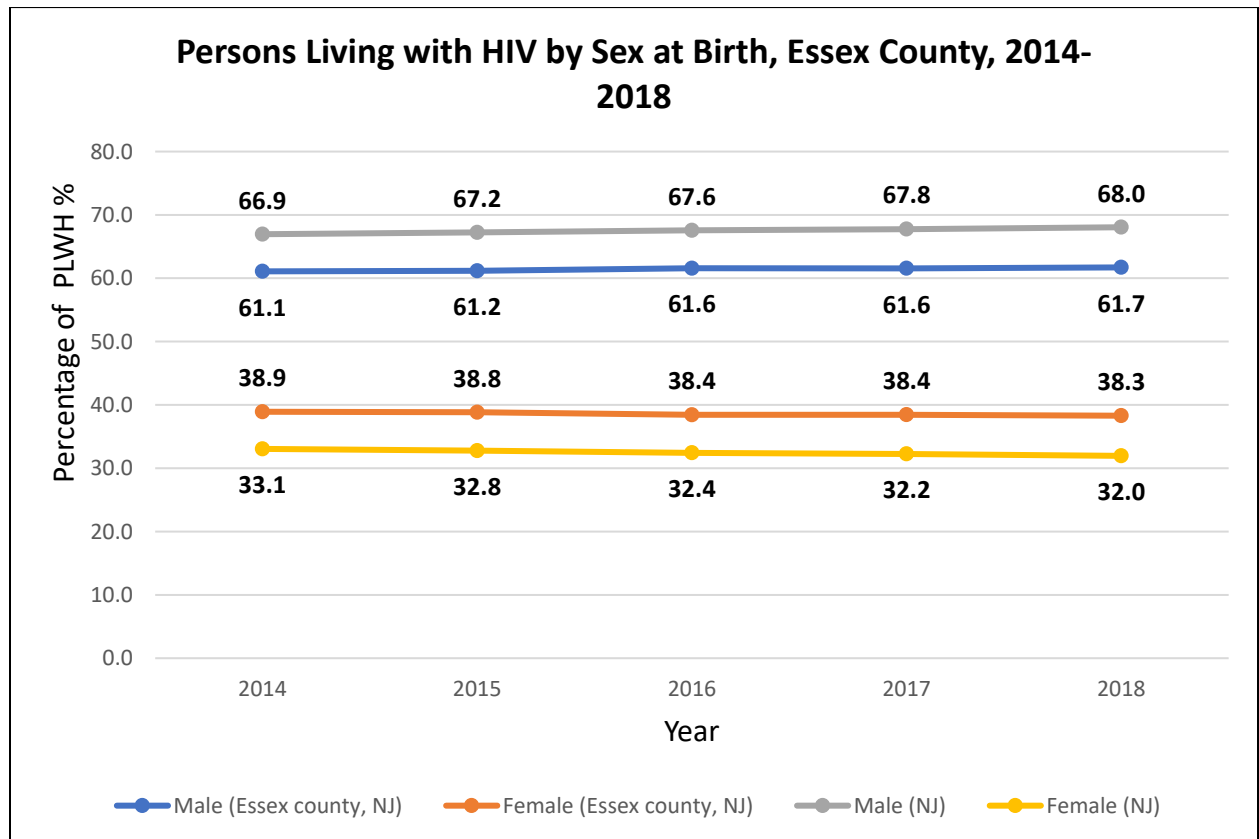


II. Persons Living With HIV

i. Persons Living with HIV by Sex at Birth, New Jersey

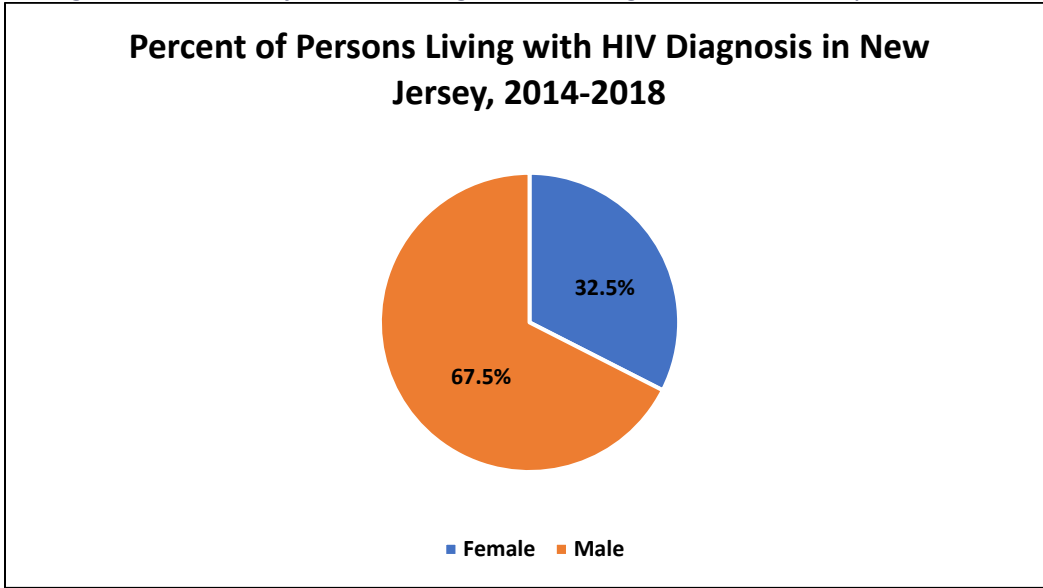
In 2018, 37,675 persons were living with HIV in New Jersey. Most of the diagnoses (68%) were for males. In Essex County, 9,563 persons were living with HIV and most of the diagnoses (61.7%) were for males (Figure 33).

Figure 33: Persons Living with HIV by Sex at Birth, Essex County, 2014-2018



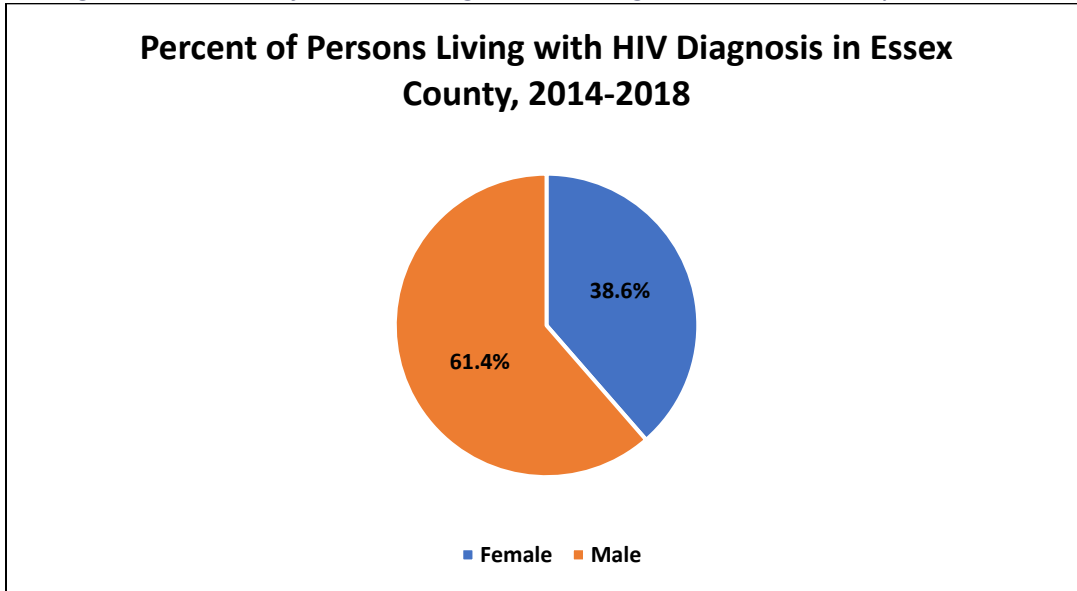
Between 2014-2018, there were more males (67.5%) living with an HIV diagnosis compared to females (32.5%) in New Jersey (Figure 34).

Figure 34: Percent of Persons Living with HIV Diagnosis in New Jersey, 2014-2018



Between 2014-2018, there were more males (61.4%) living with an HIV diagnosis compared to females (38.6%) in Essex County (Figure 35).

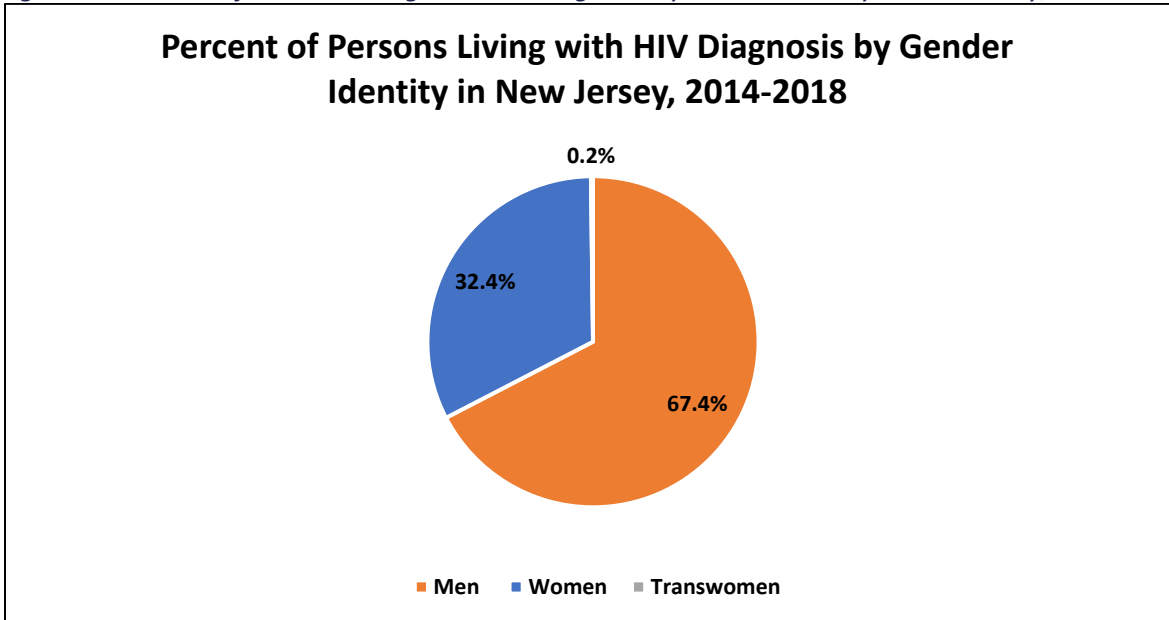
Figure 35: Percent of Persons Living with HIV Diagnosis in Essex County, 2014-2018



ii. Persons Living with HIV by Gender, New Jersey and Essex County

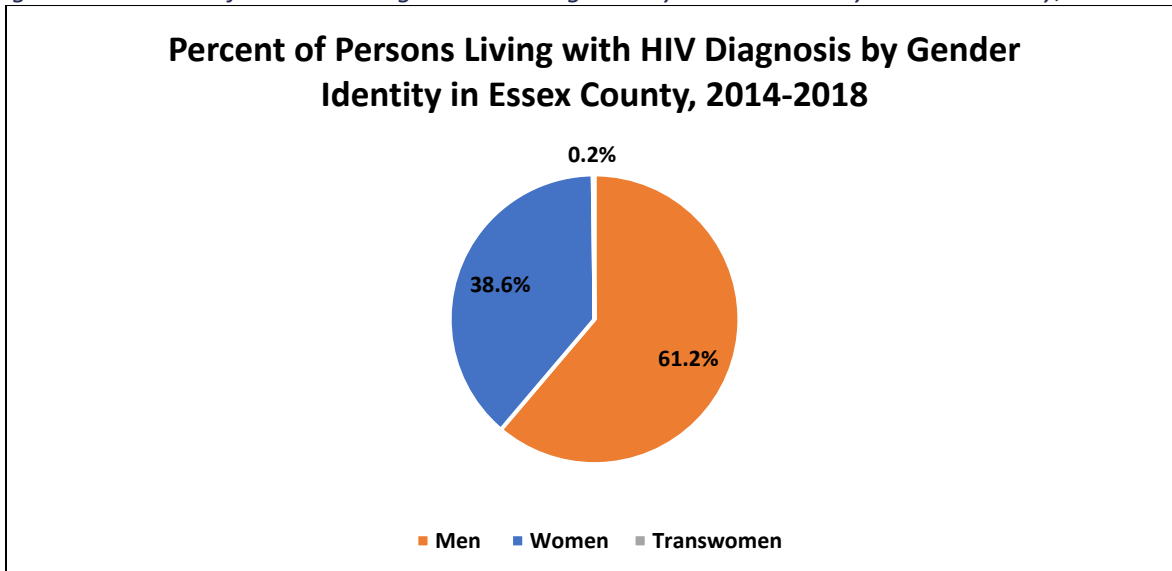
The percentages of men, women, and transwomen living with a diagnosis of HIV in New Jersey as a whole, as well as Essex County specifically remained stable from 2014-2018. Between 2014-2018, more men (67.4%) compared to women (32.4%) were living with an HIV diagnosis. Transwomen also made up 0.2% of persons living with a diagnosis in New Jersey during this time (Figure 36).

Figure 36: Percent of Persons Living with HIV Diagnosis by Gender Identity in New Jersey, 2014-2018



Between 2014-2018, more men (61.2%) compared to women (38.6%) were living with an HIV diagnosis in Essex County. Transwomen also made up 0.2% of persons living with a diagnosis in Essex County during this time (Figure 37).

Figure 37: Percent of Persons Living with HIV Diagnosis by Gender Identity in Essex County, 2014-2018



iii. Persons Living with HIV by Race/Ethnicity, New Jersey

In New Jersey, between 2014-2018, the percentages of Black/African Americans, Hispanics, Whites, and individuals of multiple races living with HIV remained stable. In Essex County, the same trend was observed.

In 2018, there were 17,032 (45.2%) Black/African American, 10,825 (28.7%) Hispanic, 7,290 (19.3%) White, 2,053 (5.4%) multiple race, and 475 (1.1%) other/unknown race persons living with a diagnosis of HIV in New Jersey. In Essex County, there were 6,584 (68.8%) Black/African American, 1,842 (19.3%) Hispanic, 544 (5.7%) White, 541 (5.7%) multiple race, and 52 (0.6%) other/unknown race persons living with a diagnosis of HIV. There were 23.6% more Black/African Americans living with an HIV diagnosis in Essex County compared to New Jersey overall.

Table 32: Number of Persons Living with HIV in New Jersey and Essex County by Year and Race/Ethnicity, 2014-2018

Number of Persons Living with Diagnosis of HIV in New Jersey by Year and Race/Ethnicity										
	2014		2015		2016		2017		2018	
Race/Ethnicity	N	%	N	%	N	%	N	%	N	%
Hispanic, All Races	9791	27.2	10052	27.6	10310	28.0	10549	28.4	10825	28.7
American Indian/Alaska Native	8	0.0	8	0.0	8	0.0	8	0.0	11	0.0
Asian	216	0.6	241	0.7	266	0.7	290	0.8	316	0.8
Black/African American	16581	46.1	16707	45.9	16788	45.6	16915	45.5	17032	45.2
Native Hawaiian/Other Pacific Islander	8	0.0	8	0.0	8	0.0	9	0.0	9	0.0
White	7036	19.6	7090	19.5	7171	19.5	7198	19.4	7290	19.3
Legacy Asian/Pacific Islander	94	0.3	92	0.3	92	0.2	90	0.2	89	0.2
Multiple Race	2159	6.0	2133	5.9	2112	5.7	2085	5.6	2053	5.4
Unknown	52	0.1	52	0.1	51	0.1	50	0.1	50	0.1
Total	35945	100	36383	100	36806	100	37194	100	37675	100
Number of Persons Living with Diagnosis of HIV in Essex County by Year and Race/Ethnicity										
Hispanic, All Races	1681	18.3	1729	18.6	1767	18.9	1804	19.1	1842	19.3
Asian	16	0.2	19	0.2	22	0.2	23	0.2	27	0.3
Black/African American	6364	69.2	6430	69.2	6463	69.1	6537	69.0	6584	68.8
White	514	5.6	511	5.5	526	5.6	528	5.6	544	5.7
Multiple Race	598	6.5	577	6.2	557	6.0	552	5.8	541	5.7

Other	24	0.3	24	0.3	23	0.2	47	0.5	25	0.3
Total	9197	100	9290	100	9358	100	9468	100	9563	100
These are actual numbers of persons living with HIV disease that have been reported.										
Diagnosed HIV disease cases include persons diagnosed with HIV and an absent, later, or concurrent diagnosis of AIDS.										

iv. **Persons Living with HIV by Age at Diagnosis New Jersey and Essex County**

In 2018, of the 37,675 people living with an HIV diagnosis in New Jersey, more than half (64.7%) of cases received their diagnosis between 25-44 years of age. In Essex County, of the 9,563 persons living with an HIV diagnosis, more than half (63%) of cases also received their diagnosis between 25-44 years of age. The percentage of people who received their diagnosis of HIV in this age group has remained stable since 2014 for Essex County as well as New Jersey as a whole.

Table 33: Number of Persons Living with HIV in New Jersey and Essex County by Year and Age at Diagnosis, 2014-2018

Number of Persons Living with Diagnosis of HIV in New Jersey by Year and Age at Diagnosis										
Age at Diagnosis (years)	2014		2015		2016		2017		2018	
	N	%	N	%	N	%	N	%	N	%
<13	651	1.8	650	1.8	645	1.8	643	1.7	646	1.7
13-19	1000	2.8	1023	2.8	1045	2.8	1074	2.9	1104	2.9
20-24	3425	9.5	3567	9.8	3691	10.0	3825	10.3	3941	10.5
25-34	12045	33.5	12205	33.5	12407	33.7	12576	33.8	12761	33.9
35-44	11700	32.5	11675	32.1	11631	31.6	11587	31.2	11605	30.8
45-54	5349	14.9	5403	14.9	5468	14.9	5511	14.8	5556	14.7
55-64	1497	4.2	1564	4.3	1605	4.4	1654	4.4	1717	4.6
>=65	278	0.8	296	0.8	314	0.9	324	0.9	345	0.9
Total	35945	100	36383	100	36806	100	37194	100	37675	100
Number of Persons Living with Diagnosis of HIV in Essex County by Year and Age at Diagnosis										
<13	205	2.2	206	2.2	205	2.2	205	2.2	208	2.2
13-19	316	3.4	324	3.5	331	3.5	340	3.6	342	3.6
20-24	882	9.6	910	9.8	948	10.1	972	10.3	996	10.4
25-34	2889	31.4	2928	31.5	2977	31.8	3030	32.0	3085	32.3
35-44	2999	32.6	2988	32.2	2956	31.6	2933	31.0	2932	30.7
45-54	1414	15.4	1413	15.2	1419	15.2	1446	15.3	1438	15.0
55-64	418	4.5	440	4.7	443	4.7	457	4.8	469	4.9
>=65	74	0.8	81	0.9	79	0.8	85	0.9	93	1.0

Total	9197	100	9290	100	9358	100	9468	100	9563	100
These are actual numbers of cases diagnosed with HIV disease that have been reported.										
Diagnosed HIV disease cases include persons diagnosed with HIV and an absent, later, or concurrent diagnosis of AIDS.										

v. **Persons Living with HIV by Transmission Category, New Jersey and Essex County**
 In New Jersey, 11,247 (29.9%) of persons living with HIV were had transmission by MSM contact, 10,667 (28.3%) through other/unknown adult risk, 8,227 (21.8%) through heterosexual contact, 5,982 (15.9%) through IDU, 888 (2.4%) through MSM/IDU contact, and 664 (1.8%) through mother-to-child transmission in 2018.

Among persons living with an HIV diagnosis in Essex County, 34.2% were through other/unknown adult risk factors, 22.4 % were through heterosexual contact, 22.1% were among MSM, 17.1% through IDU, 2% through MSM/IDU, and 2.2 % through mother-to-child transmission in 2018.

Table 34: Number of Persons Living with HIV in New Jersey and Essex County by Year and Transmission Category

Number of Persons Living with Diagnosis of HIV in New Jersey by Year and Transmission Category										
Transmission Category	2014		2015		2016		2017		2018	
	N	%	N	%	N	%	N	%	N	%
MSM	9831	27.4	10200	28.0	10548	28.7	10884	29.3	11247	29.9
IDU	6759	18.8	6538	18.0	6308	17.1	6123	16.5	5982	15.9
MSM/IDU	912	2.5	911	2.5	902	2.5	891	2.4	888	2.4
Heterosexual contact	7878	21.9	7966	21.9	8074	21.9	8154	21.9	8227	21.8
Other/Unknown Adult Risk	9899	27.5	10101	27.8	10312	28.0	10482	28.2	10667	28.3
Mother-to-child transmission	666	1.9	667	1.8	662	1.8	660	1.8	664	1.8
Total	35945	100	36383	100	36806	100	37194	100	37675	100
Number of Persons Living with Diagnosis of HIV in Essex County by Year and Transmission Category										
MSM	1780	19.4	1864	20.1	1956	20.9	2022	21.4	2112	22.1
IDU	1859	20.2	1800	19.4	1723	18.4	1678	17.7	1633	17.1
MSM/IDU	203	2.2	201	2.2	201	2.1	196	2.1	195	2.0
Heterosexual contact	2026	22.0	2053	22.1	2077	22.2	2120	22.4	2142	22.4
Other/Unknown Adult Risk	3120	33.9	3162	34.0	3192	34.1	3244	34.3	3270	34.2
Mother-to-child transmission	209	2.3	210	2.3	209	2.2	208	2.2	211	2.2

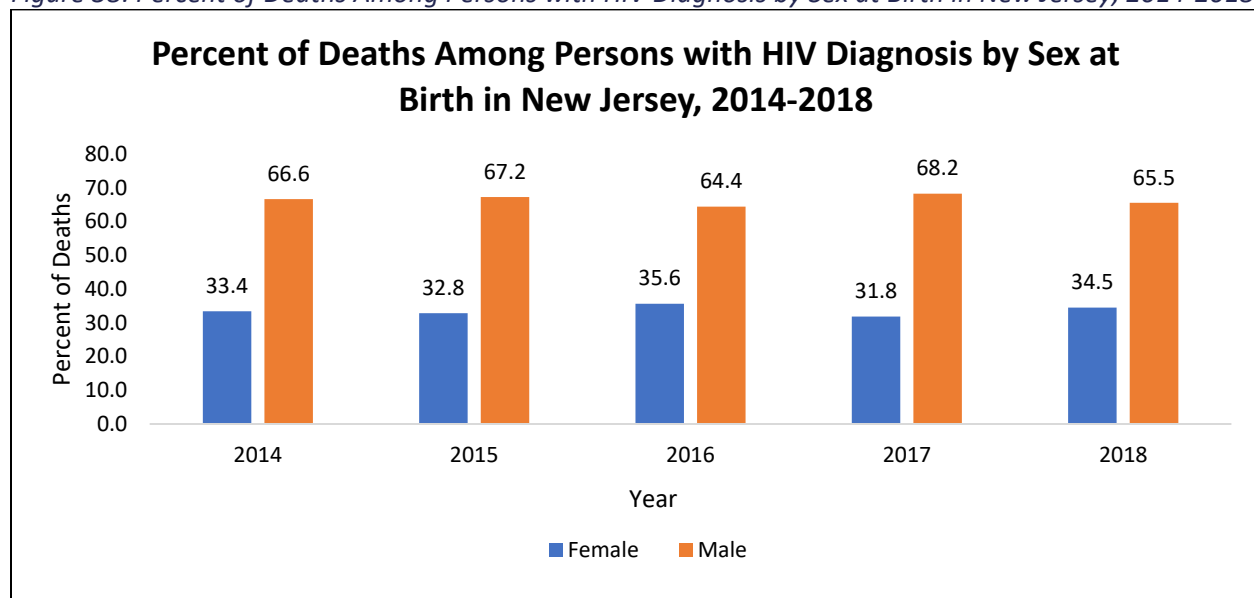
Total	9197	100	9290	100	9358	100	9468	100	9563	100
Transmission category data presented by sex at birth and include transgender persons.										
Transmission categories are mutually exclusive, hierarchical risk categories determined by the CDC and system-calculated using sex at birth and risk factor history to determine mode of transmission. A person with multiple risks is only represented in the highest category based on the CDC hierarchical algorithm. Thus, transgender women are included in the men who have sex with men sexual contact transmission category if assigned male at birth and risk factor history indicates sex with males. Please note this is for the categorization of HIV transmission categories only and not to describe sexual orientation.										
These are actual numbers of persons living with HIV disease that have been reported.										
Diagnosed HIV disease cases include persons diagnosed with HIV and an absent, later, or concurrent diagnosis of AIDS.										
Other/unknown- transmission category includes hemophilia, blood transfusion, perinatal, and risk not reported or not identified.										

III. Deaths among Persons Living with HIV

i. Deaths among People with HIV by Sex at Birth and Year of Death, New Jersey and Essex County

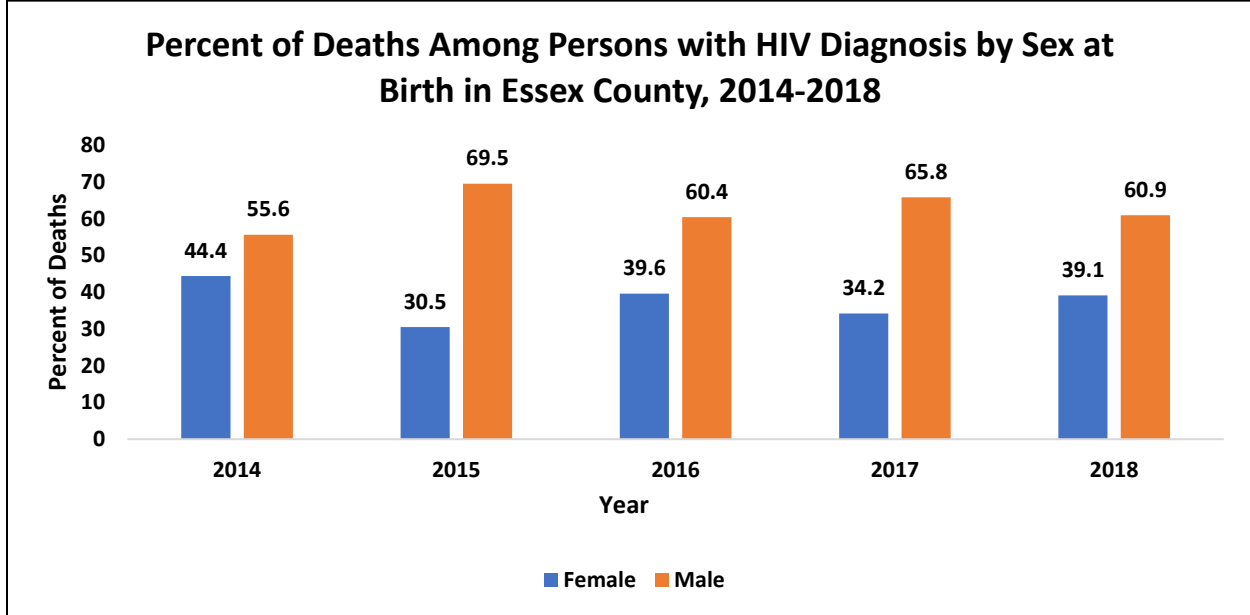
In 2018, the percentage of death among persons with a diagnosis of HIV infection was greater among males (65.5%) compared to females (34.5%) in New Jersey (Figure 38).

Figure 38: Percent of Deaths Among Persons with HIV Diagnosis by Sex at Birth in New Jersey, 2014-2018



In Essex County, the percentage of death among persons with a diagnosis of HIV infection was also greater among males (60.9%) compared to females (39.1%). The percentage of death in Essex County was approximately 5% higher for females compared to the percentage for all of New Jersey. Deaths among persons with a diagnosis of HIV infection have increased for males and decreased for females living in Essex County since 2014 (Figure 39).

Figure 39: Percent of Deaths Among Persons with HIV Diagnosis by Sex at Birth in Essex County, 2014-2018



ii. Deaths among People with HIV by Gender and Year of Death, New Jersey and Essex County

In 2018, the percentage of death among persons with a diagnosis of HIV infection was greater among males (65.5%) compared to females (34.5%) in New Jersey. In Essex County, the percentage of death among persons with a diagnosis of HIV infection was also greater among males (60.9%) compared to females (39.1%). The percentage of death in Essex County was approximately 5% higher for females compared to the percentage for all of New Jersey. Deaths among persons with a diagnosis of HIV infection have increased for males and decreased for females living in Essex County since 2014.

Table 35: Number of deaths among persons with diagnosis of HIV in New Jersey and Essex County by Year and Gender, 2014-2018

Number of Deaths among Persons with Diagnosis of HIV in New Jersey by Year and Gender										
Gender identity	2014		2015		2016		2017		2018	
	N	%	N	%	N	%	N	%	N	%
Men	492	66.6	498	66.8	479	64.3	487	67.8	376	65.5
Women	247	33.4	244	32.8	265	35.6	228	31.8	198	34.5
Transgender ^{aa}	†	†	†	†	†	†	†	†	†	†
Transgender ^{bb}	†	†	†	†	†	†	†	†	†	†
Number of Deaths among Persons with Diagnosis of HIV in Essex County by Year and Gender										
Men	120	55.6	153	69.5	148	60.4	142	64.8	109	60.9
Women	96	44.4	67	30.5	97	39.6	75	34.2	70	39.1
Transgender ^{aa}	†	†	†	†	†	†	†	†	†	†

Transgender^{bb}	†	†	†	†	†	†	†	†	†	†
† Data are suppressed										
Transmission categories are mutually exclusive, hierarchical risk categories determined by the CDC and system-calculated using sex at birth and risk factor history to determine mode of transmission. A person with multiple risks is only represented in the highest category based on the CDC hierarchical algorithm. Thus, transgender women are included in the men who have sex with men sexual contact transmission category if assigned male at birth and risk factor history indicates sex with males. Please note this is for the categorization of HIV transmission categories only and not to describe sexual orientation.										
These are actual numbers of persons living with HIV disease that have been reported.										
Diagnosed HIV disease cases include persons diagnosed with HIV and an absent, later, or concurrent diagnosis of AIDS.										
aa "Transgender male-to-female" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender.										
bb "Transgender female-to-male" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender.										

Between 2014-2018, more deaths among persons with diagnosed HIV were observed among men (66.2%) compared to women (33.6%) in New Jersey. Transwomen also made up 0.2% of deaths among persons with diagnosed HIV during this time frame.

iii. Deaths among People with HIV by Race/Ethnicity and Year of Death, New Jersey and Essex County

In 2018, the percentage of death among persons living with HIV was greater for Black/African Americans (50.3%) compared to Hispanics (20.2%), Whites (19%), and multiple races (10.1%) in New Jersey. In Essex County, the percentage of death among persons living with HIV was also greater among Black/African Americans (69.3%) compared to Hispanics (16.2%), multiple races (8.9%), and Whites (5.6%). The percentage of death for Black/African Americans was 19% higher in Essex County than the rest of New Jersey.

Table 36: Number of deaths among persons with HIV in New Jersey and Essex County by Year and Race/Ethnicity, 2014-2018

Number of Deaths among Persons with HIV in New Jersey by Year and Race/Ethnicity										
	2014		2015		2016		2017		2018	
Race/Ethnicity	N	%	N	%	N	%	N	%	N	%
Hispanic, All races	169	22.9	141	18.9	162	21.7	149	20.8	116	20.2
Asian	†	†	†	†	†	†	†	†	†	†
Black/African American	384	52.0	396	53.2	365	49.0	374	52.1	289	50.3
White	136	18.4	140	18.8	153	20.5	139	19.4	109	19.0
Multiple Race	49	6.6	65	8.7	63	8.5	51	7.1	58	10.1
Other*	†	†	†	†	†	†	†	†	†	†
Total	†	100	†	100	†	100	†	100	†	100
Number of Deaths among Persons with HIV in Essex County by Year and Race/Ethnicity										
Hispanic, All races	40	18.5	33	15.0	43	17.6	39	17.8	29	16.2
Asian	†	†	†	†	†	†	†	†	†	†

Black/African American	153	70.8	142	64.5	163	66.5	155	70.8	124	69.3
White	8	3.7	16	7.3	13	5.3	13	5.9	10	5.6
Multiple Race	15	6.9	29	13.2	25	10.2	11	5.0	16	8.9
Other*	†	†	†	†	†	†	†	†	†	†
Total	†	100	†	100	†	100	†	100	†	100
† Data are suppressed										
These are actual numbers of persons living with HIV disease that have been reported.										
Diagnosed HIV disease cases include persons diagnosed with HIV and an absent, later, or concurrent diagnosis of AIDS.										
Other*- This category is made up of American Indian/Alaska native, native Hawaiian/other pacific islander, legacy Asian/Pacific Islander and unknown in an effort to prevent data suppression from needing to be applied										

iv. Deaths among People with HIV/AIDS by Transmission Category, New Jersey and Essex County

In 2018, among persons with a diagnosis of HIV in New Jersey, the number of deaths was highest in injection drug users (34.5%) followed by other/adult unknown risk factors (27.2%) and heterosexual contact (20.4%). This trend was however not reproduced in the county where the highest number of deaths were recorded among other/adult unknown risk factors (35.2%) followed by injections drug users (31.8 %), heterosexual contact (22.3%), and MSM contact (8.4%).

Table 37: Number of Deaths among Persons with HIV in New Jersey and Essex County by Year of Death and Transmission Category, 2014-2018

Number of Deaths among Persons with HIV in New Jersey by Year of Death and Transmission Category					
Transmission Category	2014	2015	2016	2017	2018
	N	N	N	N	N
MSM	107	124	121	132	85
IDU	272	264	260	236	198
MSM/IDU	16	22	20	22	16
Heterosexual contact	126	140	146	130	117
Other/Unknown Adult Risk	213	189	190	195	156
Mother-to-child transmission	†	6	8	†	†
Number of Deaths among Persons with HIV in Essex County by Year of Death and Transmission Category					
MSM	14	31	22	26	15
IDU	88	76	81	72	57
MSM/IDU	†	†	†	6	†

Heterosexual contact	44	39	54	49	40
Other/Unknown Adult Risk	64	69	81	65	63
Mother-to-child transmission	†	†	†	†	†
Transmission category data presented by sex at birth and include transgender persons. † Data are suppressed					
These are actual numbers of persons living with HIV disease that have been reported.					
Diagnosed HIV disease cases include persons diagnosed with HIV and an absent, later, or concurrent diagnosis of AIDS.					
Other/unknown- transmission category includes hemophilia, blood transfusion, perinatal, and risk not reported or not identified.					

IV. Linkage to Care

i. Linkage to Care in New Jersey and Essex County

Between 2017, more than half (67.9%) of patients who were linked to care services were linked within 1 month of HIV diagnosis in New Jersey. In Essex County, 67.7% of patients were also linked to care within this timeframe. During this period, more HIV patients (11.4%) were never linked to care in Essex County compared to those who were not linked in New Jersey (9.7%).

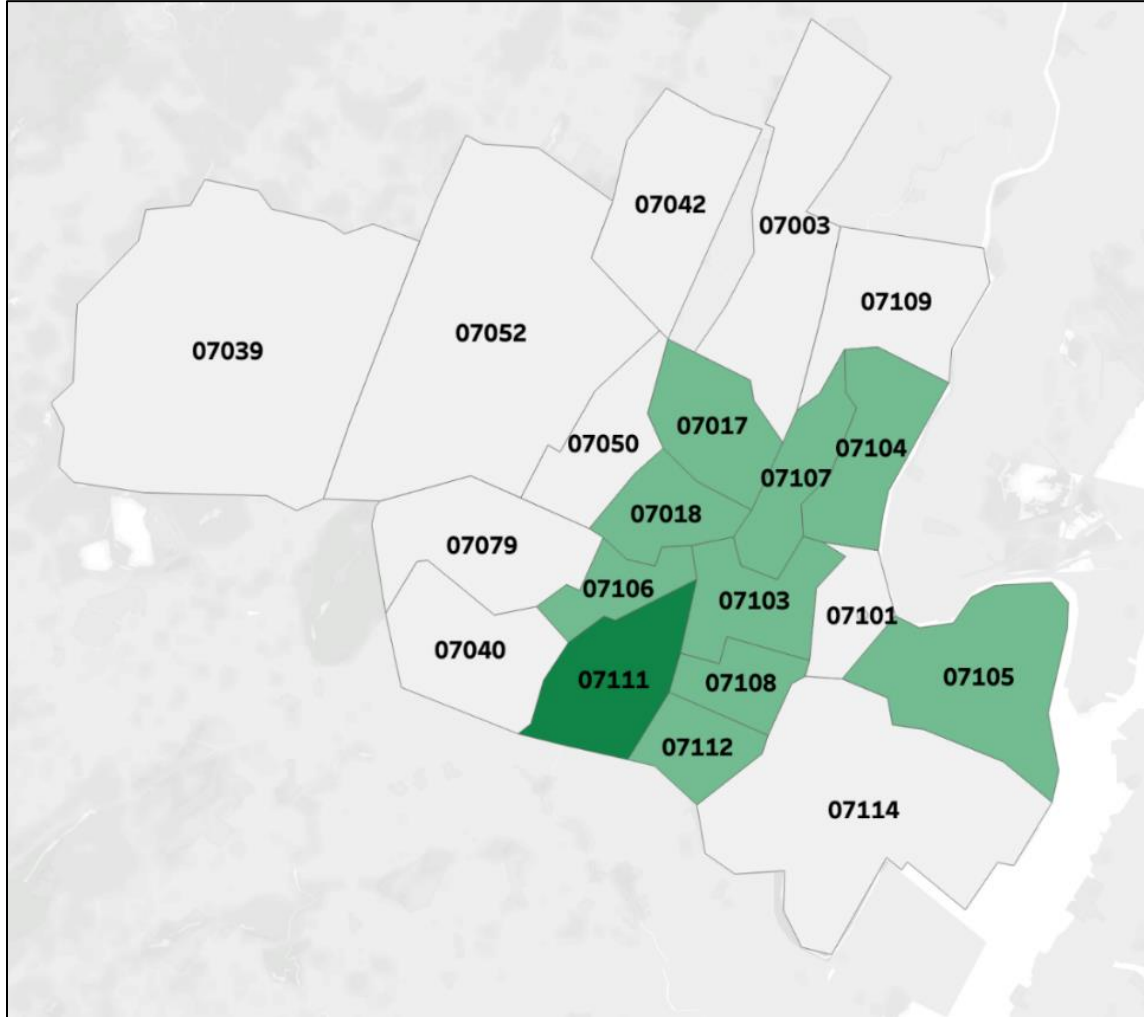
Table 38: Time to Link to Care in New Jersey and Essex County, 2017

Linkage to Care, New Jersey, 2017		
Linkage to care	N	%
Within 1 months	833	67.9
Within 2 months	61	5.0
Within 3 months	27	2.2
3+ to 6 months	55	4.5
6+ to 12 months	55	4.5
12+ to 39 months	76	6.2
Never linked	119	9.7
Total	1226	100
Linkage to Care, Essex County		
Within 1 months	214	67.7
Within 2 months	13	4.1
Within 3 months	6	1.9
3+ to 6 months	10	3.2
6+ to 12 months	14	4.4
12+ to 39 months	23	7.3
Never linked	36	11.4
Total	316	100

ii. Linkage to Care by Sex at Birth, Race/Ethnicity, Age and Transmission Category for Essex County, 2017

In 2017, 10-15% of HIV cases were linked to care in Irvington (07111), a municipality in Essex County. In Newark (07103, 07104, 07105, 07106, 07108, 07112) and East Orange (07017, 07018, 07107) 5-10% of HIV cases were linked to care (Figure 40).

Figure 40: Linkage to Care, Essex County, 2017



Linkage to Care, Essex County	
0%-5%	
5%-10%	
10%-15%	

In Essex County, most diagnosed HIV cases (67.7%) were linked to care within 1 month of HIV diagnosis in 2017. Linkage to care within this time frame was more prevalent among females (69.9%), Hispanics (76.8%), those with a heterosexual contact transmission (72.1%), and those who were 65 years of age or older (76.9%). No linkage to care (11.4%) was more prevalent among males (49%), Whites (25%), those who injected drugs (8.5%), and those who were

between the ages of 45-54 years (19.4%). Note that numbers less than five should be interpreted with caution due to instability.

Table 39: Linkage to Care by Sex at Birth, Age, Race/Ethnicity and Transmission Category for Essex County, 2017

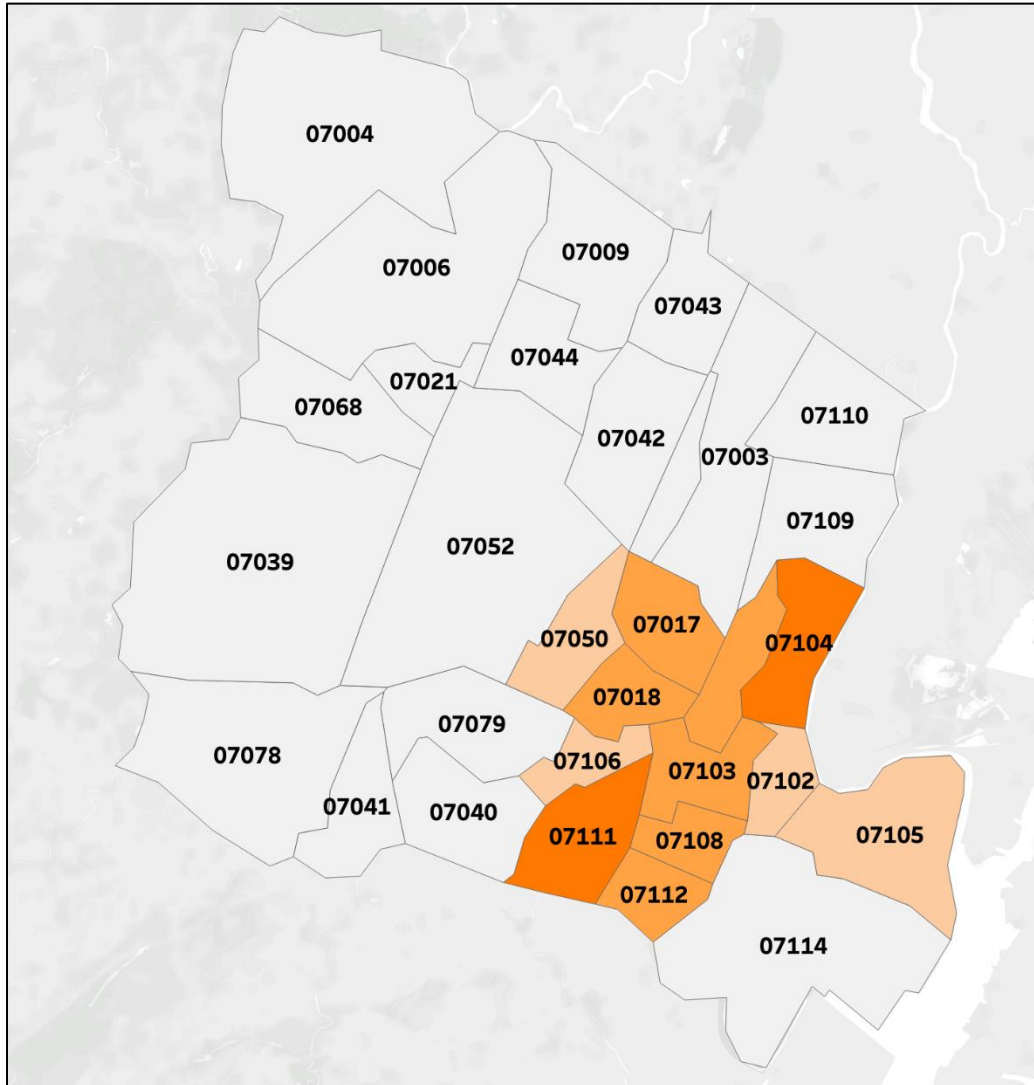
	Within 1 month		Within 2 months		Within 3 months		Within 3+ to 6 months		Within 6+ to 12 months		Within 12+ to 39 months		Never linked		Total	
	N	Row%	N	Row%	N	Row%	N	Row%	N	Row%	N	Row%	N	Row%	N	Row%
Sex at birth																
Female	79	69.9	†	†	†	†	†	†	†	†	6	5.3	12	10.6	113	100
Male	135	31	9	69	†	†	7	42	9	43	17	8	24	49	203	100
Race/Ethnicity																
Hispanic, All races	53	76.8	†	†	†	†	†	†	†	†	†	†	7	10.1	69	100
White	7	58.3	†	†	†	†	†	†	†	†	†	†	†	†	12	100
Black/African American	151	65.4	11	4.8	†	†	10	4.3	11	4.8	17	7.4	26	11.3	231	100
Other/unknown	†	†	†	†	†	†	†	†	†	†	†	†	†	†	4	100
Transmission category																
MSM	65	68.4	6	6.3	†	†	†	†	6	6.3	6	6.3	8	8.4	95	100
IDU	7	43.8	†	†	†	†	†	†	†	†	†	†	†	†	16	100
Heterosexual contact	119	72.1	7	4.2	†	†	†	†	6	3.6	11	6.7	14	8.5	165	100
Other/Unknown Adult Risk	23	57.5	†	†	†	†	†	†	†	†	†	†	9	22.5	40	100
Age																
13-19	7	63.6	†	†	†	†	†	†	†	†	†	†	†	†	11	100
20-24	27	71.1	†	†	†	†	†	†	†	†	†	†	†	†	38	100
25-34	63	71.6	†	†	†	†	†	†	†	†	†	†	9	10.2	88	100
35-44	41	63.1	†	4.6	†	†	†	†	†	†	†	†	9	13.9	65	100
45-54	39	62.9	†	†	†	†	†	†	†	†	†	†	12	19.4	62	100
55-64	27	69.2	†	†	†	†	†	†	†	†	†	†	†	†	39	100
>=65	10	76.9	†	†	†	†	†	†	†	†	†	†	†	†	13	100

Other/unknown- transmission category includes hemophilia, blood transfusion, perinatal, and risk not reported or not identified.

V. Retained in Care

The map below shows that in the municipality of Irvington (07111) and a municipality in East Newark (07104), 9%-12% of HIV cases were retained in care in 2019. In three Newark (07103, 07108, 07112) and two East Orange (07017, 07018) municipalities, 6%-9% of HIV cases were retained in care. In three Newark (07105, 07106, 07102) and one Orange (07050) municipality, 3%-6% of HIV cases were retained in care (Figure 41).

Figure 41: Retention in Care, Essex County, 2019



Percent Retention in care, Essex County	
0%-3%	
3%-6%	
6%-9%	
9%-12%	

a. Receipt and Quality of Care

The Medical Monitoring Project (MMP) is a surveillance project designed to learn more about the experiences and needs of people who are living with HIV. The New Jersey Department of Health is funded by the Centers for Disease Control and Prevention (CDC) to conduct the project in the state.

Of the total Essex and Hudson interviewees of Medical Monitoring Project (MMP), a surveillance research project conducted by the New Jersey Department of Health (NJDOH) between 2015-2018, 98.7% had received outpatient HIV care, 77.9% had been retained in care in the past 12 months, 63.4% in the past 24 months, and 81.5% had received a prescription of ART. Additionally, 21.1% had not been retained in care in the past 12 months. After 24 months, the percentage not retained in care increased to 36.3%. Of the total number of interviewees, 91.9% were currently taking ART. The primary reason for not taking ART, among those who were not using it was that the health care provider said person should not start taking ART and that the HIV positive interviewee did not believe he/she needed ART.

Of those prescribed ART, 27.3% missed taking a dose at least 1-2 times, 6.3% missed their dose 3-5 days in the month, and an additional 6.2% missed their dosage more than 6 days in the last 30 days. In 42.8% of the HIV positive interviewees, the reason for missing their dose was forgetfulness while 20.4% had a problem getting a prescription or a refill for HIV medicines, and 15% had a problem paying for their medications.

Table 40: Receipt and Quality of Care, Medical Monitoring Project, Essex and Hudson Counties, New Jersey, 2015-2018

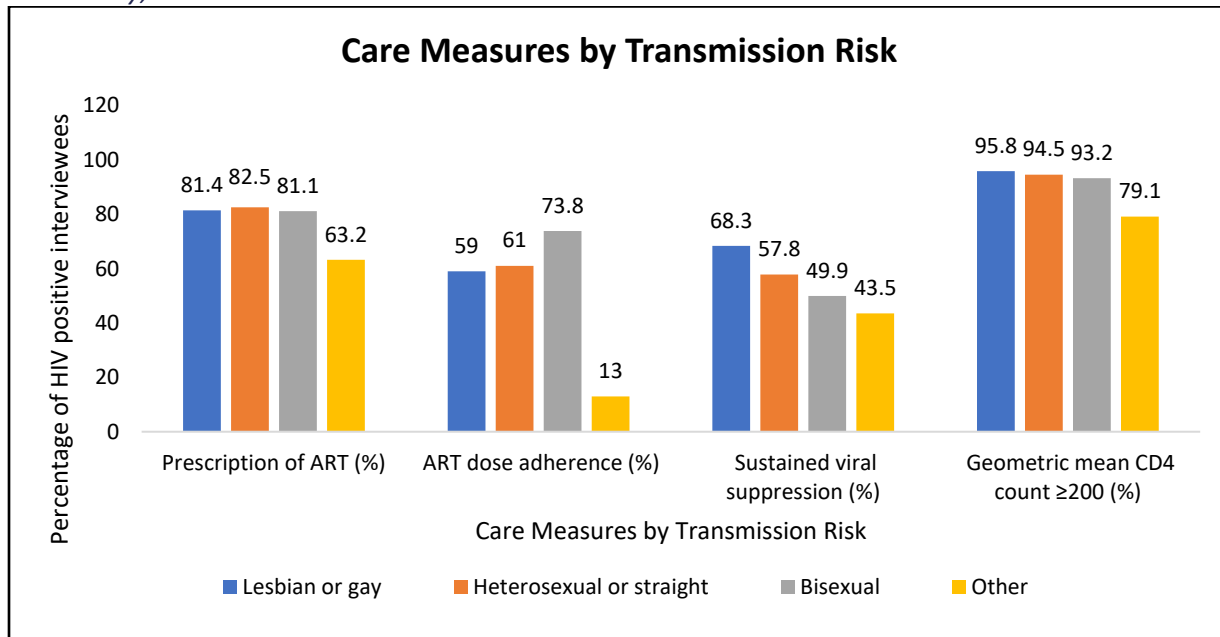
Receipt and quality of care		
	No. ^a	% ^b
Ever received outpatient HIV care^c		
Yes	239	98.7
No	1	1.3
Received outpatient HIV care, past 12 months^c		
Yes	235	97.4
No	5	2.6
Received outpatient HIV care, past 24 months^c		
Yes	236	97.7
No	4	2.3
Retained in care, past 12 months^d		
Yes	186	77.9
No	44	22.1
Retained in care, past 24 months^d		
Yes	151	63.4
No	79	36.6
Prescribed ART, past 12 months^e		
Yes	200	81.5

No	40	18.5
Total	240	100
Note. CD4 counts, viral load measurements, prophylaxes, and vaccinations are from medical record abstraction. Measurement period is the 12 months before the interview unless otherwise noted.		
Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding.		
Excluded are values with a coefficient of variation ≥ 0.30 , "don't know" responses, and skipped (missing) responses. Values with a denominator sample size < 30 are marked with an asterisk and should be interpreted with caution.		
a Numbers are unweighted.		
b Percentages are weighted percentages.		
c Outpatient HIV care was defined as any documentation of the following: encounter with an HIV care provider, viral load test result, CD4 test result, HIV resistance test or tropism assay, ART prescription, PCP prophylaxis, or MAC prophylaxis.		
d Two elements of outpatient HIV care at least 90 days apart in each 12-month period.		
e ART prescription documented in medical record; persons with no medical record abstraction were considered to have no documentation of ART prescription.		

b. Care Measures by Selected Characteristics

The care measures of Antiretroviral therapy (ART) prescription, ART dose adherence, sustained viral suppression, and geometric mean CD4 count was noted for HIV positive interviewees of the Medical Monitoring Project from Essex and Hudson Counties. Figure 42 shows that the highest percentage of lesbian and gay individuals (68.3%) sustained viral suppression among all transmission risk groups. This group has the highest percentage with a geometric mean CD4 count of 200 copies/ml or more (95.8%).

Figure 42: Care Measures by Transmission Risk, Medical Monitoring Project, Essex and Hudson Counties, New Jersey, 2015-2018



When the race of the interviewees was considered, the lowest percentage of African Americans had sustained viral suppression (48.3%) followed by Hispanics (69.2%). The highest percentage with the geometric mean CD4 count of 200 copies/ml or higher was found among Whites and Asians (Figure 43).

Figure 43: Care Measures by Race, Medical Monitoring Project, Essex and Hudson Counties, New Jersey, 2015-2018

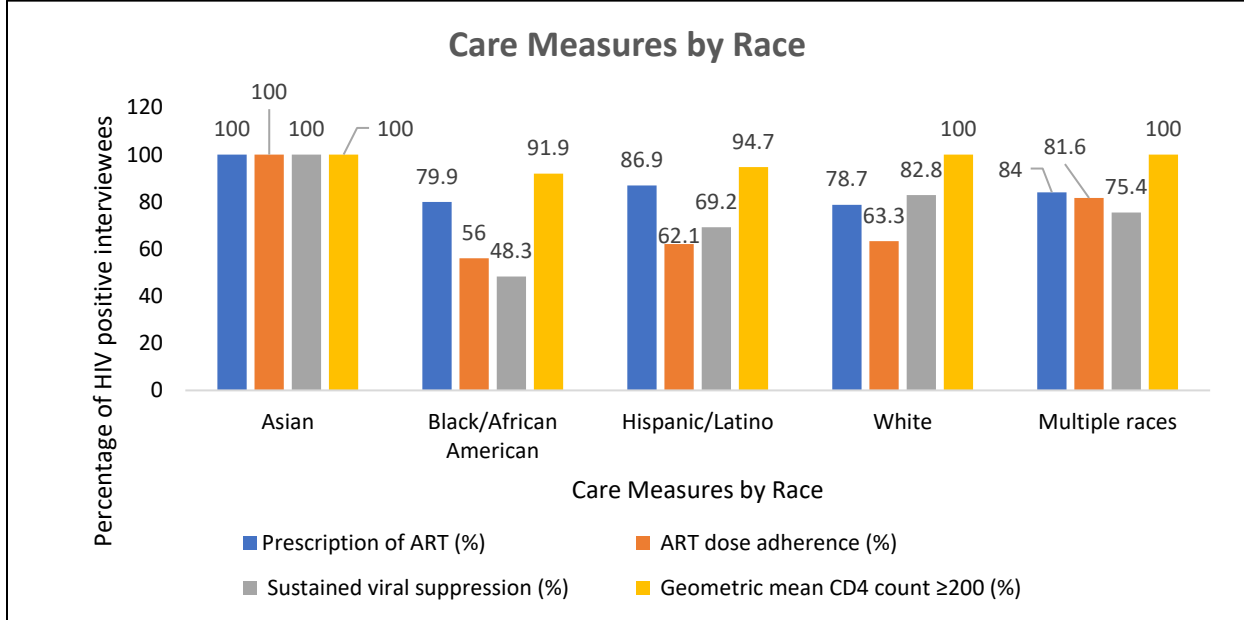


Table 41: Antiretroviral therapy (ART) prescription, ART dose adherence, sustained viral suppression, and geometric mean CD4 count, by subgroups, Medical Monitoring Project, Essex and Hudson Counties, NJ, 2015-2018

	Prescription of ART		ART dose adherence ^a		Sustained viral suppression ^b		Geometric mean CD4 count ≥200	
	No. ^c	Row % ^d	No. ^c	Row % ^d	No. ^c	Row % ^d	No. ^c	Row % ^d
Gender								
Male	115	80.2	83	60.8	87	59.6	99	92.6
Female	83	84.4	57	60.3	58	57.7	71	97.1
Transgender ^e	†	59.2	†	28.6	†	40.8	†	100
Sexual orientation								
Lesbian or gay	37	81.4	27	59.0*	31	68.3	33	95.8
Heterosexual or straight	149	82.5	104	61	108	57.8	130	94.5
Bisexual	11	81.1*	9	73.8*	6	49.9	8	93.2
Other	†	63.2	†	13	†	43.5	†	79.1*
Race/Ethnicity								
Asian	†	100	†	100	†	100	†	100
Black/African American/African American	116	79.9	78	56	74	48.3	96	91.9
Hispanic/Latino ^f	54	86.9	39	62.1	43	69.2	45	94.7
White	16	78.7*	12	63.3*	17	82.8*	18	100

Multiple races	13	84.0*	11	81.6*	11	75.4*	12	100
Age at time of interview (year)								
18–29	22	81.8*	17	66.7*	15	57.6*	22	100
30–39	29	79.8	20	52.4*	17	52.9*	20	85.3
40–49	44	83.5	29	56.8*	28	47.8*	36	97.5
≥50	105	81	75	62.4	86	65.2	94	93.9
Total	†	81.5	†	60.3	†	58.7	†	94.2

Abbreviations: CD4, CD4 T-lymphocyte count (cells/μL).

Note. Numbers might not add to total because of missing data.

Excluded are values with a coefficient of variation ≥0.30, “don’t know” responses, and skipped (missing) responses. Values with a denominator sample size <30 are marked with an asterisk and should be interpreted with caution.

a In past 30 days, 100% adherence to ART doses.

b All viral load measurements in the 12 months before the interview documented undetectable or <200 copies/mL.

c Numbers are unweighted.

d Percentages are weighted percentages.

e Persons were classified as transgender if sex at birth and gender reported by the person were different, or if the person chose “transgender” in response to the question about self-identified gender.

f Hispanics or Latinos might be of any race. Persons are classified in only 1 race/ethnicity category.

VI. Care Continuum

i. Care Continuum for Persons Living with HIV in New Jersey

In New Jersey, 70% of persons living with HIV were retained in any care. More than half (44%) were then continuously retained and 53% then achieved viral suppression in 2019. More females (55%) achieved viral suppression compared to males (53%). Nearly half (48%) of transwomen also achieved viral suppression. Whites (60%) were more likely to achieve viral suppression followed by legacy Asian/Pacific Islanders (59%), persons of multiple races (57%), Hispanics and Asians (equally at 55%), and Black/African Americans (49%). Viral suppression was more prevalent among those who identified heterosexual contact (57%) as a mode of HIV transmission followed by MSM contact (56%). Those between the ages of 20-24 years (59%), 55-64 (58%), and 13-19 (57%) achieved more viral suppression compared to cases in other age groups.

ii. Care Continuum for Persons Living with HIV in Essex County, 2019

In Essex County, 70% of persons living with HIV were retained in any care. More than half (43%) were then continuously retained and 49% then achieved viral suppression in 2019. There was not a significant difference in the percentage of viral suppression achieved between females (50%) and males (49%). However, a third (33%) of transwomen did achieve viral suppression. Asians (61%) were more likely to achieve viral suppression followed by Whites (57%), Hispanics (55%), persons of multiple races (51%) and Black/African Americans (47%). Viral suppression was more prevalent among those who identified MSM contact (54%) and heterosexual contact (53%) as a mode of transmission for HIV. Those between the ages of 20-24 years (59%) achieved more viral suppression compared to cases in other age groups.

Table 42: Care Continuum for Persons Living with HIV in Essex County, 2019

	Retained in any care in 2019				Continuously retained in 2019				Viral Suppression in 2019						All	
	No		Yes		No		Yes		Missing		No		Yes			
	N	Row%	N	Row%	N	Row%	N	Row%	N	Row%	N	Row%	N	Row%	N	Row%
Gender																
Female	779	27.0	2077	73.0	1581	55.0	1275	45.0	1137	40.0	286	10.0	1433	50.0	2856	100
Male	1374	31.0	3039	69.0	2549	58.0	1864	42.0	1909	43.0	350	8.0	2154	49.0	4413	100
Transgender^{aa}	†	†	19	79.0	17	71.0	7	29.0	10	42.0	6	25.0	8	33.0	†	†
Race\Ethnicity																
Hispanic, All races	392	27.0	1050	73.0	770	53.0	672	47.0	558	39.0	95	7.0	789	55.0	1442	100
Asian	7	30.0	16	70.0	14	61.0	9	39.0	9	39.0	†	†	14	61.0	23	100
Black/African American	1531	31.0	3379	69.0	2851	58.0	2059	42.0	2130	43.0	477	10.0	2303	47.0	4910	100
White	136	34.0	262	66.0	224	56.0	174	44.0	161	40.0	12	3.0	225	57.0	398	100
Multiple Race	90	18.0	420	82.0	282	55.0	228	45.0	193	38.0	58	11.0	259	51.0	510	100
Transmission category																
MSM	494	27.0	1309	73.0	1026	57.0	777	43.0	685	38.0	150	8.0	968	54.0	1803	100
IDU	322	31.0	720	69.0	591	57.0	451	43.0	481	46.0	103	10.0	458	44.0	1042	100
MSM/IDU	44	32.0	94	68.0	75	54.0	63	46.0	63	46.0	9	7.0	66	48.0	138	100
Heterosexual contact	422	24.0	1351	76.0	928	52.0	845	48.0	658	37.0	170	10.0	945	53.0	1773	100
Other/Unknown Adult Risk	876	35.0	1658	65.0	1525	60.0	1009	40.0	1168	46.0	209	8.0	1157	46.0	2534	100
Age																
13-19	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†
20-24	17	20.0	68	80.0	45	53.0	40	47.0	25	29.0	10	12.0	50	59.0	85	100

25-34	269	30.0	615	70.0	571	65.0	313	35.0	372	42.0	115	13.0	397	45.0	884	100
35-44	421	34.0	826	66.0	793	64.0	454	36.0	553	44.0	133	11.0	561	45.0	1247	100
45-54	613	32.0	1279	68.0	1119	59.0	773	41.0	842	45.0	146	8.0	904	48.0	1892	100
55-64	593	27.0	1569	73.0	1122	52.0	1040	48.0	872	40.0	176	8.0	1114	52.0	2162	100
>=65	245	24.0	772	76.0	493	48.0	524	52.0	392	39.0	59	6.0	566	56.0	1017	100

aa "Transgender male-to-female" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender.

Other/unknown- transmission category includes hemophilia, blood transfusion, perinatal, and risk not reported or not identified.

VII. Unmet Need

- i. Unmet Need (the percentage of persons living with HIV disease who are not in HIV care) for New Jersey, 2019

Among the 35,708 persons living with HIV in New Jersey, there was an unmet need of 40% in 2019. More males (41%), persons of other/unknown races (44%), persons who injected drugs (49%), and those 65 years of age or greater (44%) were not in any form of HIV care.

- ii. Unmet Need for Essex County, 2019

In 2019, among the 9,382 persons living with HIV in Essex County, there was an unmet need of 43%. More males (45%), Whites (44%), injection drug users (54%), and those aged 65 years or greater (47%) were not in any form of HIV care.

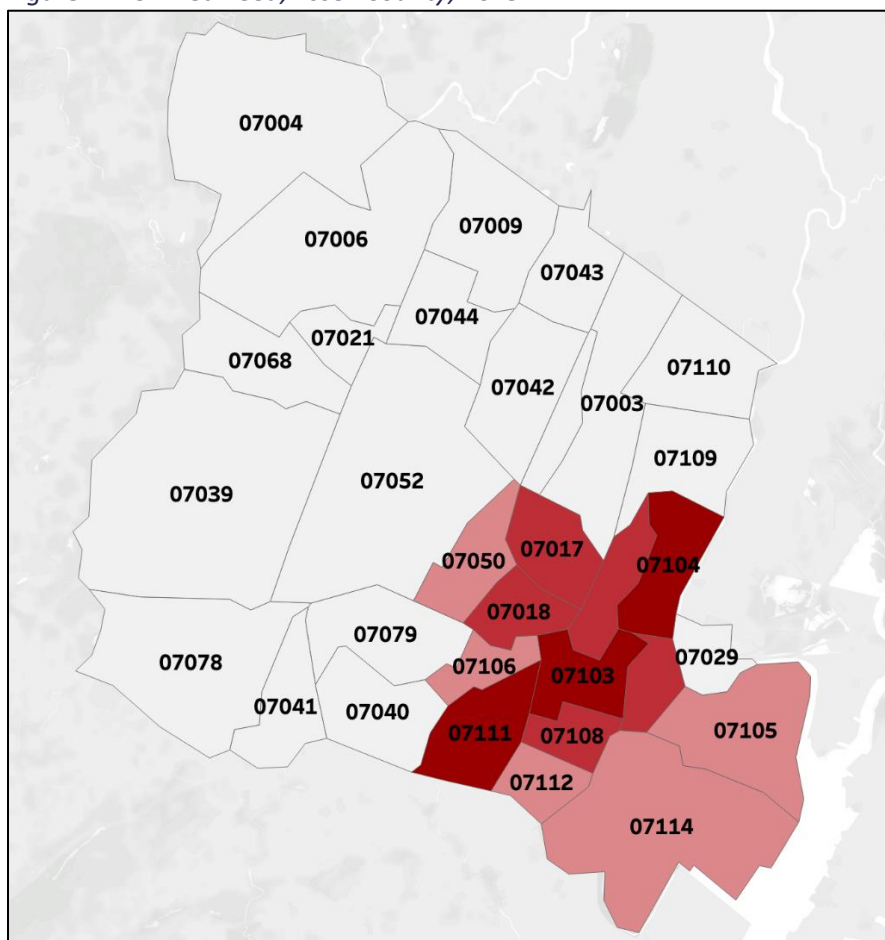
Table 43: Unmet Need by Sex at Birth, Race/Ethnicity, Transmission Category and Age, Essex County, 2019

	Received Care		Unmet Need		Total	
	N	Row%	N	Row%	N	Row%
Total	5375	57	4007	43	9382	100
Sex at birth						
Female	2174	60	1423	40	3597	100
Male	3201	55	2584	45	5785	100
Race\Ethnicity						
Hispanic	1079	59	738	41	1817	100
Non-Hispanic Black/African American	3900	57	2967	43	6867	100
Non-Hispanic White	345	56	274	44	619	100
Other/Unknown	51	65	28	35	79	100
Transmission category						
MSM	1354	65	732	35	2086	100
IDU	730	46	845	54	1575	100
MSM/IDU	96	49	98	51	194	100
Heterosexual contact	2497	61	1630	39	4127	100
Mother-to-child transmission	136	66	71	34	207	100
Other/Unknown Adult Risk	562	47	631	53	1193	100

Age						
<13	17	89	†	†	†	100
13-19	23	85	†	†	†	100
20-24	103	77	30	23	133	100
25-34	687	68	325	32	1012	100
35-44	851	61	545	39	1396	100
45-54	1300	55	1054	45	2354	100
55-64	1598	55	1330	45	2928	100
>=65	796	53	717	47	1513	100

In the municipality of Irvington (07111) and two municipalities of Newark (07103, 07104), there was an unmet need of 9%-12% among persons living with HIV. In two municipalities of East Orange (07017, 07018) and one municipality of Newark (07108) there was an unmet need of 6%-9% among persons living with HIV. In four municipalities of Newark (07105, 07106, 07112, 07114) and one municipality in Orange (07050), there was an unmet need of %3-6% among persons living with HIV (Figure 44).

Figure 44: Unmet Need, Essex County, 2019



Percent Unmet Need, Essex County	
0%-3%	
3%-6%	
6%-9%	
9%-12%	

VIII. Survival Analysis

i. Progression from HIV to AIDS and Survival Curves after AIDS Diagnosis by Sex at Birth, New Jersey/Essex

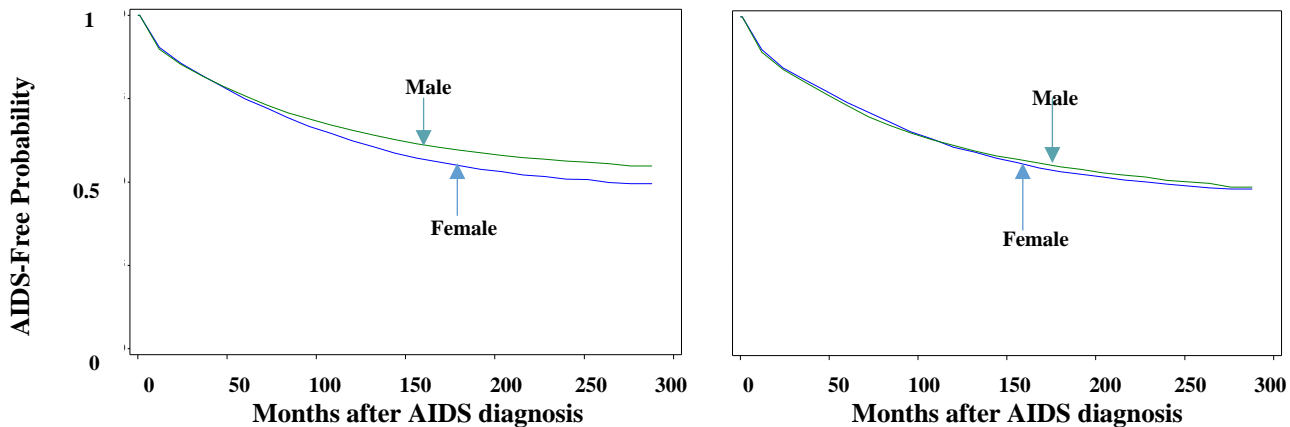
The observed differences in progression from HIV to AIDS and on survival after AIDS diagnosis between males and females (Figure 45) are mixed during 1996-2018. Progression from HIV to AIDS has been equal among males and females in the early period in NJ. However as compared to the state, in Essex County it has the same progression throughout the time period. Past 5-years males have shown slower progression to AIDS than females in the state but the same is not true for the county. However higher proportion of males than females were diagnosed at AIDS (i.e., their progression to AIDS were included here because they came in as AIDS). Indeed, the observed difference between males and females in progression to AIDS is limited at late times after HIV diagnosis and the curves cross after 5 years of HIV diagnosis. Likewise, survival after AIDS diagnosis was similar, with females showing higher survival at early times after diagnosis in the state. Overall, from 1996-2018, the survival among females was higher as compared to males in Essex County.

Figure 45: Progression to AIDS and Survival Curves after AIDS Diagnosis by Sex at Birth, 1996-2018

Progression to AIDS and Survival Curves after AIDS Diagnosis by Sex at Birth*

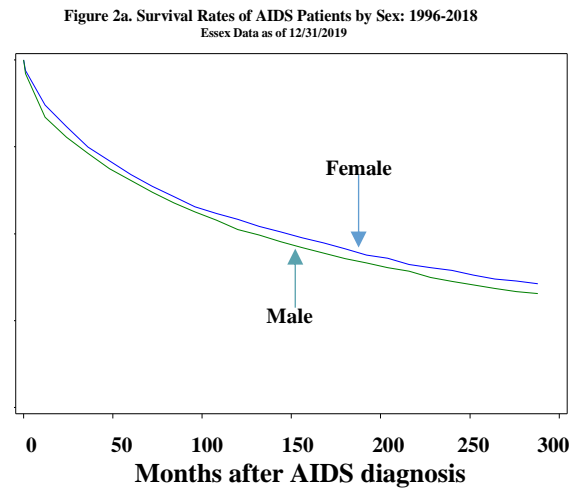
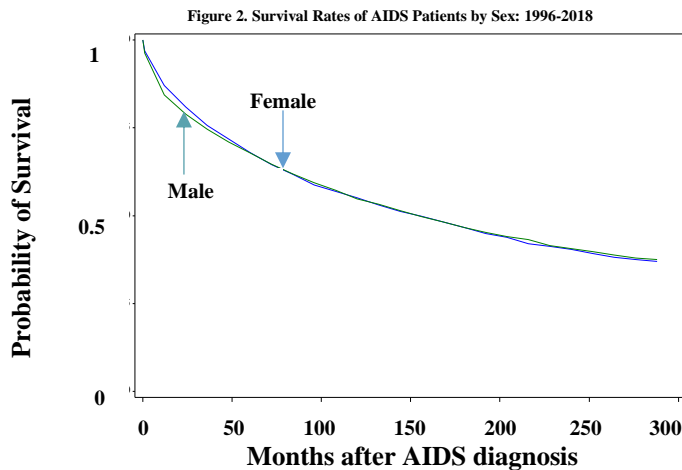
AIDS-Free Survival Curves, New Jersey

AIDS-Free Survival Curves, Essex



*Note: Y axis is the same for both the graphs

Survival Rates of AIDS patients, New Jersey Survival Rates of AIDS patients, Essex



*Note: Y axis is the same for both the graphs

Progression to AIDS and Survival Curves after AIDS Diagnosis	
Female	
Male	

ii. Progression from HIV to AIDS and Survival Curves after AIDS Diagnosis by Race/Ethnicity, New Jersey/Essex

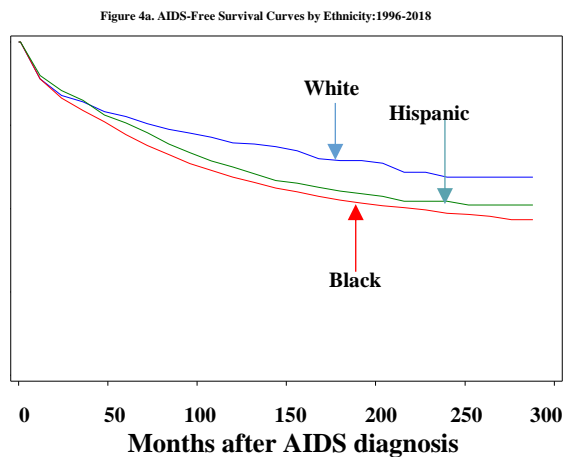
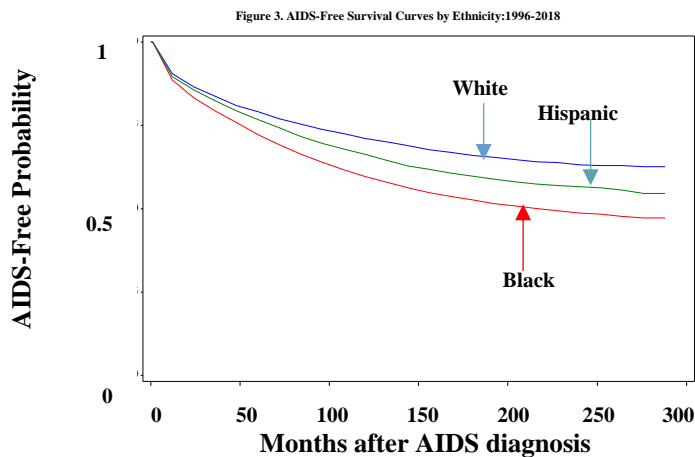
As compared to Essex county, ethnic differences in progression to AIDS and on survival from AIDS to death show that Black Non-Hispanics and Hispanic patients progress to AIDS significantly faster than White Non-Hispanics in the state (Figure 46). Black Non-Hispanics in particular experienced a considerably faster progression from HIV to AIDS and higher mortality after AIDS diagnosis. However, despite the fact that Hispanics progressed to AIDS significantly than non-Hispanic Whites; they have shown a higher survival after AIDS diagnosis than non-Hispanic White. In Essex county, progression to AIDS is slower for White Non-Hispanics as compared to Black Non-Hispanic and Hispanics. Survival rates among AIDS patients was the lowest in Black Non-Hispanics as compared to other ethnicities in the county. There has been an improvement of Hispanics over time that maybe related to a higher survival or an improvement in reporting mortality for Hispanics. Racial and ethnic differences in survival rates may reflect, at least in part, differences in access to medical care, as documented in the literature. Hispanic mortality may also be affected by a differential in mortality reports.

Figure 46: Progression to AIDS and Survival Curves after AIDS Diagnosis by Race and Ethnicity, 1996-2018

Progression to AIDS and Survival Curves after AIDS Diagnosis by Race/Ethnicity*

AIDS-Free Survival Curves, New Jersey

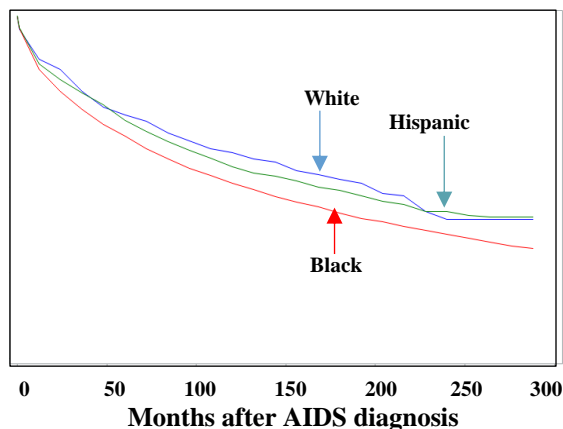
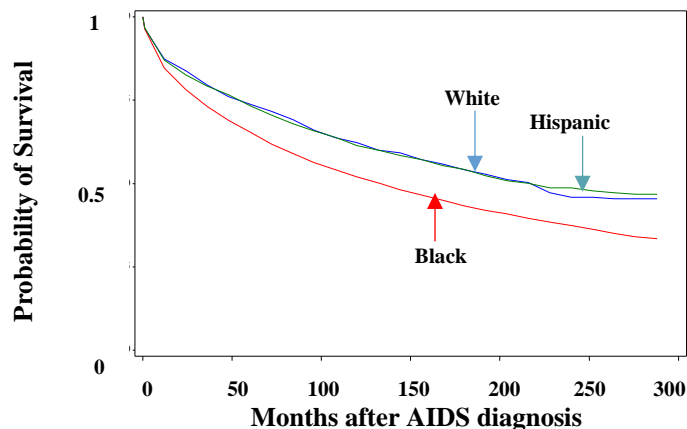
AIDS-Free Survival Curves, Essex



*Note: Y axis is the same for both the graphs

Survival Rates of AIDS patients, New Jersey

Survival Rates of AIDS patients, Essex



*Note: Y axis is the same for both the graphs

Progression to AIDS and Survival Curves after AIDS Diagnosis	
Non-Hispanic White	
Non-Hispanic Black/African American	
Hispanic	

iii. Progression from HIV to AIDS and Survival Curves after AIDS Diagnosis by Transmission category, New Jersey/Essex/Hudson, 2014-2018

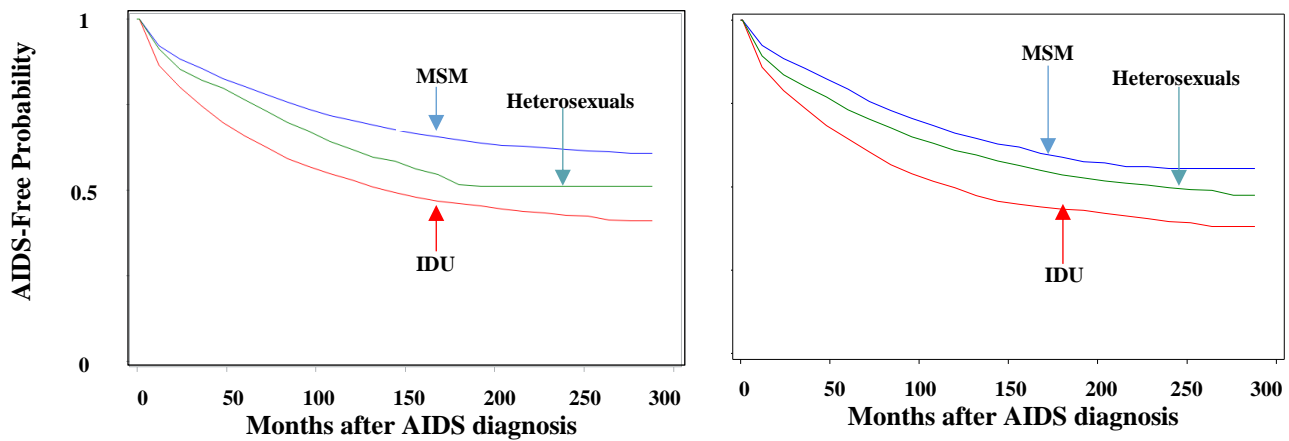
In both the state and the county, differences in progression to AIDS and in survival after AIDS diagnosis by major exposure groups show that those whose HIV exposure was injecting drug

use have experienced significantly faster progression to AIDS and higher mortality after AIDS diagnosis than those whose HIV disease exposure was heterosexual sex or men having sex with men (Figure 47). MSM have shown slower progression to AIDS and higher survival after AIDS diagnosis than heterosexual and IDUs.

Figure 47: Progression to AIDS and Survival Curves after AIDS Diagnosis by Transmission Category, 1996-2018

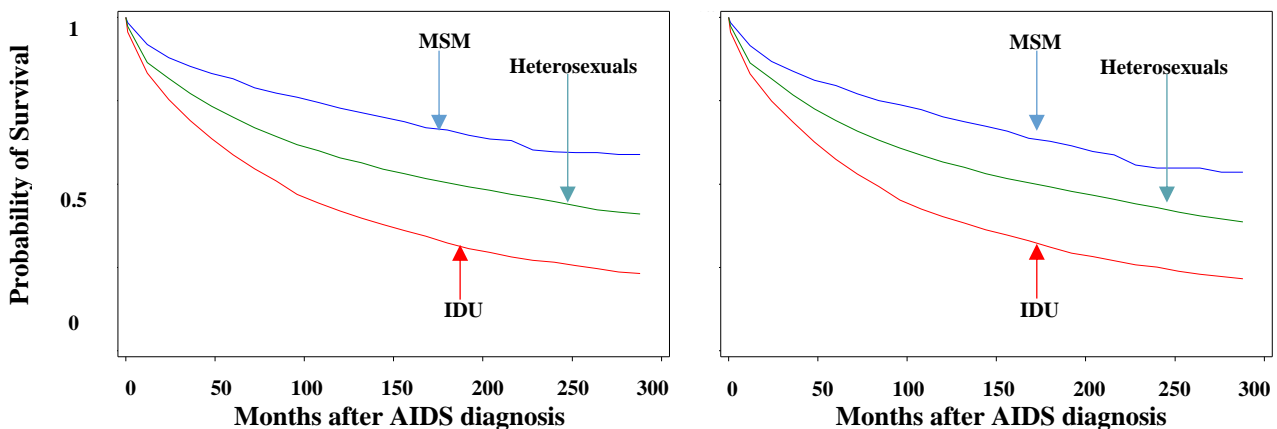
Progression to AIDS and Survival Curves after AIDS Diagnosis by Transmission Category*

AIDS-Free Survival Curves, New Jersey AIDS-Free Survival Curves, Essex



*Note: Y axis is the same for both the graphs

Survival Rates of AIDS patients, New Jersey Survival Rates of AIDS patients, Essex



*Note: Y axis is the same for both the graphs

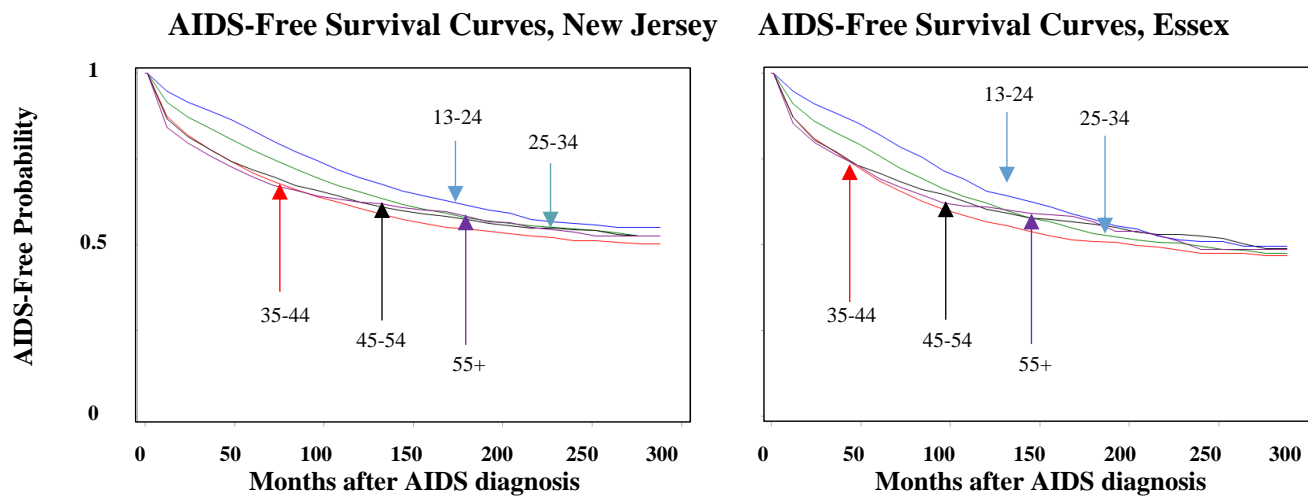
Progression to AIDS and Survival Curves after AIDS Diagnosis	
MSM	
IDU	
Heterosexuals	

iv. Progression from HIV to AIDS and Survival Curves after AIDS Diagnosis by Age Group, New Jersey/Essex/Hudson 2014-2018

Marked differences in progression to AIDS and in survival after AIDS diagnosis occurred by age at AIDS diagnosis. Progression from HIV to AIDS increases significantly by age and survival after AIDS diagnosis decreases significantly with age. Figure 48 shows that those diagnosed at younger ages of 13-24 consistently show slower progression from HIV to AIDS and improved survival compared to those who were diagnosed with AIDS when they were older, aged 55+. AIDS-free curves at older ages fluctuates as the sample at risk attenuates.

Figure 48: Progression from HIV to AIDS and Survival Curves after AIDS Diagnosis by Age Group, 1996-2018

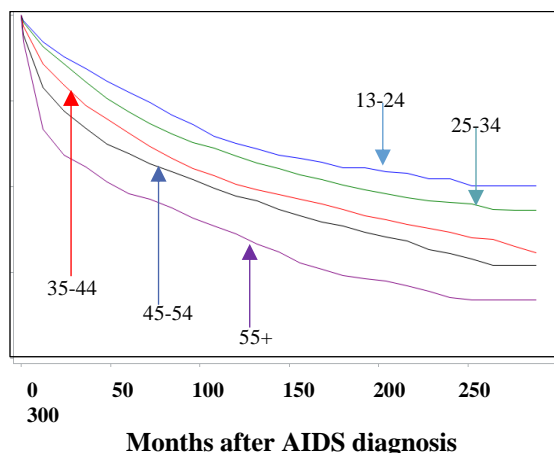
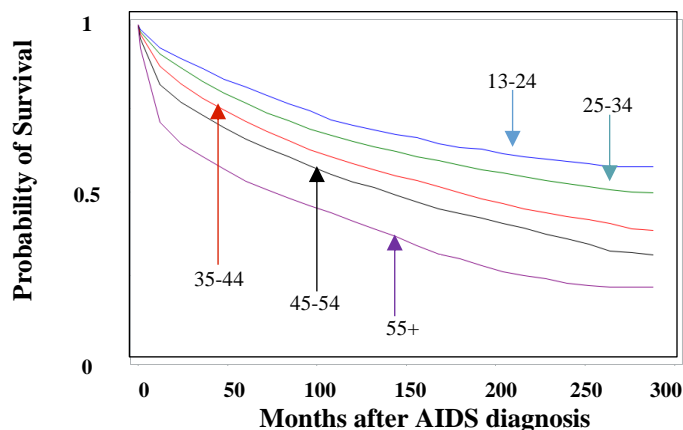
Progression to AIDS and Survival Curves after AIDS Diagnosis by Age Category*








*Note: Y axis is the same for both the graphs

Survival Rates of AIDS patients, New Jersey

Survival Rates of AIDS patients, Essex



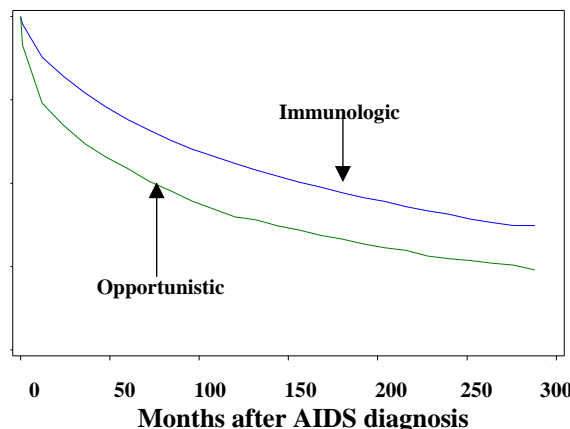
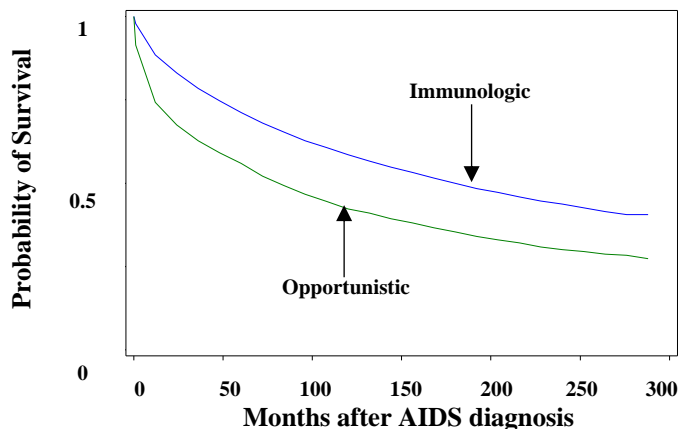
Progression to AIDS and Survival Curves after AIDS Diagnosis	
13-24	
25-34	
35-44	
45-54	
=55+	

v. Survival estimates by clinical stage, New Jersey and Essex, 1996-2018
 Similarly, marked differences in survival rates after AIDS diagnosis occurred by the clinical stage at diagnoses. Figure 49 shows that those diagnosed with opportunistic infections had a higher mortality rate as compared to those diagnosed with immunologic infections.

Figure 49: Survival Curves by Clinical Stage, 1996-2018

Survival Rates of AIDS patients, NJ

Survival Rates of AIDS patients, Essex, NJ



Progression to AIDS and Survival Curves after AIDS Diagnosis	
Immunologic	
Opportunistic	

Section D: EHE Pillar 'Prevent'

I. HIV Testing

i. HIV testing in New Jersey by Year and Demographics, 2017-2019

CDC recommends that everyone between the ages of 13 and 64 get tested for HIV at least once as part of routine health care. For those at higher risk, CDC recommends getting tested at least once a year (Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, 2020). As of 2017, per the NJ Behavioral Health Risk Factor Survey, 55.6% of Essex County residents had been tested for HIV in their lifetime.

The NJDOH DHSTS funded Counseling and Testing Sites (CTS) make free testing available to clients at 164 locations (as of 2018) in New Jersey of which 27 are in Essex County. Of the total 215,511 HIV tests conducted in New Jersey between 2017-2019, 54,221 (25.1%) were in Essex County.

ii. HIV testing in Essex County by Year and Demographics, 2017-2019

Data indicate that the CTS sites in Essex County conducted 24.6% fewer tests in 2019 (15,063) as compared to 2017 (19,981). Out of the 54,221 clients that were tested in Essex County between 2017-2019, 48.9% were male, 50.7% were female and .4% belonged to the transgender community. Of the same population, 67.9% were Black/African American/African American, 25.2% were Hispanic, and 4.7% were White. For those who received an HIV test, 3.5% were between 13-19 years, 28.6% were between 20-29 years, 24.9% were 30-39, and 19.1% were 40-49 years, 17.5% were 50-59 years and 6.2% were above 60 years old. For identified transmission risk factor of the same group, 6.25% were gay or bisexual men, 79.8% were heterosexuals, 12.3% had unknown or other risk, and 1.5% were persons who inject drugs. Between 2017. 2019, less than 1% of the conducted tests were positive for HIV.

Table 44: HIV Testing Numbers among Counseling and Testing Sites in Essex County by Gender, Race/Ethnicity, Transmission Category and Age

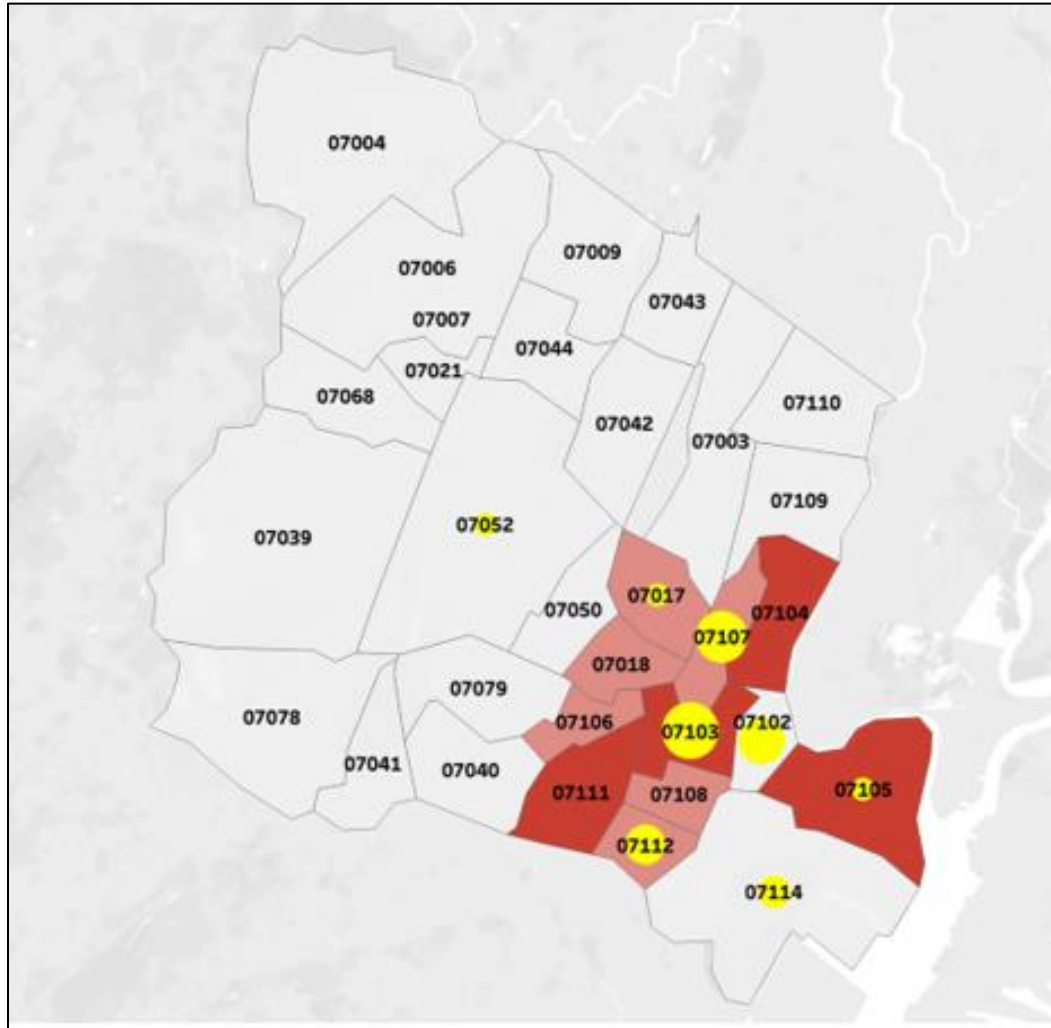
HIV Testing in Essex by Year						
	2017		2018		2019	
	No. of tests	No. of HIV Positive Tests	No. of tests	No. of HIV Positive Tests	No. of tests	No. of HIV Positive Tests
Gender						
Men	9952	68	9457	68	7102	26
Women	9962	128	9636	128	7882	100
Transgender^{aa}	55	0	60	0	52	0
Transgender^{bb}	3	3	14	3	17	3
Other	9	0	10	0	10	0

Race						
Hispanic, All races	4882	47	4737	53	4075	36
American Indian/Alaska Native	25	0	44	3	17	0
Asian	144	1	158	0	118	1
Black/African American	13752	136	13012	126	10061	86
Native Hawaiian/Other Pacific Islander	30	1	38	0	43	0
White	967	10	1000	9	619	0
Multiple Race	52	2	75	1	42	2
Unknown	129	2	113	1	88	4
Age						
Age<13	9	0	8	0	4	0
Age 13 to 19	733	1	706	4	480	2
Age 20 to 29	5770	63	5395	42	4336	37
Age 30 to 39	5032	38	4636	55	3822	34
Age 40 to 49	3775	30	3703	43	2919	17
Age 50 to 59	3461	47	3518	34	2538	27
Age 60 and over	1201	20	1211	15	964	12
Transmission						
MSM	1212	65	1219	59	963	61
IDU	309	6	274	10	239	2
MSM/IDU	14	1	11	2	29	1
Heterosexual contact	15778	96	15127	89	12381	53
Other/Unknown Adult Risk	2668	26	2546	27	1451	
Total	19981	199	19177	193	15063	129

Transmission category data presented by sex at birth and include transgender persons.
 Other/unknown- transmission category includes hemophilia, blood transfusion, perinatal, and risk not reported or not identified.
 Other race category includes >Declined, Don't know, Not asked
 aa "Transgender male-to-female" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender.
 bb "Transgender female-to-male" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender.

The map below (Figure 50) shows the zip codes with the highest percentage of new HIV diagnoses in Essex County from 2014-2018. The map also displays the location of Counseling and Testing Sites in Essex County. The size of the circle indicates the number of testing sites carried out by each Counseling and Testing Site. The larger the size of the circle, the greater number of sites in that location.

Figure 50: Percentage of newly diagnosed HIV Cases by Zip Code with number of NJDOH Funded Counseling Testing Sites, Essex County, 2014-2018



Percentage of newly diagnosed cases by testing sites, Essex County	
0%-4%	[Lightest Yellow Box]
4%-8%	[Light Red Box]
8%-12%	[Dark Red Box]
Number of tests done at Counseling and Testing sites	[Yellow Box]

II. Pre-Exposure Prophylaxis (PrEP)

PrEP (pre-exposure prophylaxis) is medicine people at risk for HIV take to prevent getting HIV from sex or injection drug use (Centers for Disease Control and Prevention, 2020). In June 2019 the U.S. Preventive Services Task Force (USPSTF) issued a Grade A recommendation for providers to offer PrEP to people at high risk for HIV. With this recommendation, beginning in January 2021, patients with private insurance plans subject to preventive service requirements

or health coverage through Medicaid Expansion can receive first-dollar coverage (no cost-sharing) for their PrEP medication (U.S. Department of Health and Human Services, 2020).

Per CDC ATLAS data, which uses national pharmacy data from the IQVIA Real World Data-Longitudinal Prescriptions database to classify persons aged ≥16 years who have been prescribed PrEP in the specific year (Centers for Disease Control and Prevention, 2020), in 2018 627 individuals were prescribed PrEP in Essex County. 82 individuals of those prescribed belonged to the 13-24 age group, 247 individuals were from the 25-34 age group, 153 were from the 35-44 age group, 105 were 45-54 years and 40 in the 55+ age group.

In New Jersey, PrEP is available through NJDOH funded programs located at Hyacinth Newark, Newark Beth Israel Medical Center, North Jersey Community Research Initiative, Rutgers Infectious Disease Practice and St. Michael’s Medical Center to clients who cannot afford the medication. The programs saw a total of 2249 new and re-activated clients between 2017-2019. In the same period, 570 clients were served in Essex County, which is approximately 25 % of the funded sites' clientele.

Table 45: Pre-Exposure Prophylaxis in New Jersey by Year, 2017-2019

Pre-Exposure Prophylaxis in New Jersey by Year						
	2017		2018		2019	
	N	%	N	%	N	%
Gender						
Men	351	82.4	699	80.3	821	86.1
Women	68	16.0	160	18.4	110	11.5
Transgender ^{aa}	6	1.4	9	1.0	18	1.9
Transgender ^{bb}	1	0.2	2	0.2	3	0.3
Other	0	0.0	0	0.0	1	0.1
Total	426	100.0	870	100.0	953	100.0
Race						
Hispanic	203	47.7	353	40.6	454	47.6
Black/African American/African American	124	29.1	264	30.3	229	24.0
White	75	17.6	190	21.8	204	21.4
American Indian/Alaskan Native	1	0.2	6	0.7	2	0.2
Asian	18	4.2	35	4.0	46	4.8
Multiracial	2	0.5	10	1.1	2	0.2

Native Hawaiian/Other Pacific Islander	0	0.0	1	0.1	1	0.1
Other Race	1	0.2	6	0.7	7	0.7
Don't Know or Refused	1	0.2	3	0.3	6	0.6
Unknown	1	0.2	2	0.2	2	0.2
Total	426	100	870	100	953	100
Age						
<13	2	0.5	1	0.1	0	0.0
13-19	10	2.3	42	4.8	54	5.7
20-24	80	18.8	161	18.5	189	19.8
25-34	185	43.4	364	41.8	399	41.9
35-44	85	20.0	156	17.9	183	19.2
45-54	44	10.3	110	12.6	79	8.3
55-64	14	3.3	34	3.9	41	4.3
65>	6	1.4	2	0.2	8	0.8
Total	426	100	870	100	953	100
Transmission						
MSM	328	83.0	639	80.7	758	85.0
High risk women	61	15.4	139	17.6	111	12.4
IDU	1	0.3	3	0.4	7	0.8
Transgender	5	1.3	11	1.4	16	1.8
Total	395	100	792	100	892	100
If in any cell, 'a' --> Not Applicable/Missing. Transmission category data presented by sex at birth and include transgender persons.						
Other/unknown- transmission category includes hemophilia, blood transfusion, perinatal, and risk not reported or not identified.						
Other race category includes >Declined, Don't know, Not asked						
aa "Transgender male-to-female" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender.						
bb "Transgender female-to-male" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender.						

Of the 570 clients to receive a PrEP prescription between 2017-2019, 74.7% were male, 22.8% were female and 2.1% were male-to-female transgender. Of the same population, 44.9% were Black/African American/African American, 38.2 % were Hispanic, and 11.4% were White. For those who received a PrEP prescription, 5.2% were between 13-19, 15.4% were between the ages of 20-24, 38.4% were 25-34, and 23.85% were 35-44. For identified transmission risk factor of the same group, 72.5% were gay or bisexual men and 24.7% were women at high risk. Data for injection drug users and persons from transgender communities were suppressed.

Table 46: Pre-Exposure Prophylaxis in Essex County by Year, 2017-2019

Pre-Exposure Prophylaxis in Essex County by Year						
	2017		2018		2019	
	N	%	N	%	N	%
Gender						
Men	87	77.0	191	72.3	148	76.7
Women	25	22.1	68	25.8	37	19.2
Transgender ^{aa}	1	0.9	4	1.5	7	3.6
Transgender ^{bb}	0	0.0	1	0.4	1	0.5
Other	0	0.0	0	0.0	0	0.0
Total	113	100.0	264	100.0	193	100.0
Race						
Hispanic	47	41.6	79	29.9	92	47.7
Black/African American/African American	45	39.8	136	51.5	75	38.9
White	14	12.4	35	13.3	16	8.3
American Indian/Alaskan Native	1	0.9	5	1.9	0	0.0
Asian	3	2.7	1	0.4	7	3.6
Multiracial	2	1.8	6	2.3	0	0.0
Other Race	0	0.0	1	0.4	1	0.5
Don't Know or Refused	1	0.9	1	0.4	2	1.0
Unknown	0	0.0	0	0.0	0	0.0
Total	113	100	264	100	193	100
Age						
<13	1	0.9	1	0.4	0	0.0
13-19	3	2.7	15	5.7	12	6.2
20-24	18	15.9	38	14.4	32	16.6
25-34	46	40.7	105	39.8	68	35.2
35-44	27	23.9	57	21.6	52	26.9
45-54	14	12.4	36	13.6	20	10.4
55-64	2	1.8	12	4.5	7	3.6
65>	2	1.8	0	0.0	2	1.0
Total	113	100	264	100	193	100

Transmission						
MSM	78	78.8	159	69.4	121	72.9
High risk women	19	19.2	64	27.9	39	23.5
IDU	1	1.0	0	0.0	1	0.6
Transgender	1	1.0	6	2.6	5	3.0
Total	99	100	229	100	166	100
If in any cell, 'a' --> Not Applicable/Missing. Transmission category data presented by sex at birth and include transgender persons.						
Other/unknown- transmission category includes hemophilia, blood transfusion, perinatal, and risk not reported or not identified.						
Other race category includes >Declined, Don't know, Not asked						
aa "Transgender male-to-female" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender.						
bb "Transgender female-to-male" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender.						

III. Safe Syringe Access

Harm Reduction Programs/ Syringe Access Programs are community-based programs that offer a safe, non- stigmatizing space for people who inject drugs (PWID) to access sterile syringes, needles and other injection equipment, and facilitate safe disposal of used needles and syringes. Some HRCs are housed in Drop-In Centers that provide clients with access to food, telephone, laundry services, restrooms, showers, and computer services. HRC services include Trauma-Informed Harm Reduction Education sessions and prevention supplies such as syringes, needles, tourniquets, band aids, alcohol wipes, sharp containers, cotton, cookers, antiseptic ointments, and hygiene/dignity kits. In addition to these, HRCs also include safe disposal of injection equipment; risk reduction education for HIV and viral hepatitis; education on safer sex and safer injection practices; overdose prevention education and access to Naloxone and fentanyl test strips. Referrals and linkages to drug treatment, medical care, and social and mental health services and counseling and education on PrEP/nPEP are also available.

New Jersey has a harm reduction center, Hyacinth AIDS Foundation, in the Newark location in Essex County. Of the 968 Essex participants that accessed the Center's services between 2017 and 2019, 55.9% were White, 23.1% were Hispanic, and 18.9% were Black/African American. Of the same group, 65.4% were male and 30.3% were female. 79.2% were between 25-54 years.

Table 47: Persons who received services at a grant funded Harm Reduction Center, New Jersey and Essex County, 2017-2019

Persons who received services at Harm Reduction Center, New Jersey and Essex County, 2017-2019				
	Essex County, NJ		NJ	
Sex at birth	N	%	N	%
Males	514	65.4	2553	67.1
Females	238	30.3	1170	30.8
Transgender ^{aa}	2	0.3	11	0.3
Transgender ^{bb}	3	0.4	12	0.3
Transgender	1	0.1	2	0.1
Year Missing	28	3.6	55	1.4

Total	786	100.0	3803	100.0
Age at Diagnosis:				
<13	0	0.0	0	0.0
13-19	5	0.6	35	0.9
20-24	46	5.9	294	7.7
25-34	249	31.7	1360	35.8
35-44	204	26.0	934	24.6
45-54	170	21.6	773	20.3
55-64	74	9.4	306	8.0
65>	10	1.3	44	1.2
Missing	28	3.6	57	1.5
Total	786	100.0	3803	100.0
Race /Ethnicity:				
Hispanic	182	18.8	548	12.6
American Indian/Alaska Native	3	0.3	18	0.4
Asian	6	0.6	17	0.4
Black/African American	149	15.4	697	16.0
Native Hawaiian/Other Pacific Islander	1	0.1	11	0.3
White	433	44.7	2359	54.2
Multiple Race	13	1.3	83	1.9
Unknown	11	1.1	287	6.6
Other	141	14.6	275	6.3
Missing	29	3.0	56	1.3
Total	968	100	4351	100

Transmission category data presented by sex at birth and include transgender persons.
 Other/unknown- transmission category includes hemophilia, blood transfusion, perinatal, and risk not reported or not identified.
 Other race category includes >Declined, Don't know, Not asked.
 aa "Transgender male-to-female" includes individuals who were assigned "male" sex at birth but have ever identified as "female" gender.
 bb "Transgender female-to-male" includes individuals who were assigned "female" sex at birth but have ever identified as "male" gender.

In 2019, the Harm Reduction Center based in Newark had 149 newly enrolled participants and 603 unduplicated participants accessed the program with 211,155 syringes dispensed. There were 2,721 total exchanges and 162,879 syringes returned, totaling a syringe return rate of 77%. Of the clients who accessed services, 6 clients were referred to drug treatment and of which 4 clients were successfully admitted for drug treatment, totaling a drug treatment admission rate of 67%.

As of December 2020, the Harm Reduction Center based in Newark had 59 newly enrolled participants, 455 unduplicated participants accessed the program with 127,119 syringes dispensed. There were

1,566 total syringe exchanges and 92,612 syringes returned, totaling a syringe return rate of 73%. Of all the clients who accessed HRC services, 1 client was referred to drug treatment pending admission.

IV. Access to Reproductive Care and HIV Services (ARCH)

The Access to Reproductive Care and HIV Services (ARCH) is a comprehensive initiative that embeds a licensed registered nurse at each of the seven Syringe Access Programs (SAP) located in Asbury Park, Atlantic City, Camden, Jersey City, Newark, Paterson and Trenton. The integration of ARCH with the SAPs optimizes outreach to injection drug users (IDUs) who otherwise may not seek healthcare and are at high risk for infection. The ARCH program utilizes nurses to enhance the services of SAPs and Local Health Departments by offering basic health and health education services. While serving all genders, the program maintains a disease prevention focus on women at risk for HIV and Hepatitis C (HCV) employing disease prevention interventions and identifying women who are HIV/HCV-infected and/or pregnant, referring them to prenatal and HIV/HCV care.

Table 48: Access to Reproductive Care and HIV Services, 2017-2019

Demographics	2017				2018				2019			
	NJ		Essex		NJ		Essex		NJ		Essex	
	N	%	N	%	N	%	N	%	N	%	N	%
Age(years)												
13-19	19	3.92	0	0.00	73	5.40	0	0.00	121	4.40	5	2.87
20-24	75	15.46	3	3.70	167	12.36	10	6.17	360	13.10	12	6.90
25-34	162	33.40	25	30.86	388	28.72	50	30.86	834	30.35	63	36.21
35-44	93	19.18	21	25.93	256	18.95	40	24.69	500	18.20	37	21.26
45-54	73	15.05	17	20.99	231	17.10	42	25.93	407	14.81	39	22.41
55-64	45	9.28	14	17.28	174	12.88	15	9.26	374	13.61	16	9.20
65>	9	1.86	1	1.23	62	4.59	5	3.09	152	5.53	2	1.15
Missing	9	1.86	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Total	485	100	81	100.00	1351	100	162	100.00	2748	100	174	100.00
Gender												
Male	300	61.86	51	62.96	760	56.25	109	67.28	1562	56.84	112	64.37
Female	183	37.73	30	37.04	590	43.67	53	32.72	1175	42.76	62	35.63
Transgender	2	0.41	0	0.00	1	0.07	0	0.00	11	0.40		0.00
Total	485	100	81	100.00	1351	100	162	100.00	2748	100	174	100.00
Race/Ethnicity												
American Indian/ Alaskan Native	3	0.62	0	0.00	2	0.15	0	0.00	3	0.11	0	0.00
Asian	16	3.30	0	0.00	23	1.70	0	0.00	68	2.47	1	0.57
Biracial	7	1.44	2	2.47	27	2.00	0	0.00	34	1.24	1	0.57

Black/African American/African American	194	40.00	58	71.60	410	30.35	116	71.60	761	27.69	107	61.49
Native American/Other Pacific Islander	2	0.41	0	0.00	1	0.07	0	0.00	5	0.18	0	0.00
White	155	31.96	9	11.11	641	47.45	32	19.75	1302	47.38	30	17.24
Other	2	0.41	0	0.00	9	0.67	0	0.00	17	0.62	0	0.00
Don't Know or Refused	4	0.82	1	1.23	4	0.30	1	0.62	19	0.69	0	0.00
Hispanic Ethnicity	102	21.03	11	13.58	234	17.32	13	8.02	539	19.61	35	20.11
Total	485	100	81	100.00	1351	100	162	100.00	2748	100	174	100.00
Transmission Category												
High Risk Sexual Activities	291	57.17	38	45.24	798	56.36	94	50.81	1813	61.17	174	81.69
Injection Drug User	186	36.54	14	16.67	345	24.36	93	50.27	518	17.48	113	53.05
Needle Sharing Partner of IDU	53	10.41	12	14.29	157	11.09	85	45.95	136	4.59	2	0.94
Sexual Partner of IDU	72	14.15	5	5.95	175	12.36	59	31.89	243	8.20	0	0.00
Tests												
HIV	325	63.85	77	95.06	563	39.76	122	65.95	1015	34.24	120	56.34
HIV +	3	0.59	0	0.00	3	0.21	0	0.00	5	0.17	1	0.47
Hepatitis C	202	39.69	73	90.12	305	21.54	120	64.86	769	25.94	112	52.58
Hepatitis C +	34	6.68	6	7.41	39	2.75	5	2.70	69	2.33	1	0.47
Hepatitis B	3	0.59	1	1.23	13	0.92	0	0.00	68	2.29	0	0.00
Hepatitis B+	0	0.00	0	0.00	2	0.14	0	0.00	8	0.27	0	0.00
Gonorrhea	296	58.15	7	8.64	692	48.87	38	20.54	1405	47.40	78	36.62
Gonorrhea +	2	0.39	0	0.00	29	2.05	1	0.54	82	2.77	15	7.04
Chlamydia	291	57.17	8	9.88	672	47.46	37	20.00	1406	47.44	80	37.56
Chlamydia +	1	0.20	0	0.00	72	5.08	1	0.54	152	5.13	14	6.57
Syphilis	88	17.29	8	9.88	253	17.87	30	16.22	908	30.63	54	25.35
Syphilis +	4	0.79	1	1.23	7	0.49	1	0.54	52	1.75	4	1.88
Trichomoniasis	1	0.20	0	0.00	192	13.56	4	2.16	458	15.45	1	0.47
Trichomoniasis +	0	0.00	0	0.00	23	1.62	0	0.00	42	1.42	0	0.00
TB	4	0.79	0	0.00	4	0.28	0	0.00	166	5.60	0	0.00
TB+	0	0.00	0	0.00	0	0.00	0	0.00	5	0.17	0	0.00
Pregnancy	41	8.06	9	11.11	75	5.30	31	16.76	139	4.69	45	21.13
Pregnancy +	10	1.96	1	1.23	1	0.07	0	0.00	15	0.51	5	2.35

V. Intersecting Risks and Populations: HIV, STDs, Tuberculosis and Hepatitis C in New Jersey and Essex County

i. Sexually Transmitted Diseases and Co-infection with HIV

STDs and HIV tend to be linked in several ways. The risk factors for STDs and HIV are similar, and a substantial proportion of new HIV infections among men who have sex with other men are attributable to STDs. Research indicates that STD clinics diagnose more new HIV cases than any other healthcare setting, so they are uniquely positioned to help people at high risk prevent HIV or people with HIV stay healthy (National Center of HIV/AIDS, Viral Hepatitis, STD and TB Prevention, 2020).

a. Sexually transmitted disease testing during the 12 months before the interview, by sexual activity, 2015-2018

Among the Essex and Hudson HIV positive interviewees of the NJ MMP Project who had been sexually active in the last 12 months, 63.8% had not received a gonorrhea test, 63.2% had not received a chlamydia test, and 53.4% had no syphilis test on record for the last year.

Table 49: Sexually transmitted disease testing during the 12 months before the interview, by sexual activity, Medical Monitoring Project, Essex and Hudson Counties, New Jersey, 2015-2018

	Total population		Sexually active ^a persons only	
	No. ^b	% ^c	No. ^b	% ^c
Gonorrhea^d				
Yes, received test	92	40.6	46	36.2
No test documented	123	59.4	72	63.8
Chlamydia^e				
Yes, received test	93	40.9	47	36.8
No test documented	122	59.1	71	63.2
Syphilis^f				
Yes, received test	118	52.1	59	46.6
No test documented	97	47.9	59	53.4
Gonorrhea, chlamydia, and syphilis				
Yes, received all 3 tests	79	34.7	40	31.6
Fewer than 3 tests documented	136	65.3	78	68.4
Total	240	100	133	100
a Sexual activity was reported in the interview component of the Medical Monitoring Project and was defined as anal or vaginal intercourse.				
b Numbers are unweighted.				
c Percentages are weighted percentages.				

d Testing for <i>Neisseria gonorrhoeae</i> was defined as documentation of a result from culture, gram stain, EIA, NAAT, or nucleic acid probe.
e Chlamydia trachomatis testing was defined as a result from culture, DFA, EIA or ELISA, NAAT, or nucleic acid probe.
f Syphilis testing was defined as a result from nontreponemal syphilis tests (RPR or VDRL), treponemal syphilis tests (TPHA, TP-PA, MHA-TP, or FTA-ABS tests), or dark-field microscopy.
Note. Information on laboratory testing for sexually transmitted diseases was based on medical record abstraction.
Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding.

b. Number of Sex Partners by Partnership Gender Type among Sexually Active Persons with HIV in Essex and Hudson Counties, 2015-2018

Persons with HIV that had engaged in sexual behavior during the 12 months reported a median of 1-2 sexual partners in the past 12 months. MSM participants in Essex and Hudson’s MMP project a higher mean number of sex partners, with the reported range at 1 to 3 partners for heterosexual females and 1 to 40 partners for MSM.

Table 50: Number of Sex Partners by Partnership Gender Type among Sexually Active Persons with HIV in Essex and Hudson Counties, 2015-2018

Partnership Type	N	Median	Mean	Interquartile Range
Male w/ Female	44	1	2	1-10
Male w/ Male	33	2	5	1-40
Female w/ Male	48	1	1	1-3

Source: New Jersey Medical Monitoring Project, 2015-2018

c. Incidence Rate of Sexually Transmitted Infections in New Jersey, Essex County, 2019

In New Jersey, the incidence rate of chlamydia infections was 4,413.8 per 100,000. In Essex County, the rate of chlamydia infections was nearly one fifth (833.9/100,000) that of New Jersey’s. The rates of gonorrhea and early syphilis infections in Essex County were nearly 2.5 times that of the rates in New Jersey (259.6/100,000 compared to 111.7/100,000 and 37.5/100,000 compared to 15.5/100,000, respectively).

Table 51: Incidence of Sexually Transmitted Infections in New Jersey, Essex County, 2019

Incidence of Sexually Transmitted Infections, New Jersey/Essex County, 2019*		
Sexually Transmitted Infections	New Jersey	Essex County
Chlamydia	4,413.8	833.9
Gonorrhea	111.7	259.6
Early Syphilis	16.5	37.5

*Incidence per 100,000 population

**Early Syphilis: primary, secondary, and non-primary syphilis cases

d. Percentage of Co-Infection with HIV and STDs, New Jersey and Essex County, 2019

In 2019, 2% of sexually transmitted diseases were co-infected with HIV in New Jersey. In Essex County, 3% of sexually transmitted diseases were co-infected with HIV.

Table 52: Percentage Co-Infection for HIV and STD, 2019

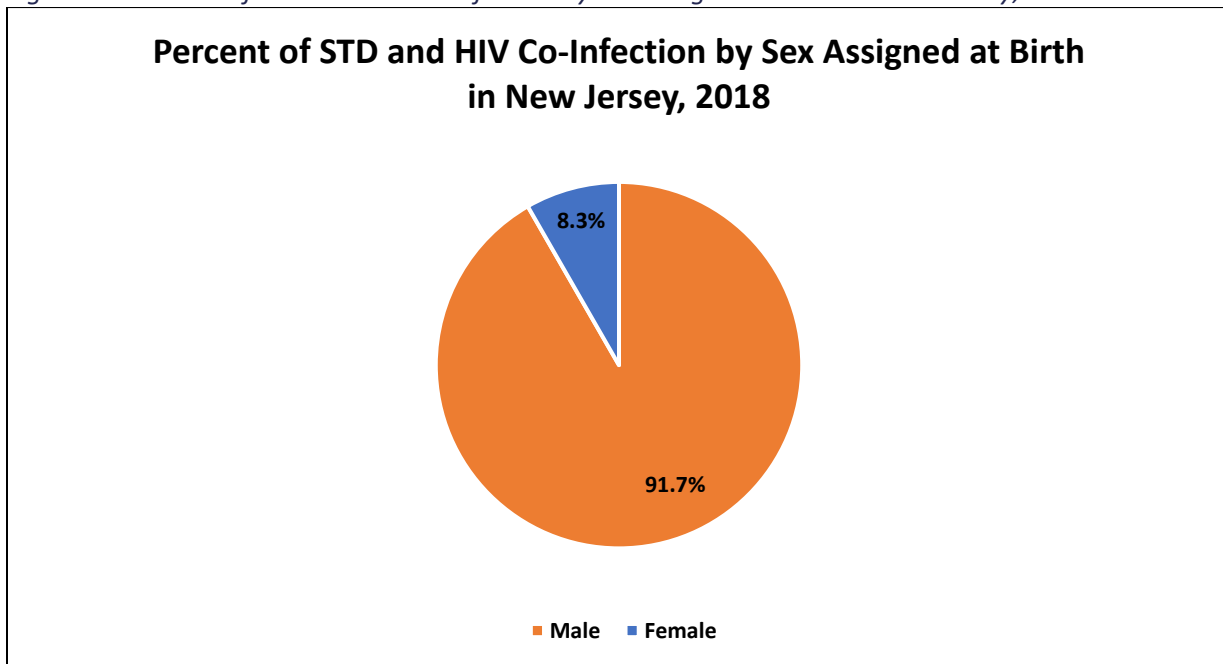
Sexually Transmitted Infections Co-Infected with HIV, 2019		
	New Jersey	Essex County

Percent of Co-Infections with HIV	2%	3%
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e. STD and HIV Co-Infection in New Jersey, 2018

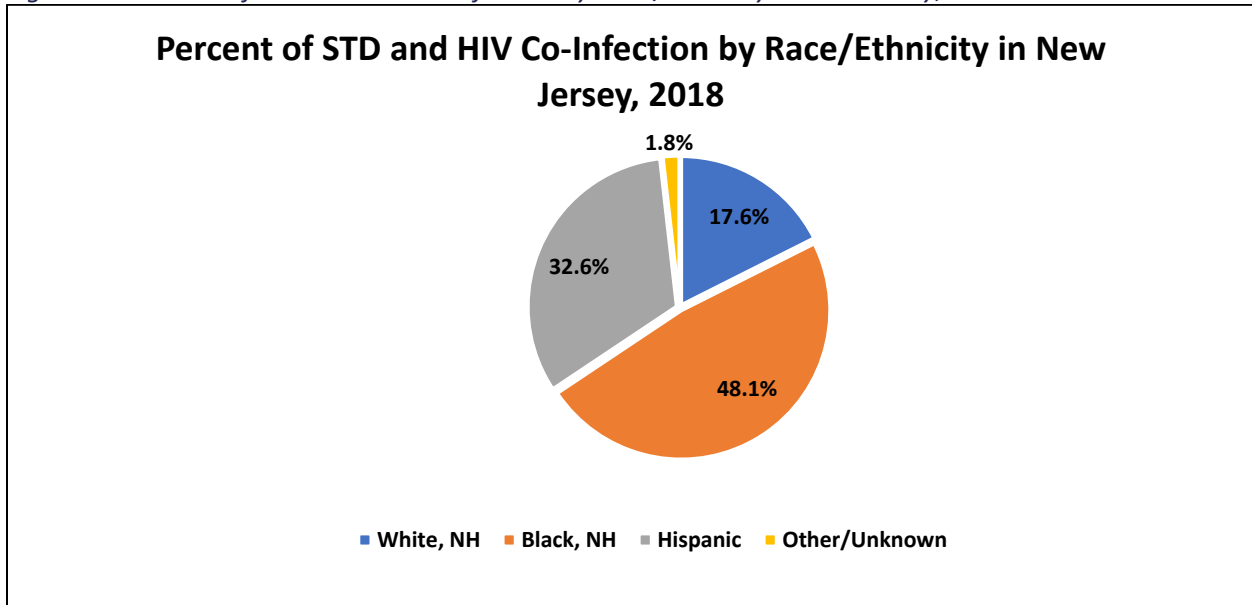
In 2018, 1,111 cases of STD with HIV co-infection were reported in New Jersey. STD and HIV co-infection was more prevalent among males (91.7%) compared to females (8.3%) (Figure 51).

Figure 51: Percent of STD and HIV Co-Infection by Sex Assigned at Birth in New Jersey, 2018



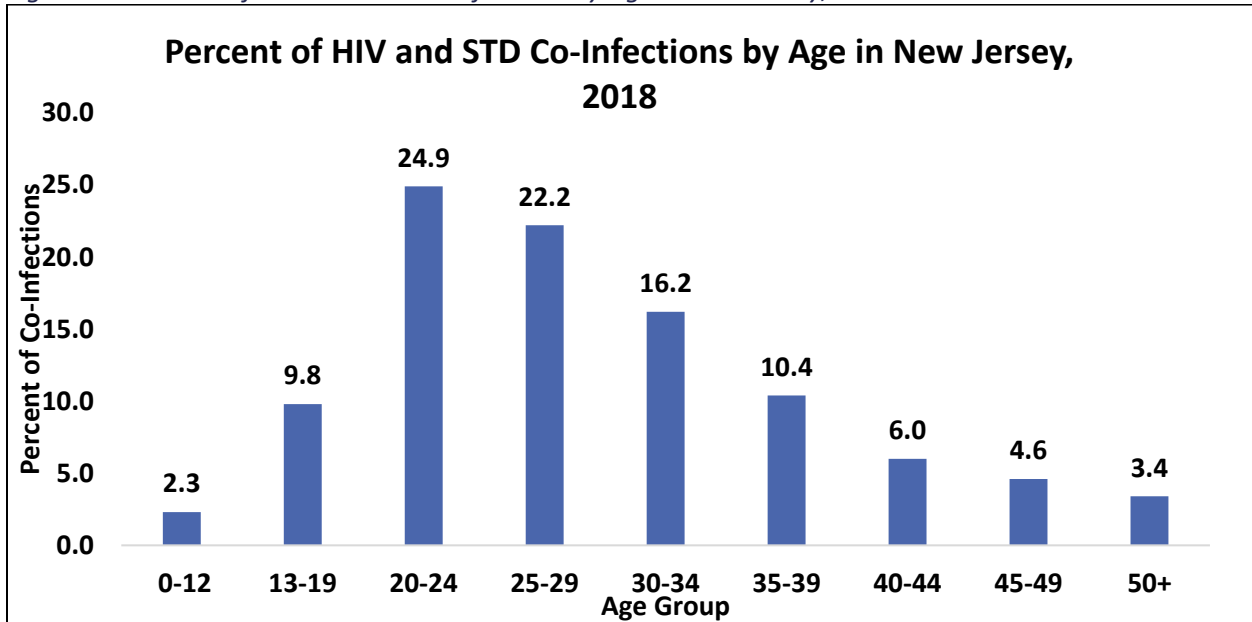
More non-Hispanic Black/African American (48.1%) and Hispanic (32.6%) co-infection cases were identified when compared to non-Hispanic White (17.6%) cases (Figure 52).

Figure 52: Percent of STD and HIV Co-Infection by Race/Ethnicity in New Jersey, 2018



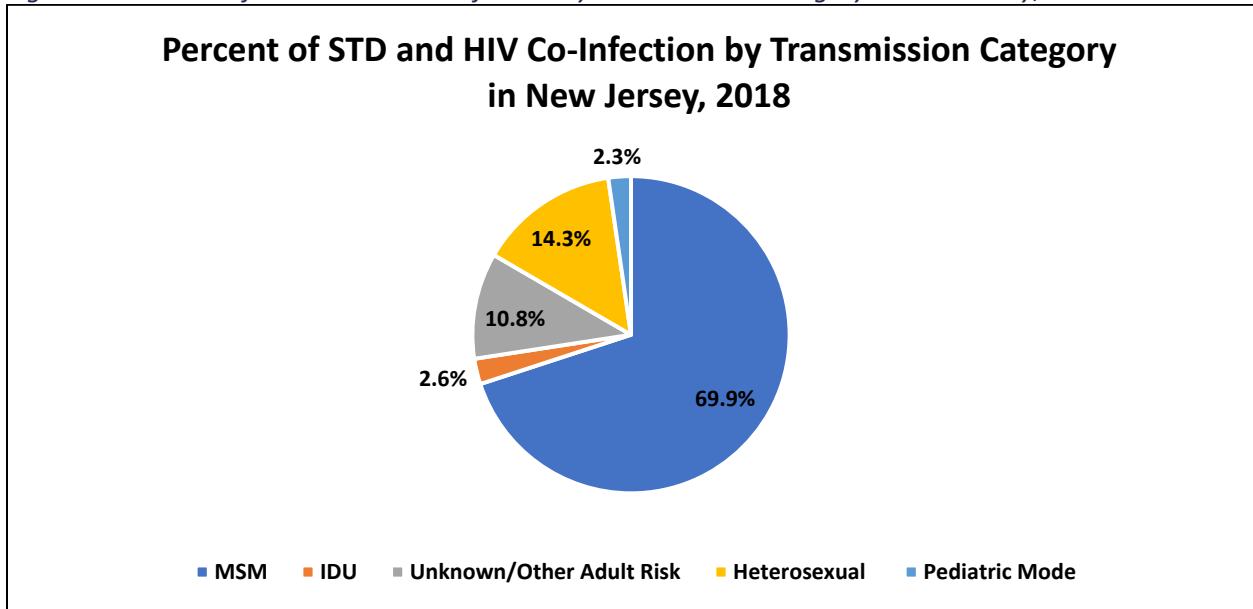
Almost half (47.1%) of co-infection cases were observed for those aged 20-29 years (Figure 53).

Figure 53: Percent of HIV and STD Co-Infections by Age in New Jersey, 2018



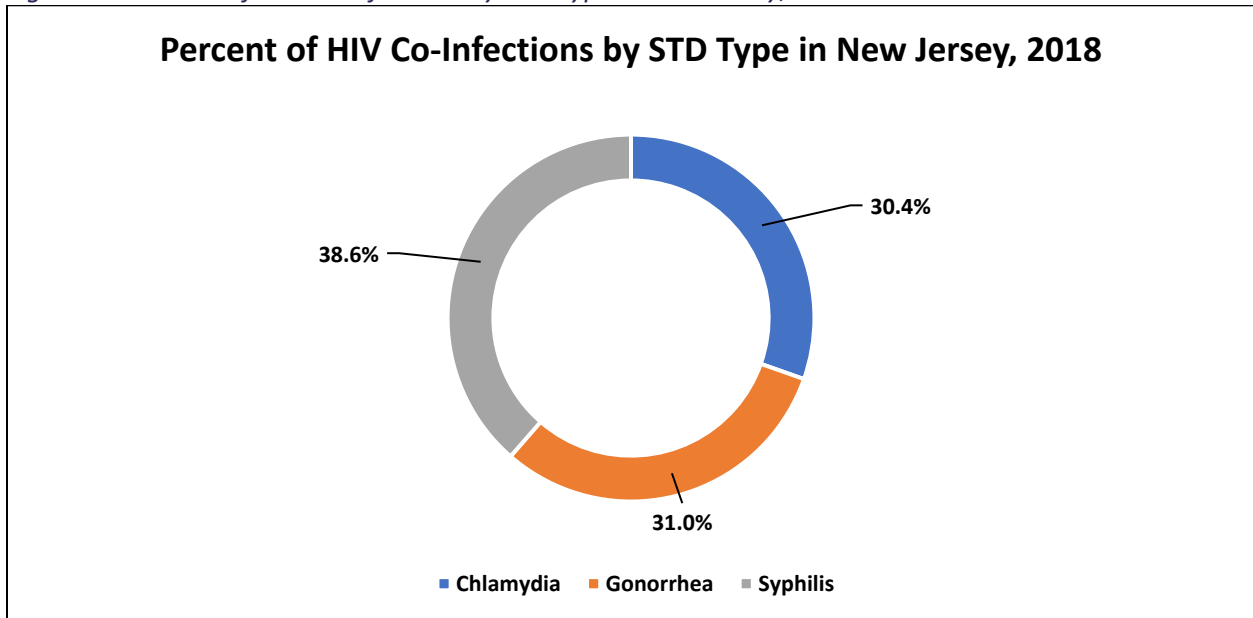
By HIV exposure, those who identified as MSM had a higher co-infection proportion (69.9%) when compared to other exposure categories (Figure 54).

Figure 54: Percent of STD and HIV Co-Infection by Transmission Category in New Jersey, 2018



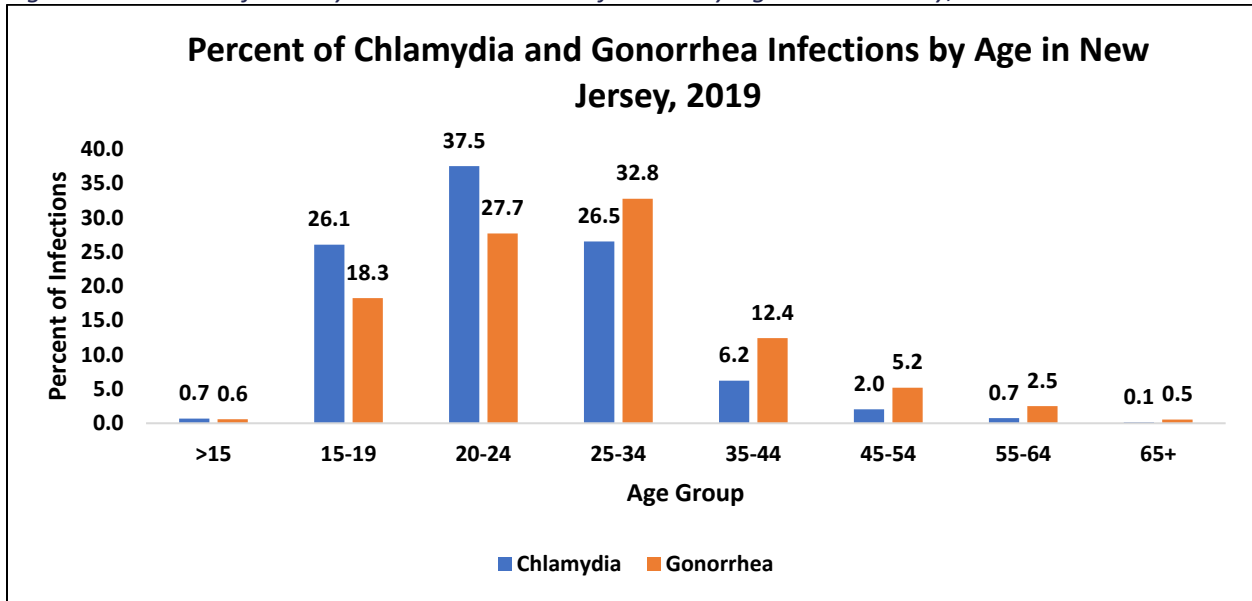
Thirty-nine percent of co-infected individuals reported an episode of syphilis. Gonorrhea was the second most reported at 31% and chlamydia at 30.4% (Figure 55).

Figure 55: Percent of HIV Co-Infections by STD Type in New Jersey, 2018



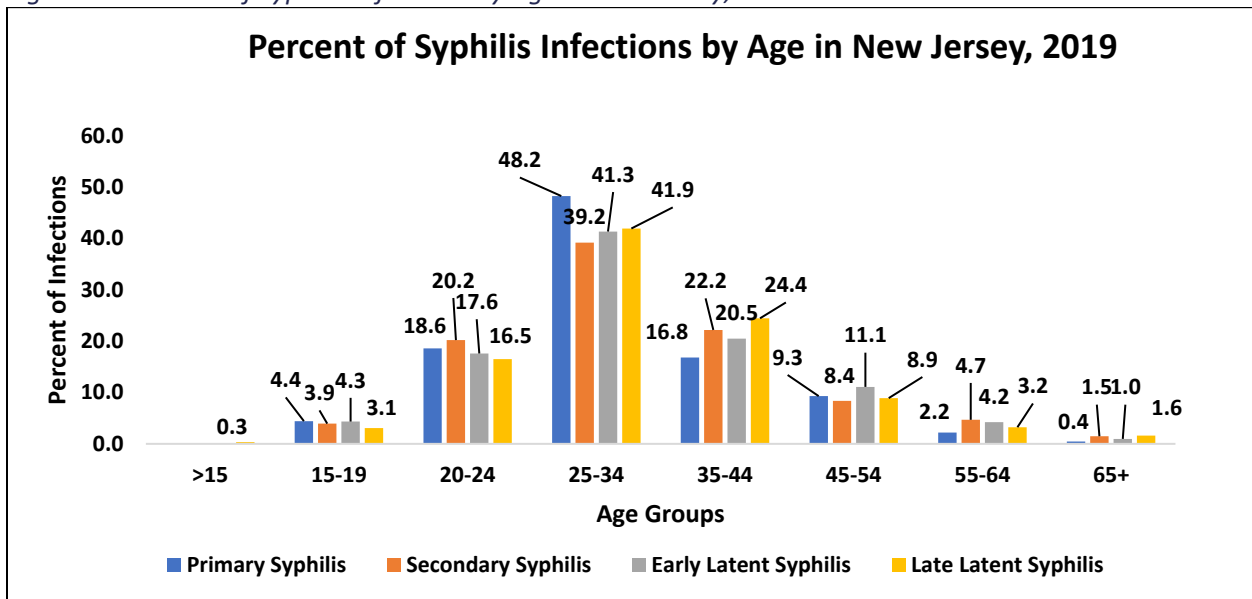
In 2019, more chlamydia infections (76%) were reported compared to gonorrhea (19.8%), primary syphilis (0.5%), secondary syphilis (0.8%), early latent syphilis (1.7%), and late latent syphilis (1.2%) infections in New Jersey. Chlamydia was more prevalent among those aged 20-24 years (37.5%) compared to other age groups (Figure 56).

Figure 56: Percent of Chlamydia and Gonorrhea Infections by Age in New Jersey, 2019



Of those aged 25-34 years, gonorrhea (32.8%), primary syphilis (48.2%), secondary syphilis (39.2%), early latent syphilis (41.3%), and late latent syphilis (41.9%) were more prevalent when compared to other age groups (Figures 56 and 57).

Figure 57: Percent of Syphilis Infections by Age in New Jersey, 2019



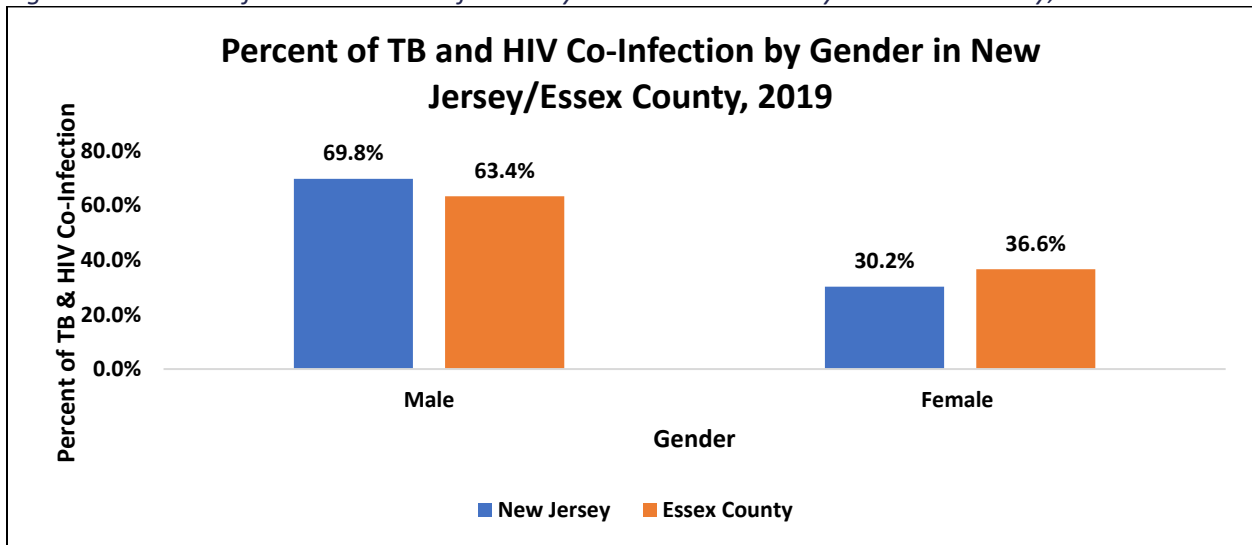
ii. Co-infection with Tuberculosis (TB)

All people with HIV should be tested for TB infection as soon as possible after they get an HIV diagnosis. Anyone who has TB disease, is being evaluated for TB disease, or is a contact of a TB patient should be tested for HIV. (Division of HIV/AIDS Prevention, National Center for

HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, 2020).

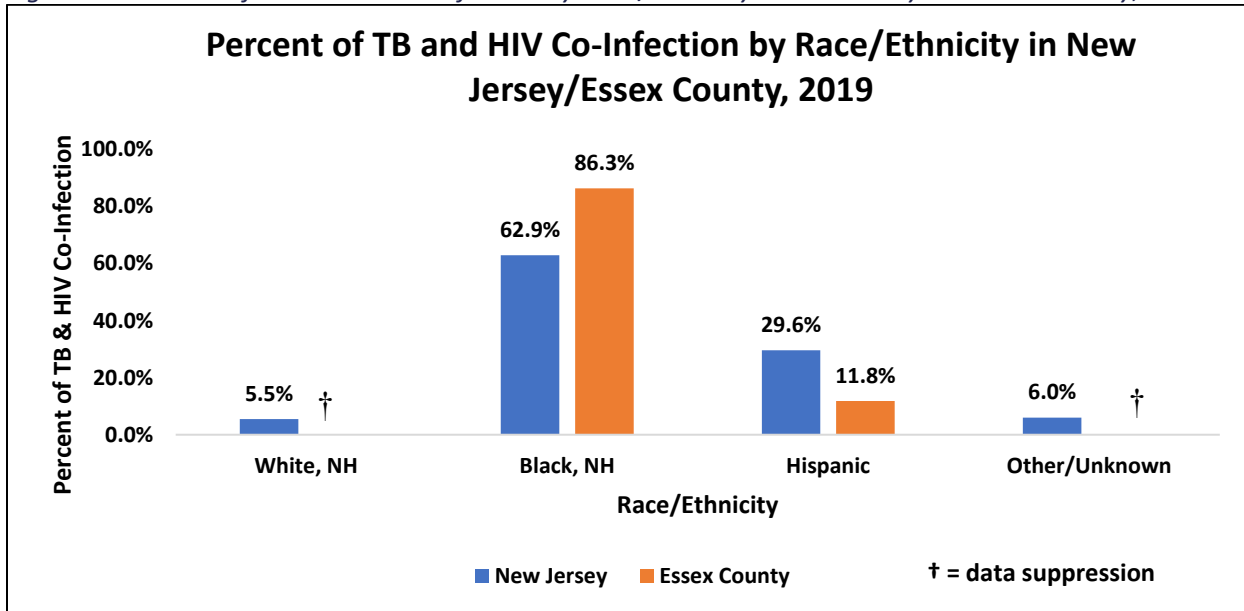
In 2019, TB and HIV co-infections were more prevalent among males (69.8%) compared to females (30.2%) in New Jersey. In Essex County, TB and HIV co-infections were also more prevalent among males (63.4%) and females (36.6%) (Figure 58).

Figure 58: Percent of TB and HIV Co-Infection by Gender in New Jersey and Essex County, 2019



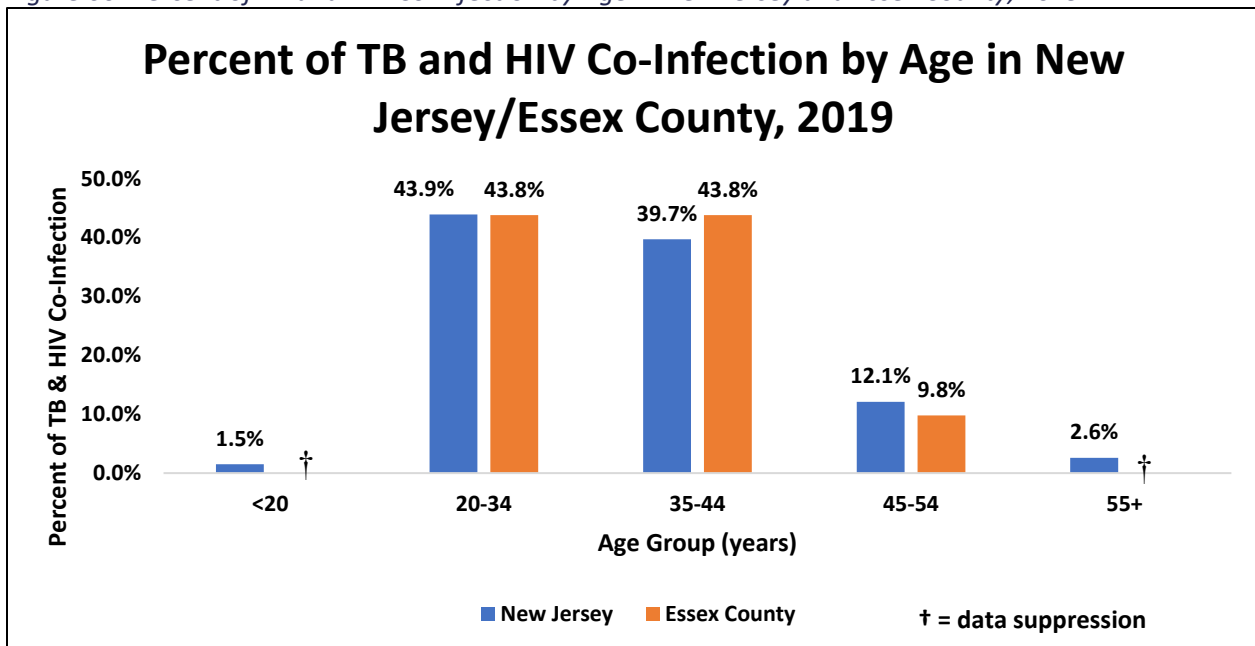
In 2019, more non-Hispanic Blacks/African Americans (62.9%) were reported with TB and HIV co-infections compared to Hispanics (29.6%), non-Hispanic Whites (5.5%), and other/unknown races (6%). In Essex County, nearly six out of seven (86.3%) co-infections were among non-Hispanic Blacks/African Americans and 11.8% of co-infections were among Hispanics. Data for Essex County was suppressed for certain racial/ethnic groups (Figure 59).

Figure 59: Percent of TB and HIV Co-Infection by Race/Ethnicity in New Jersey and Essex County, 2019



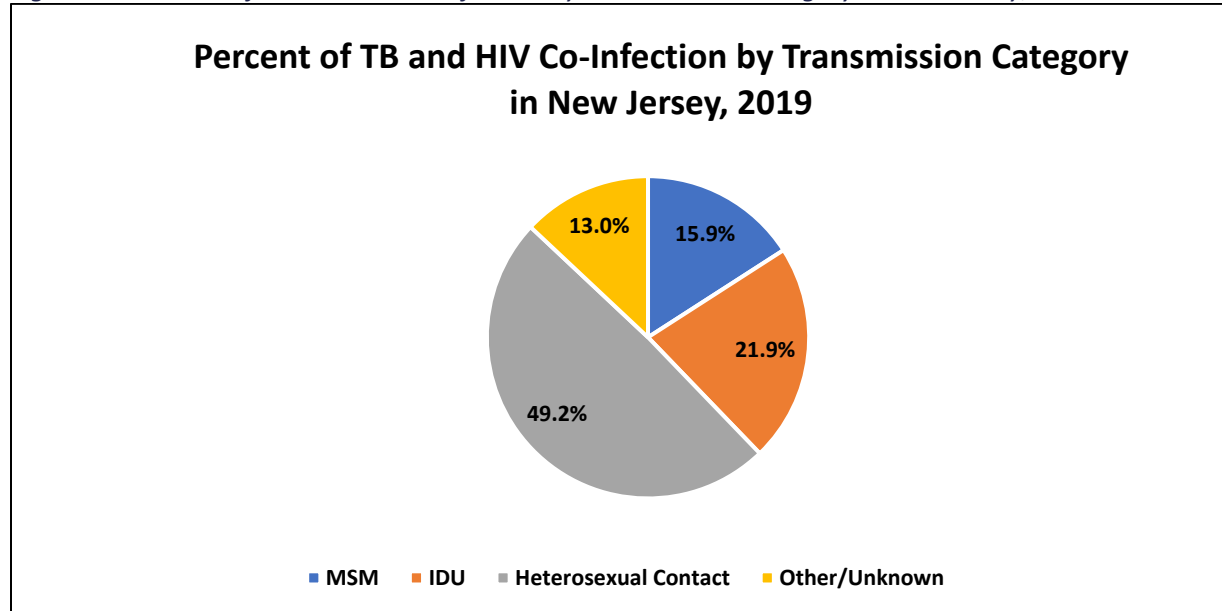
In New Jersey, approximately five out of six (83.6%) TB and HIV co-infections were observed among those aged 20-44 years in 2019. In Essex County, seven out of eight (87.6%) TB and HIV co-infections were also observed among those in this age group. Data for Essex County was suppressed for certain age groups (Figure 60).

Figure 60: Percent of TB and HIV Co-Infection by Age in New Jersey and Essex County, 2019



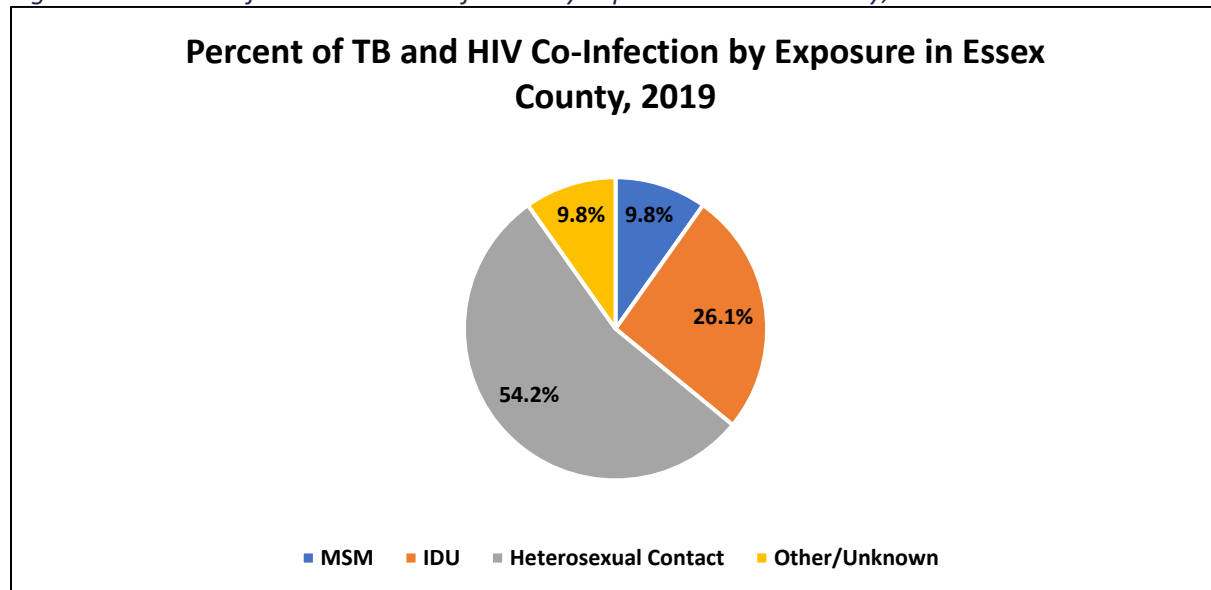
In New Jersey, by transmission category, nearly half (49.2%) of co-infections were among those who had heterosexual contact, 21.9% were among IDU, 15.9% were among MSM, and 13% were due to unknown/other adult risk in 2019 (Figure 61).

Figure 61: Percent of TB and HIV Co-Infection by Transmission Category in New Jersey, 2019



In Essex County, by transmission category, more than half (54.2%) of co-infections were among those who had heterosexual contact, followed by 26.1% among IDU. MSM and unknown/other adult risks each comprised 10% of TB and HIV co-infections (Figure 62).

Figure 62: Percent of TB and HIV Co-Infection by Exposure in Essex County, 2019



f. Hepatitis C and HIV Co-Infection in New Jersey, 2018

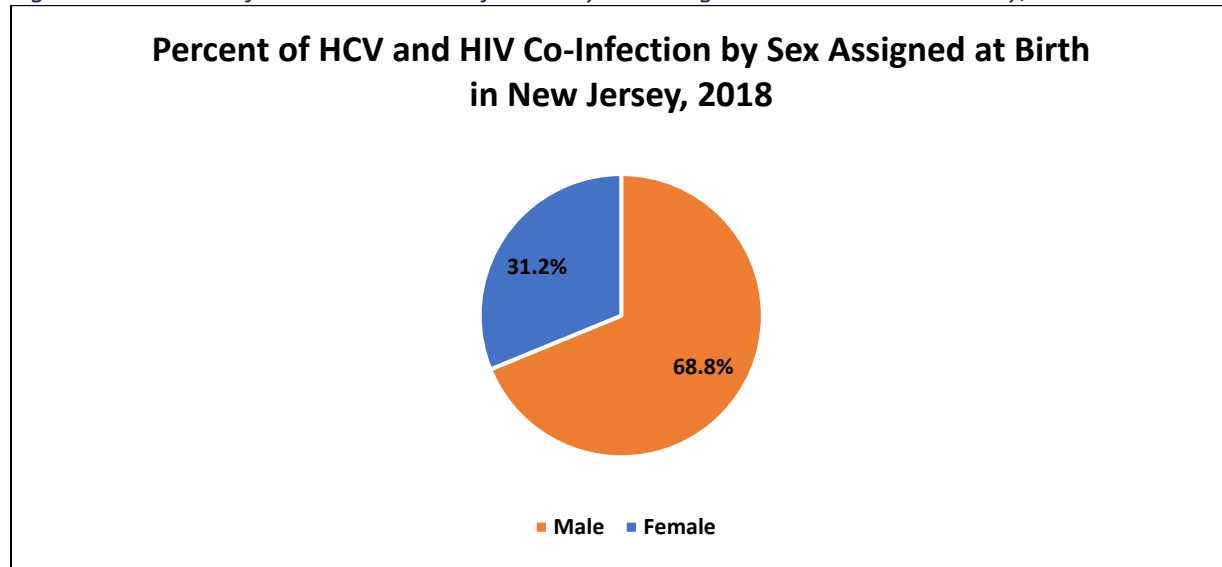
iii. Co-Infection with Hepatitis C

Hepatitis-C (HCV) reports during 2018 were matched probabilistically to the HIV Registry in New Jersey as of August 11, 2019 using AUTOMATCH. The matching algorithm used dates of birth,

names (including aliases), street address(s), city, county, zip code, sex and race/ethnicity to match and verify matched records.

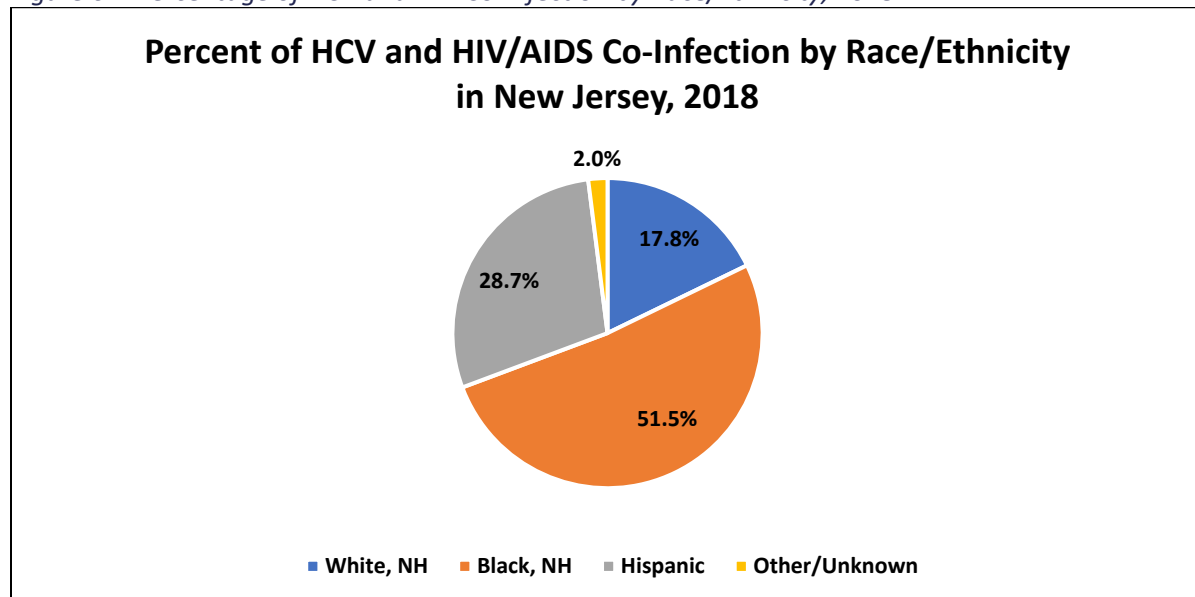
In 2018, HCV and HIV co-infection was more prevalent among males (68.8%) compared to females (31.2%) (Figure 63).

Figure 63: Percent of HCV and HIV Co-Infection by Sex Assigned at Birth in New Jersey, 2018



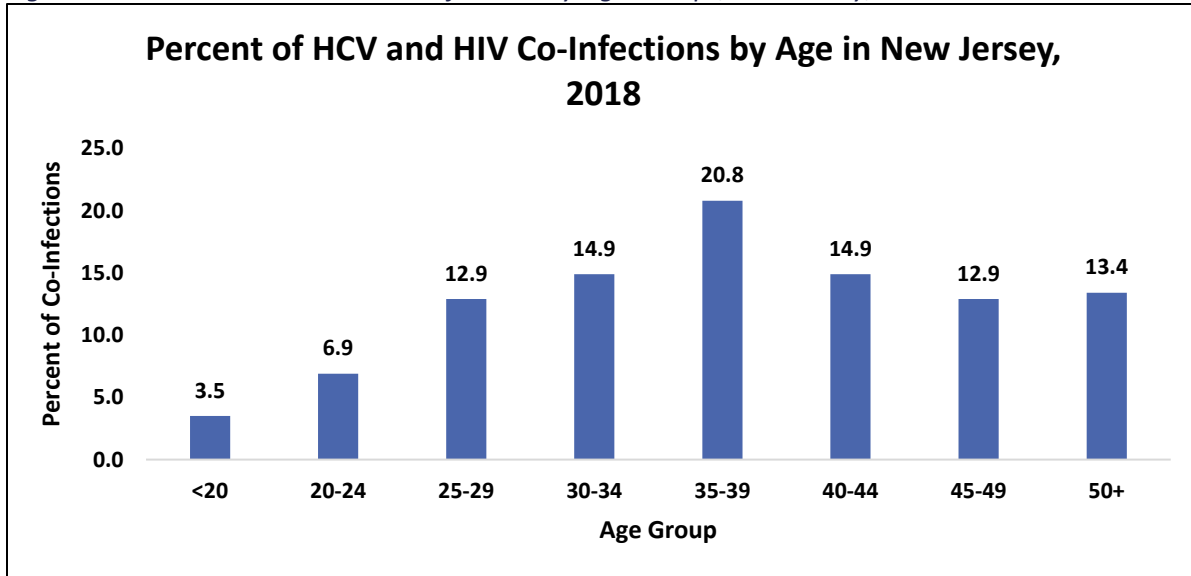
More non-Hispanic Black/African American (51.5%) and Hispanic (28.7%) co-infection cases were identified when compared to non-Hispanic White (17.8%) cases (Figure 64).

Figure 64: Percentage of HCV and HIV Co-Infection by Race/Ethnicity, 2018



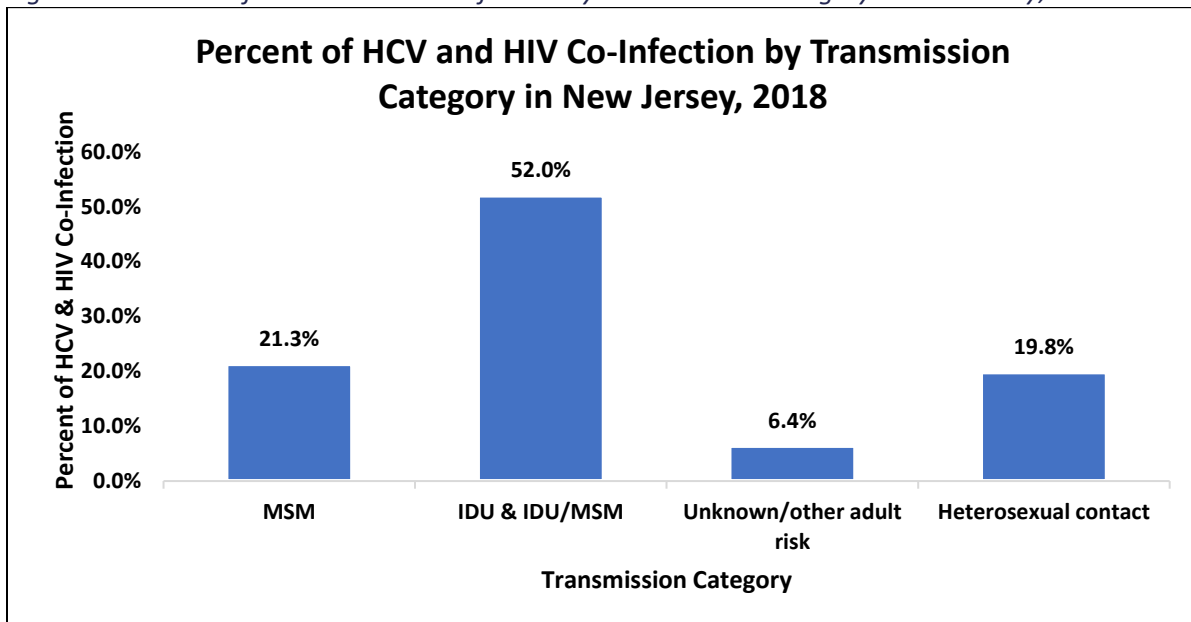
More HCV and HIV co-infections were observed for those aged 35-39 years (20.8%) compared to other age groups (Figure 65).

Figure 65: Percent HCV and HIV Co-Infections by Age Groups, New Jersey, 2018



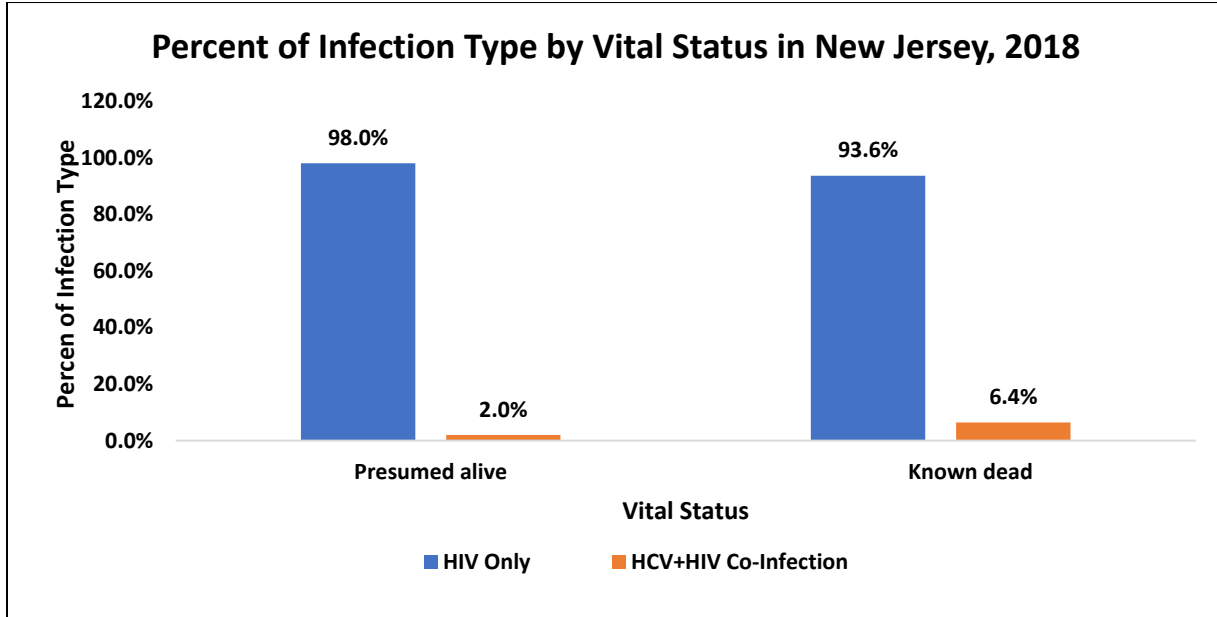
There was a high association between injection drug use and HCV/HIV co-infection. By HIV exposure, those who identified within IDU & MSM/IDU had a higher co-infection proportion (52%) when compared to other exposure categories. An additional 21.3% of those co-infected reported MSM and 19.8% reported heterosexual contact (Figure 66).

Figure 66: Percent of HCV and HIV Co-Infection by Transmission Category in New Jersey, 2018



Mortality was higher among the co-infected group with 6.4% dying in or after 2018 compared to only 2% for the not co-infected group. The risk of mortality among the co-infected group was more than three times that of the not co-infected group (Figure 67).

Figure 67: Percent of Infection Type by Vital Status in New Jersey, 2018



The following table (Table 53) shows the adjusted odds of having HCV infection among HIV patients associated with risk exposure categories, controlling for sex, age at HIV diagnosis, year of HIV diagnosis and race/ethnicity. The odds of co-infection with HCV among HIV patients were almost 8 times (7.7) higher among those who inject drugs than among those who did not report any risk exposure. The odds of co-infection for those exposed to HIV through MSM and other non-IDU categories were not significantly different from those who did not report any risk exposure. Recent years of HIV diagnosis were associated with increased odds of co-infection. No significant effects (at <= 1%) among ethnic groups, age at HIV diagnosis and sex were observed, once the exposure category was controlled for.

Table 53: Adjusted Odds of HCV/HIV Co-Infection Associated with Transmission Risk and Year of HIV diagnosis

Predictors	Estimated Odds and 95% Confidence Limits
<u>HIV disease Exposure Category:</u>	
Men having Sex with Men (MSM)	1.58 (0.85 – 2.95)
Injection Drug Use Related (IDUs and MSM/IDUs)	7.72 (4.33 – 13.78)*
Heterosexual categories	1.04 (0.56 – 1.93)
Other/Unknown (Reference category)	1.00
Year of HIV disease diagnosis	1.04 (1.03 – 1.06)*

Significant at 1%. Controlling for sex, ethnicity, age at HIV diagnosis and year of HIV. The Odds for categorical variables are interpreted in relation to the reference category

iv. Injection Drug Use in Essex County, 2018

In 2018, there were 1,051 substance abuse admissions per 100,000 population in Essex County. There were a total 3,706 admissions due to Heroin, 512 for cocaine/crack, and 377 for other opiates. The drug related death rate has steadily climbed in Essex County from 14.4 in 2014 to 46.1 per 100,000 in 2018. In 2018, cocaine was mentioned as the cause in the decedents' death certificate for 170 individuals, heroin for 183 and oxycodone for 13 decedents.

Data from eHARS indicate that the HIV positive population with injection drug use are stable and low. The injection drug use during the 12 months before the interview.

Table 54: HIV Diagnosis in Injectable Drug Users

Residence at HIV disease	Estimated Population as of 07/01/2018	# Diagnosis between 2016/12 - 2017/11*	# Diagnosis between 2017/12 - 2018/11*	# Diagnosis between 2018/12 - 2019/11*	# Diagnosis between 2019/12 - 2020/11*
Essex	799,767	20	9	3	5

The National HIV Behavioral Surveillance study conducts a study among PWID once every three years in the Newark Eligible Metropolitan Areas (EMA). The study includes individuals who are HIV positive and negative. The 2018 cycle found that of the 523 PWID were interviewed, 10% were HIV positive, 22% used a syringe after someone else used it, 25% PWID overdosed in the past 12 months. Additionally, 51% women and 18% men received money or drugs in exchange for sex. Almost 32% percentage of people who obtained a sterile syringe from SSP centers and 24% from a pharmacy. Of those interviewed, 53% tested for HIV in the past 12 months. Finally, 31% of PWID tried but were unable to obtain MAT for opioid use treatment.

Section E. EHE Pillar 'Respond'

The Division of HIV, STD, and TB Services (DHSTS) has been engaged in cluster detection activities since January 2019 by submitting HIV surveillance and sequence data through Time-Space and HIV Molecular Cluster analysis. Temporal-spatial analyses are conducted monthly to identify, monitor, and evaluate potential spikes in HIV case counts. New HIV diagnoses reported in eHARS, with a diagnosis date occurring in a 48-month period prior to the month of report, are analyzed. Analysis is performed on the total number of new diagnoses in eHARS and for MSM, IDU, MSM/IDU separately.

No alerts have been issued for Essex County in New Jersey since Time Space exercise began to be undertaken in New Jersey

Table 55: Time Space Report through November 2020

Residence at Diagnosis	Overall Alerts	Overall 3-year baseline average no. of diagnoses	IDU Alert	IDU 3-year baseline average no. of diagnoses	MSM Alert	MSM 3-year baseline average no. of diagnoses	MSM-IDU Alert	MSM-IDU 3-year baseline average No. of diagnoses
New Jersey	N	1117.33	N	54.67	N	14.33	N	69
Essex County	N	289.33	N	10.67	N	1.67	N	12.33

Section F. Social Determinants of Health and Intersection with HIV

Healthy People 2020 defines social determinants of health as conditions in which people are born, grow, live, work, and age that affect a wide range of health outcomes and risks. The social determinants of health partly explain why some people are healthier than others, and generally why some people are not as healthy as they could be. Resources that address the social determinants of health and improve quality of life can have a significant impact on population health outcomes. Examples of these resources include access to education, public safety, affordable housing, availability of healthy foods, and local emergency and health services.

Understanding the different social determinants in Essex County can lead to identification of drivers or ‘root causes’ of health conditions and potential services that work to improve disparities within that community. Programs that address the social determinants such as targeted outreach to people living alone, translation services for people with limited English proficiency, and financial counseling for people living in poverty can help to improve the overall health of the community. This section explores the associations between social and economic determinants of health in Essex County and diagnoses of HIV. These social determinants and other factors help build the context of the service area of EHE to allow for better understanding of the improvements in resource allocation and funding that might be needed.

Figure 68: Healthy People 2020 Framework for Social Determinants of Health

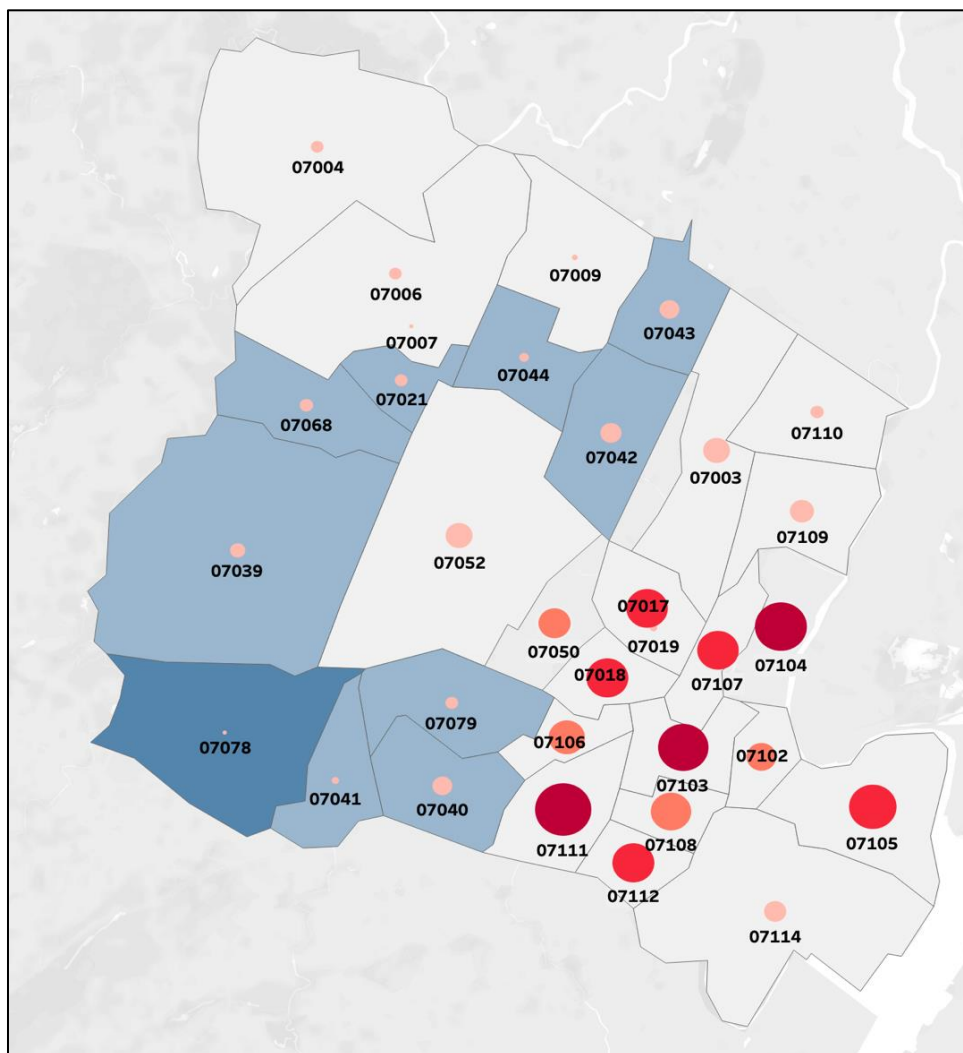


I. Education Attainment

Educational attainment is one of the key factors that affects the health status of a community. It can influence employment and income, influence health behavior and health seeking, and determine the ease with which a person can access and navigate the health system. Figure 69 displays the educational attainment for population age 25+ in Essex County.

The map below, Figure 69, layers the number of new HIV cases, diagnosed between 2014-2018 in each zip code, with education attainment of the residents of the zip code. Majority residents (75% to 100%) of the gray colored zip codes have a bachelor's degree or lower. The graduated colored circles show the percent of newly diagnosed Essex County cases that reside in the zip codes. The larger the circle, the higher the number of newly diagnosed cases in the zip code. The map shows that the largest numbers of new HIV cases reside in the zip codes with the lowest education attainment. Conversely, the zip code with the highest education attainment in deep blue have the least percent of cases.

Figure 69: Education Attainment by Newly Diagnosed Cases, Essex County, 2014-2018



Percent with bachelor education or below, Essex County, NJ	
75%-100%	
50%-75%	
25%-50%	
0-25%	

Percent of newly diagnosed cases, Essex County, NJ	
0%-3%	
3%-6%	
6%-9%	
9%-12%	

II. Social Needs of persons living with diagnosed HIV infection, by selected characteristics

i. Housing in the past 12 months and Stigma

Medical Monitoring Project data for Essex and Hudson Counties (2015-2018) indicate that almost 8% of the persons living with HIV who were interviewed had been homeless at any time in the past 12 months; 16.7% had moved in with other people because of financial reasons; 13.7% had moved at least once in the last 12 months and 11.4% had moved twice or more; and 8.2% had been evicted from housing. Among persons receiving HIV care in the past 12 months, a larger percentage of transgender, bisexual and 18-29 years old persons tended to be homeless.

Data from the 2015-2018 cycles of the Medical Monitoring Project were used to measure prevalence of four dimensions of HIV stigma since HIV diagnosis: disclosure concerns, concerns with public attitudes about HIV, personalized HIV stigma and negative self-image. The composite median score for interviewees from Essex And Hudson is given below. Females reported higher stigma among all genders. Among races, it was individuals who were White and of multiple races and among age groups, those who were older than 50 years.

Table 56: National Indicators: homelessness and HIV stigma—Medical Monitoring Project, Essex and Hudson Counties, NJ, 2015-2018

	Homeless in the 12 months before the interview among persons receiving HIV care in the past 12 months ^a		HIV stigma ^b		
	No. ^c	Row % ^d	No. ^c	Row median	Interquartile range
Gender					
Male	8	6.2	127	33	23.2–47.8
Female	9	9.8	89	39.9	30.3–57.3
Transgender^e	1	40.8	3	29.5	25.0–41.3
Sexual orientation					

Lesbian or gay	3	6.2	41	33.4	30.0–46.2
Heterosexual or straight	13	8.2	161	35.8	24.7–51.5
Bisexual	2	12.3	13	34.9	10.8–52.7
Other	0		4	38	27.9–44.4
Race/Ethnicity					
Asian	0		1	35	35.0–35.0
Black/African American/African American	10	7.6	127	34.5	24.7–49.3
Hispanic/Latino ^f	5	9.5	60	34.1	22.9–49.0
Native Hawaiian/Other Pacific Islander	0				
White	1	4.2	18	47.6	38.1–57.4
Multiple races	2	11.9	13	48.1	25.3–51.8
Age at time of interview (year)					
18–29	6	26.2	24	34.1	27.3–48.7
30–39	3	8.1	36	35.5	27.5–43.6
40–49	2	5.9	50	34	21.7–50.3
≥50	7	4.8	109	37	26.3–51.5
Total	18	7.9	219	35.1	25.2–50.8
<i>Note.</i> Numbers might not add to total because of missing data.					
Excluded are values with a coefficient of variation ≥0.30, “don’t know” responses, and skipped (missing) responses. Values with a denominator sample size <30 are marked with an asterisk and should be interpreted with caution.					
^a Living on the street, in a shelter, in a single-room–occupancy hotel, or in a car.					
^b Ten-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma, disclosure concerns, negative self-image, and perceived public attitudes about people living with HIV.					
^c Numbers are unweighted.					
^d Percentages are weighted percentages.					
^e Persons were classified as transgender if sex at birth and gender reported by the person were different, or if the person chose “transgender” in response to the question about self-identified gender.					
^f Hispanics or Latinos might be of any race. Persons are classified in only 1 race/ethnicity category.					

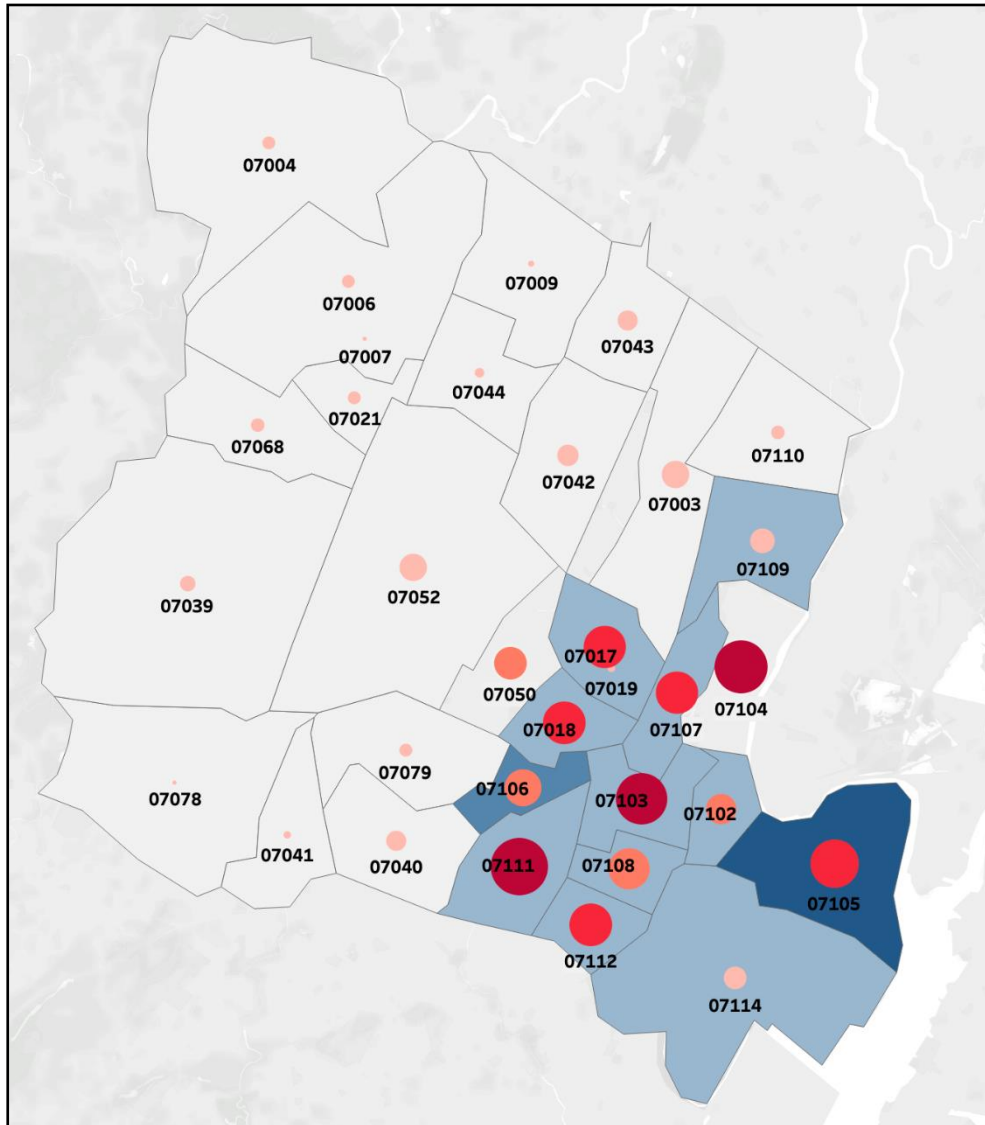
ii. Health Insurance or coverage for medications in the past 12 months

Of the persons with HIV who were interviewed by the Medical Monitoring Project, 99.6% had some form of health insurance. Of these, 40.2% had coverage through Ryan White, 62.4% had Medicaid, 30.1% had private health insurance, 26.7% had Medicare, 6% received other public insurance, 1.8% had care through Tricare/CHAMPUS or Veterans Administration and .9% had other unknown insurance.

The map below, Figure 70, layers the number of newly diagnosed cases between 2014-2018 in each zip code with the percent population in the zip code without health insurance. The larger the percentage of uninsured in the zip code, the deeper the color of the layer. The graduated colored circles indicate the percent of newly diagnosed cases that reside in the zip codes. The larger and deeper colored the circles, the larger the number of newly diagnosed cases in the zip code. The map shows that the largest numbers of new HIV cases reside in the zip codes with the lowest levels of insurance. Most interviewees

in the MMP project cited they had health insurance, so it is likely that the low health insurance level is a proxy measure of some other disparity that is linked to number of new HIV cases.

Figure 70: Health Insurance by Newly Diagnosed Cases, Essex County, Year 2014-2018



Percent without Health Insurance, Essex County, NJ	
0%-8%	
8%-16%	
16%-24%	
24%-36%	

Percent newly diagnosed cases, Essex County, NJ	
0%-3%	
3%-6%	
6%-9%	
9%-12%	

iii. Income Assistance in the past 12 months

Of the persons with HIV who were interviewed by MMP, 25% received Supplemental Security Income (SSI) and 23% received Social Security Disability Insurance (SSDI) in the past 12 months

iv. Employment Status in the past 12 months

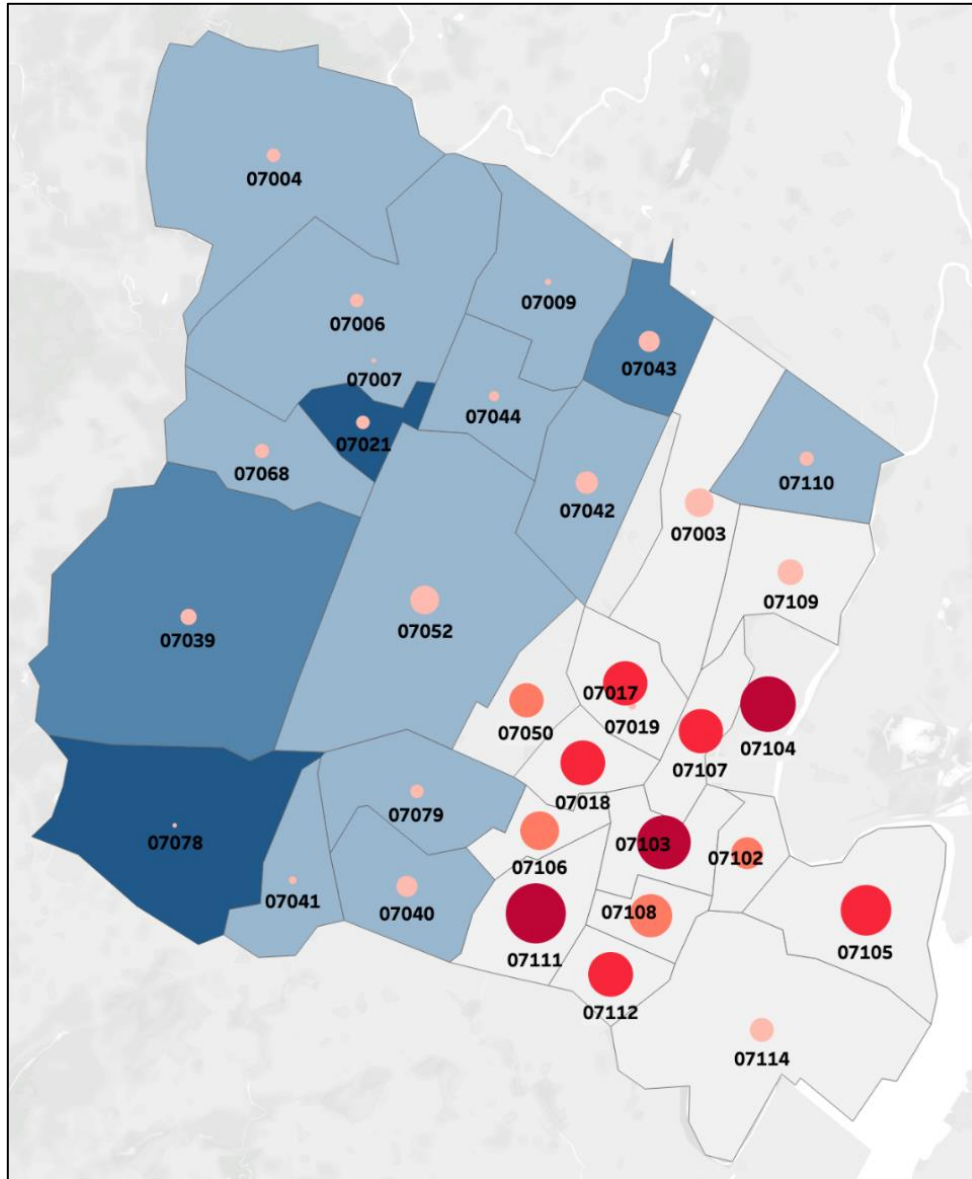
More than half the persons with HIV who were interviewed by MMP were not employed in the past 12 months (52%). An additional 7.7 % were retired, .3% were students and 40 % were employed.

v. Monthly Household Income in the past 12 months

Almost 1 in 2 interviewees (47.9%) of the 2015-2018 MMP project were at or below the federal poverty threshold. Of the interviewees, 57% had a combined yearly household income of US \$0–19,999; 24% had an income of US \$20,000–39,999; 12.4% had an income of US \$40,000–74,999; and 6.6% had an income of \geq US \$75,000.

The map below, Figure 71, layers the number of new HIV cases, diagnosed between 2014-2018 in each zip code, with the median household income of the zip code. The gray colored zip codes have a median household income of US \$25,000 to \$85,000. The graduated colored circles show the percent of newly diagnosed Essex County cases that reside in the zip codes. The larger the circle, the higher the number of newly diagnosed cases in the zip code. The map shows that the largest numbers of new HIV cases reside in the zip codes with the lowest income category.

Figure 71: Newly Diagnosed Cases by Median Household Income, Essex County, 2014-2018



Median household income, Essex County, NJ	
25k-85k	Lightest blue
>85k-145k	Light blue
>145k-205k	Medium blue
>205k	Darkest blue

Percent newly diagnosed cases, Essex County, NJ	
0%-3%	Lightest pink
3%-6%	Light pink
6%-9%	Red
9%-12%	Darkest red

vi. Met and unmet needs for ancillary services during the past 12 months
 Among HIV positive persons interviewed by the MMP project between 2015-2018 in Essex and Hudson Counties, the services that were needed most, ranked in order, among those who did not get the services were: domestic violence services (236); professional help remembering to take HIV medicines on time or correctly (adherence support services)(236); drug or alcohol counseling or treatment (234); medicine through ADAP (226); HIV peer group support (221); HIV case management (220), mental health services (218); transportation assistance (215); and, patient navigation services (213).

Table 57: Met and unmet needs for ancillary services during the past 12 months; Essex and Hudson Counties, 2015-2018

	Persons who received services		Persons who needed but did not receive services by time of interview	
	No. ^a	% ^b	No. ^a	% ^b
HIV case management services				
Yes	167	68.2	19	9.3
No	72	31.8	220	90.7
Dental care				
Yes	157	63.2	53	23.2
No	83	36.8	187	76.8
Professional help remembering to take HIV medicines on time or correctly (adherence support services)				
Yes	121	47.7	2	0.6
No	117	52.3	236	99.4
Medicine through ADAP				
Yes	106	40.2	12	5.9
No	132	59.8	226	94.1
Mental health services				
Yes	86	36.9	21	8.5
No	153	63.1	218	91.5
SNAP or WIC				
Yes	84	36.2	56	22.7
No	156	63.8	184	77.3
Shelter or housing services				
Yes	76	31.5	47	18
No	163	68.5	192	82
Transportation assistance				
Yes	60	24.7	24	7.7
No	179	75.3	215	92.3
Meal or food serviced^c				
Yes	60	23.3	35	14.6
No	180	76.7	205	85.4
HIV peer group support				
Yes	43	16.5	19	6.8

	No	197	83.5	221	93.2
Patient navigation services					
	Yes	35	13.3	27	11.6
	No	205	86.7	213	88.4
Drug or alcohol counseling or treatment					
	Yes	25	8.7	6	2.7
	No	215	91.3	234	97.3
Domestic violence services					
	Yes	4	1.9	3	1
	No	235	98.1	236	99
Total		240	100	240	100
Abbreviations: ADAP, AIDS Drug Assistance Program; SNAP, Supplemental Nutrition Assistance Program; WIC, Special Supplemental Nutrition Program for Women, Infants, and Children.					
<i>Note.</i> Persons could report receiving or needing more than 1 service. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding.					
Excluded are values with a coefficient of variation ≥ 0.30 , "don't know" responses, and skipped (missing) responses. Values with a denominator sample size <30 are marked with an asterisk and should be interpreted with caution.					
^a Numbers are unweighted.					
^b Percentages are weighted percentages.					
^c Includes services such as soup kitchens, food pantries, food banks, church dinners, or food delivery services.					

Section G: Priority Populations

The [HIV National Strategic Plan - A Roadmap to End the Epidemic for the United States, 2021–2025](#) prioritizes certain disparity populations that national data demonstrate are disproportionately affected by the epidemic. The NJDOH analysis shows concurrence with some of the national priority populations for the EHE jurisdictions. These are discussed below.

I. HIV Among Gay & Bisexual Men in New Jersey and Essex County

HIV diagnosis is broken down into categories in which transmission can happen. In New Jersey, the category "male to male sexual contact" also known as men who have sex with men (MSM), is the most common mode of exposure. Even though there has been a significant drop in HIV infection since the early years of the epidemic, MSM continue to be at the highest risk for HIV and many sexually transmitted diseases (STDs). For over a decade, HIV infection has remained stable among MSM in the state and Essex and Hudson Counties

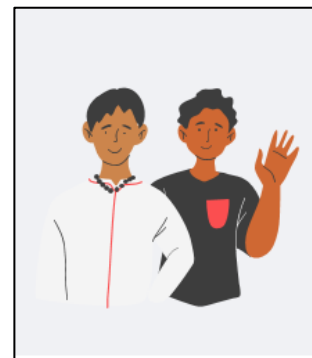
MSM AND LOCATION



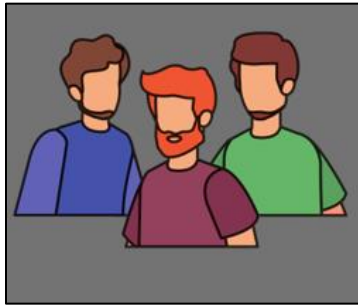
Between 2014-2018, there were 2,435 new HIV infections among MSM in New Jersey. The top 5 counties with the highest number of new diagnoses were: Essex (22%), Hudson (17.9%), Union (7.9%), Bergen (7.1%) and Passaic (6.7%). Essex and Hudson counties continue to be hotspots. Many MSM with HIV reside in poor areas, with low income and face challenges in getting care and treatment.

MSM AND RACE

Among gay and bisexual men who received an HIV diagnosis between 2014-2018 in New Jersey, racial and ethnic disparities continue to exist. Minority MSM made up 82.9% of all MSM HIV diagnoses. From 2014-2018, Black/African American MSM made up 42.8% and Latino MSM cases made up 34.9% of HIV diagnoses. In Essex County, between 2014 and 2018, 545 MSM were newly diagnosed with HIV. Of these, 54.7% 298 were Black/African American and 34.8% were Hispanic.



MSM IN ESSEX COUNTY

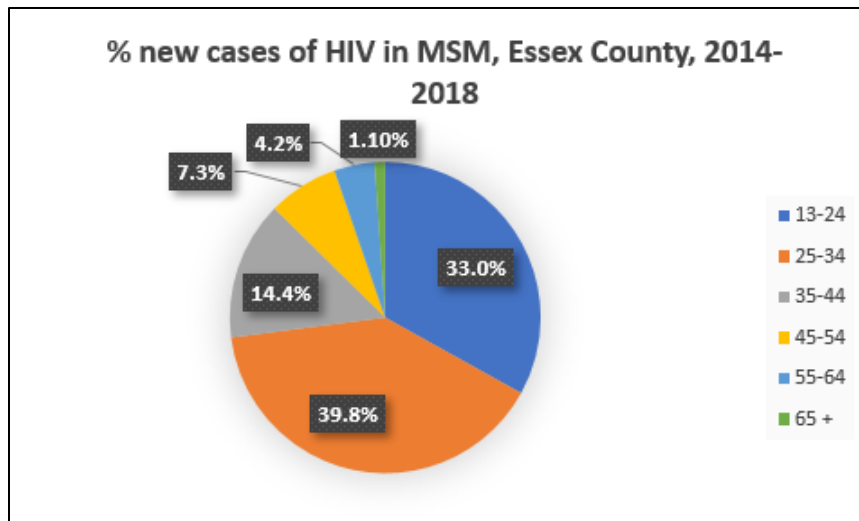


As of 2019, there were 11,509 MSM living with HIV in New Jersey. 2,367 (20.6%) MSM with HIV resided in Essex County. Of the MSM living with HIV in Essex, 60.6% were Black/African American and 25.2% were Hispanic.

MSM AND AGE GROUP

The average age of newly diagnosed HIV infections for MSM has decreased over the past decade. Yet some trends are concerning. Between 2014-2018, in New Jersey, 30.8% of new diagnosis among MSM were in the 25-34 years age group. In Essex County, 39.8% of new diagnosis among MSM were in the 25-34 years age group.

**ALMOST 1 IN 3
NEW
DIAGNOSIS
IS IN
25-35 YRS**



MSM DIAGNOSED WITH HIV BY AGE GROUP, 2014-2018

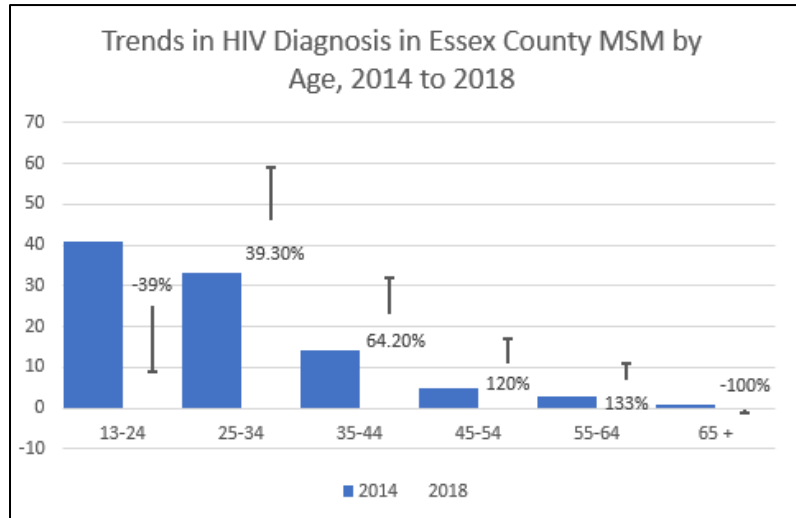
Almost 1 in 2 new HIV/AIDS infections (48.8%) in New Jersey are under the age of 35 years at the age of diagnosis. In Essex County, 72.8% or almost 3 in 4 new HIV infections are under the age of 35 years at the time of diagnosis.

TRENDS IN HIV DIAGNOSES AMONG AGE GROUPS IN MSM, NEW JERSEY, 2014 TO 2018

In New Jersey, the highest number of new cases among MSM come from the age group of 25-34 years old but highest percentage increase of new diagnoses is in the 34-45 years age group followed by the 45-55 years age groups.

TRENDS IN HIV DIAGNOSES AMONG AGE GROUPS IN MSM, ESSEX, 201 TO 2018

In Essex County, the highest increase in new diagnosis of HIV in MSM comes from the 24-34 age group but the highest percentage increase is coming from the 35- 64 years age group.

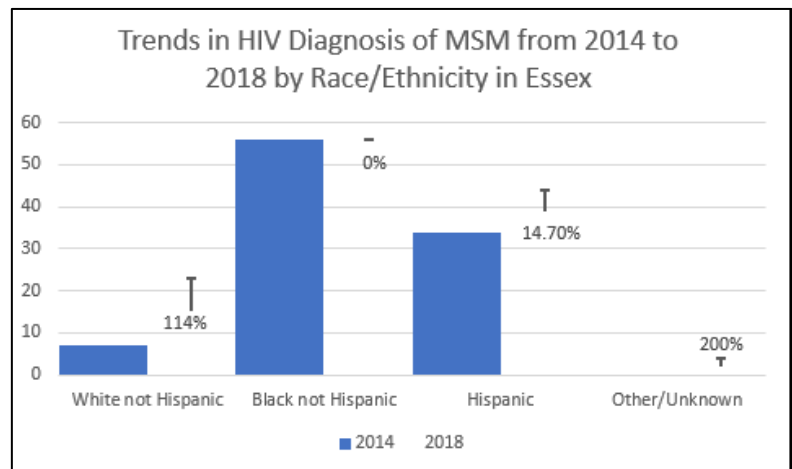


TRENDS IN HIV DIAGNOSES AMONG RACE/ETHNICITIES IN MSM IN NEW JERSEY, 2014 TO 2018

In New Jersey, the percentage decrease in diagnosis of HIV is highest in Black/African American MSM. Latino MSM have a much lower percentage drop in diagnosis.

TRENDS IN HIV DIAGNOSES AMONG RACE/ETHNICITIES IN MSM IN ESSEX, 2014 TO 2018

In Essex, there is no change in new diagnosis of HIV in Black/African American MSM. The diagnosis in Latino MSM and White MSM has shown an increase in the past five years.



LATE DIAGNOSIS IN MSM, ESSEX COUNTY, 2014-2018

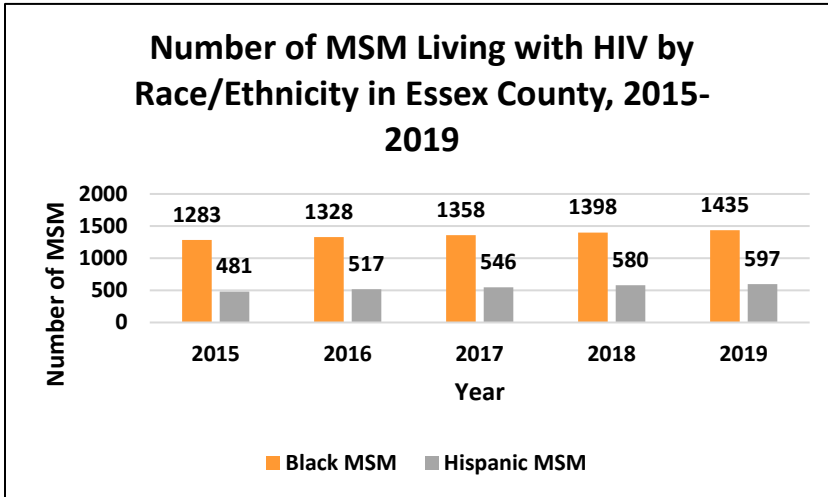
Almost one in five (17.8%) MSM are diagnosed with AIDS within three months of being diagnosed with HIV in Essex County. Of those who were diagnosed late, 45.4% were Hispanic and 40.2% were non-Hispanic Black/African American.

CO-OCCURRING RISK BEHAVIORS

The MSM category also includes "men who have sex with men and who inject drugs (MSM/IDU)." MSM/IDU are at an even greater risk of getting HIV if they use needles, syringes, or other drug injection equipment - for example, cookers that someone with HIV has used. Between 2014-2018, MSM/IDU were 1.6% of all MSM newly diagnosed cases in Essex.

However, in 2017, MSM and MSM/IDU accounted for 38% of adolescent and adult HIV cases reported in New Jersey and need to be observed and monitored.

NUMBER OF MSM LIVING WITH HIV BY RACE/ETHNICITY IN NEW JERSEY, 2015-2019



There has been a gradual increase in the number of MSM living with HIV from 2015 to 2019 in Essex County as a whole. The same trend can be observed for Black/African American and Hispanic MSM as well. The proportion of Black/African American MSM to Hispanic MSM living cases was approximately 2:1 from 2015-2019 in Essex County.



SEXUAL BEHAVIOR CHARACTERISTICS OF MSM LIVING WITH HIV

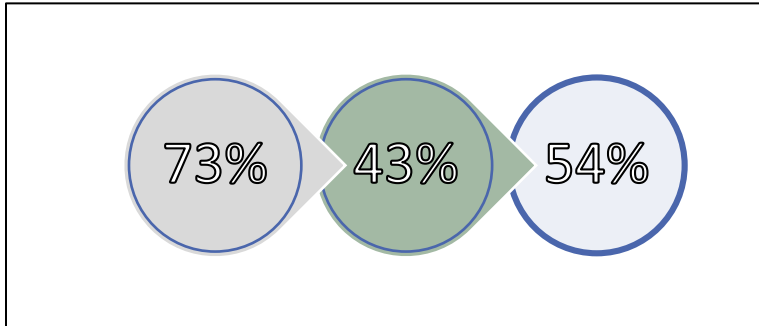
- More than 9 out of 10 Essex and Hudson men who are MSM with HIV (93.4%), and who had been sexually active in the previous 12 months, said they had not engaged in high risk sex in the 12 months prior to being interviewed.
- Of those that had been sexually active, 70% had condom protected sex.
- 57% had sex with an HIV positive partner.
- 40% had sex while they were not virally suppressed.
- 14.4% had condomless sex with a partner on PrEP.

CARE CONTINUUM OF MSM LIVING WITH HIV IN NEW JERSEY AND ESSEX COUNTY IN 2019

In New Jersey,

- 7 in 10 who are diagnosed receive some care
- 4.5 in 10 are continuously retained in care

- 5.6 in 10 achieve viral suppression



In Essex County, in the same period, 73% are retained in some care, 43% are continuously retained in care and 54% achieve viral suppression.

CARE CONTINUUM FOR MSM LIVING WITH HIV IN NEWARK EMA

81.8% of HIV-positive men reported seeing their doctor for HIV care in the past 6 months. ARV use was reported by 79.5% of the men and 68.2% reported viral suppression.



PROTECTING MSM LIVING WITH HIV



GET TESTED YEARLY

People who don't know they have HIV can't get the care they need and may pass HIV to others. Centers for Disease Control and Prevention (CDC) estimates that 1-2 persons out of 10 affected persons in New Jersey are not aware that they are HIV positive.

USE CONDOMS THE RIGHT WAY EVERY TIME YOU HAVE SEX:

Some factors put gay and bisexual men at higher risk for HIV, including having anal sex without knowing it.

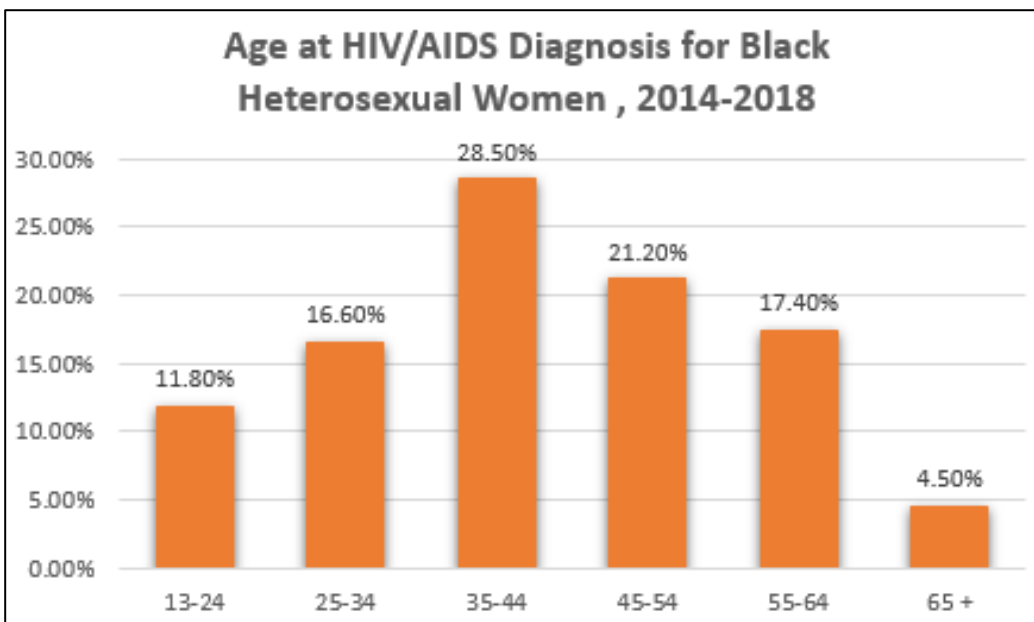
GET TESTED AND TREATED FOR OTHER STD:

Having another sexually transmitted disease (STD) can greatly increase the chance of getting or transmitting HIV. In Newark EMA, exchange sex with male casual sex partners in last 12 months, being tested positive for HCV before, being diagnosed any STDs in last 12 months, and being diagnosed with genital warts before was associated with being HIV positive.

(Source: eHARS data as of December 31, 2020; Medical Monitoring Project, 2015-2018 data; National Behavioral HIV Surveillance, 2017; [Living with Others](#) (Centers for Disease Control and Prevention, 2020)

II. HIV among Black/African American Heterosexual Women in Essex County

In Essex County, the average number of new HIV diagnoses due to heterosexual contact from 2014 to 2018 was 69 new cases per year. Of these, the average number of cases among Black/African American heterosexual women were 64 for the same period. In Essex in 2018, there were 56 new HIV diagnoses among Black/African American women. Among heterosexual women diagnosed with HIV disease, in Essex from 2014 to 2018, the majority were in 35-44 years at 25.6%, followed by 25-34 years at 25%. Approximately 53% of the new HIV diagnoses among Black/African American heterosexual women in Essex from 2014 to 2018 was on account of sex with an HIV positive man.



Black/African American women were more likely to be diagnosed later in life. By age at diagnosis, the greatest proportion were those first diagnosed between the ages of 35 to 44 (28.5%) while those who were ages 45 to 55 at diagnosis comprised 21.2% of

the total number of Black/African American heterosexual women diagnosed between 2014 to 2018. From 2014 to 2018, the trends of new diagnoses in Black/African American heterosexual women were stable in all the age groups except for 35-44 years.

Of all persons living with HIV (PLWH) in Essex as of December 31, 2019, 21.2% were Black/African American heterosexual women . Of those diagnosed between 2014 and 2018, 17.8% had progressed to an AIDS-defining condition within 90 days.



Of the Black/African American heterosexual women living with HIV in Essex as of December 31, 2019, 71.3% were linked in care in the first month in 2017, 77% were linked in care in first three months and had evidence of a HIV test, 88.4% had evidence of care in the first year and 7.5% had no evidence of care. Additionally, 57% attained viral suppression in 2019. In the 25-34 years group, only 41% attained viral suppression, the least percentage among all age groups.

It is important for women to know their HIV status so they can take medicine to treat HIV if they have the virus. Taking HIV medicine every day can make the viral load undetectable. Women who get and keep an undetectable viral load (or stay virally suppressed) have effectively no risk of transmitting HIV to HIV-negative sex partners. Because some women may be unaware of their male partner's risk factors for HIV (such as injection drug use or having sex with men), they may not use protection (like condoms or medicine to prevent HIV). In general, receptive sex is riskier than insertive sex. This means that women have a higher risk for getting HIV during vaginal or anal sex than their sex partners.



(Source: eHARS data as of December 31, 2020; NHBS data, multiple years; National Behavioral HIV Surveillance, 2017; [Living with HIV](#) (Centers for Disease Control and Prevention, 2020))

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Data Sources

To present an accurate description of the epidemic data from multiple sources have been used. The most current analysis available is presented for each source of data; however, the time frames differ from one source to another. Due to a lag in reporting, data for new diagnoses are presented through 2018. Data for persons living with HIV are also presented through 2018 for consistency in reporting. Data from the United States Census Decennial 2010 Census is used for calculating rates by race/ethnicity, gender distribution and county.

Below is a list of the data sources used in this profile.

- CDC National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention ATLAS
- Communicable Disease Reporting and Surveillance System (CDRSS) for Coinfection with Human Immunodeficiency Virus (HIV) among Reported Cases of Sexually Transmitted Diseases and Viral Hepatitis
- County Health Rankings; University of Wisconsin and Robert Wood Johnson Foundation
- Ending the HIV Epidemic 2020 @ America's HIV Epidemic Analysis Dashboard (AHEAD)
- Enhanced HIV/AIDS Reporting System (eHARS)
- HIV Testing System (EvaluationWeb)
- Medical Monitoring Project, CDC
- National Death Index (NDI)
- National HIV Behavioral Surveillance, CDC
- New Jersey Behavioral Risk Factor Survey
- Ryan White HIV/AIDS Program Services Report (RSR)
- Tuberculosis Surveillance
- Uniform Billing Hospital Discharge Data (UB-92), and
- United States Census Bureau; United States Department of Housing and Urban Development Continuum of Care Dashboard Reports.