New Jersey HIV/AIDS Epidemiologic Overview, 2018
(Data based upon the HIV/AIDS Reporting System ‘eHARS,’ unless otherwise noted.)

New Jersey Department of Health Division of HIV, STD, TB Services
Introduction

This presentation will:

- Discuss HIV Incidence in light of two initiatives: the National strategy, which calls for reducing the rate of new HIV infections by 75% in 5 years and at least 90% by 2030; and New Jersey initiative to end the epidemic by 2025 (EtE).
  - CDC estimates that more than 80% of new infections in the US were transmitted by individuals who either did not know they were infected with HIV or diagnosed but were not receiving care. Nationally, it is estimated that undiagnosed HIV infections amount to 14.2% (2016), while it is 10% in New Jersey.
- Present HIV data of diagnoses between 2012 through 2016, and prevalence as of December 31, 2018. (All surveillance data is based upon cases entered in the HIV registry by December 31, 2018).
  - HIV data will be examined by demographics: gender, age, race, and exposure category, as well as racial and ethnic disparity.
- Review geographic dispersion of HIV in NJ; and
- Track NJ Care Continuum (clinical data versus surveillance data).
Diagnosed Infection among Persons Aged ≥13 Years Living with Diagnosed or Undiagnosed HIV Infection, 2016—United States

Total = 85.8%

Note. Estimates were derived from a CD4 depletion model using HIV surveillance data.

Cumulatively, 82,643 adult/adolescent cases of HIV/AIDS have been reported in New Jersey. There are 1,200 new patients diagnosed with HIV in 2016.

Between 2012 and 2016, the number of new adult/adolescent HIV/AIDS diagnoses decreased by about 8% in New Jersey.

Number of HIV/AIDS diagnoses in 2016 for the three most-Affected Subpopulation:

1) Hispanic/Latino MSM (MSM/IDU included) : 193.
2) Black MSM (MSM/IDU included) : 173.
3) Black Heterosexual Women: 114.

The next slide shows the HIV/AIDS incidence rate nationally.
Incidence Rates of HIV Infection Among Adults and Adolescents, 2016 - Rates per 100,000:
United States = 14.7  NJ = 15.2
HIV infection stages in New Jersey

- New Jersey ranked 11th in the rate of adults and adolescents 2016 diagnosed with HIV/AIDS, but New Jersey ranked 7th among the states in the rates of diagnosed HIV infection classified as Stage 3 (AIDS).

- The percentage of simultaneously concurrent HIV and AIDS diagnoses (cases that have already progressed to AIDS at the time of the first diagnosis with the HIV) has remained 25% to 21% (2012-2016). Only 21% of new cases were concurrent HIV and AIDS diagnosed in 2016 (Large percentage mean that patients were tested late):
  - by Sex at Birth: AIDS concurrent percentage is 18.8% among females, 21.5% among males.
  - by Race/Ethnicity: AIDS concurrent percentage is 18% among White, 19% among Black, 24% among Hispanic.
  - by Age Group: The largest AIDS concurrent is 36% among persons aged 65 years or older followed by persons aged 35-44 (27.4%), and by 55-64 (26.7%) and by those aged 45-54 (23.8%). And those age 25-34 (18.6%) and those aged less than 25 years (9%).
  - by Risk Category: AIDS concurrent percentage is only 17% among MSM (only 13.4% among Black MSM, 18.8% White MSM and 19% among Hispanic MSM).
Rates of Diagnosed HIV Infection Classified as Stage 3 (AIDS) 2016—United States and 6 Dependent Areas

N = 18,370  Total Rate = 5.6

Data for the year 2016 are preliminary and based on 6 months reporting delay.
As of December 31, 2018, 37,801 individuals living with HIV were known to be alive and residing in New Jersey. Prevalent cases include 18,410 (48.7%) persons living with HIV only and 19,391 (51.3%) persons living with AIDS.

Number of deaths among HIV patients declined by 41.6% from 1,013 in 2007 to 592 in 2017, and the percent died due to HIV as the underlying cause of death declined from 57% in 2007 to 28% in 2017 (more than half). Advances in treatment delayed disease progression and reduced death due HIV/AIDS.

In 2016 there were 1,200 new HIV/AIDS diagnoses, but only 629 deaths.

It is important to ensure that 100% of persons living with HIV know their status to help prevent the spread of the disease. Patients who know their status are more likely to take further steps to protect their partners.

New Jersey ranked 6th among the 50 states in the number of persons living with HIV/AIDS in 2016.

The following slide shows HIV/AIDS prevalence among persons aged 13 years or older by area of residence in 2016, nationally.
HIV Prevalence among Persons Aged ≥13 years, by Area of Residence 2016—United States
Total = 1,140,400

Note. Estimates were derived from a CD4 depletion model using HIV surveillance data. Estimates rounded to the nearest 100 for estimates >1,000 and to the nearest 10 for estimates ≤1,000 to reflect model uncertainty.
HIV/AIDS and Sex at Birth

• New Jersey ranked 8th in the rate of female adults and adolescent with diagnosed HIV infection in 2016 with 6.9 per 100,000 females and ranked 10th in the rates of stage 3 (AIDS).

• New Jersey has historically had one of the highest proportions of HIV infections occurring in females, 24.4% of adolescent and adult HIV/AIDS diagnoses in 2016 were females in NJ, compared to only 19% in the United States.

• The number of new HIV/AIDS diagnoses annually from 2012 to 2016 among females in New Jersey decreased by 14%; only 6% among males.

• Although new cases among females are declining, females account for 32.1% of all prevalent cases in NJ in 2018 (black women account for 39.2% among blacks living with HIV/AIDS in 2018), compared to 21% of prevalent cases is females nationally in 2016.
HIV/AIDS Among Transgender Individuals

• ‘Transgender’ indicates a difference between (1) Sex at birth and (2) Current gender identity.

• One hundred twenty two transgender persons were cumulatively diagnosed with HIV among New Jersey residents as of December 31, 2018.

• Seven were diagnosed with HIV prior to 1990, twenty-seven between 1990 and 1999, twenty-eight between 2000 to 2009 and sixty since 2010 (nearly half).

• Six were incarcerated at time of diagnosis; four ever had an episode of homelessness though these categories are not mutually exclusive.

• Eighty percent were known to be alive through December 31, 2018. 3 of the 6 cases with an indication of incarceration were alive as of the end of 2017.
### Transgender Cases -- New Jersey, December 31, 2018

#### Cumulative Cases (N=123)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M to Female</td>
<td>122</td>
<td>99%</td>
</tr>
<tr>
<td>F to Male</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>5</td>
<td>4%</td>
</tr>
<tr>
<td>Black</td>
<td>67</td>
<td>55%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>48</td>
<td>39%</td>
</tr>
<tr>
<td>Other/Unknown</td>
<td>3</td>
<td>2%</td>
</tr>
<tr>
<td>Age at Diagnosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-12</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>13-24</td>
<td>45</td>
<td>32%</td>
</tr>
<tr>
<td>25-34</td>
<td>51</td>
<td>45%</td>
</tr>
<tr>
<td>35-44</td>
<td>21</td>
<td>16%</td>
</tr>
<tr>
<td>45+</td>
<td>5</td>
<td>7%</td>
</tr>
<tr>
<td>Transmission</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>108</td>
<td>88%</td>
</tr>
<tr>
<td>IDU-Related</td>
<td>12</td>
<td>10%</td>
</tr>
<tr>
<td>Unknown</td>
<td>3</td>
<td>2%</td>
</tr>
</tbody>
</table>

#### Prevalent Cases (N=98)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M to Female</td>
<td>96</td>
<td>98%</td>
</tr>
<tr>
<td>F to Male</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>6</td>
<td>6%</td>
</tr>
<tr>
<td>Black</td>
<td>52</td>
<td>53%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>37</td>
<td>38%</td>
</tr>
<tr>
<td>Other/Unknown</td>
<td>3</td>
<td>3%</td>
</tr>
<tr>
<td>Age at 12/31/2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13-24</td>
<td>10</td>
<td>10%</td>
</tr>
<tr>
<td>25-34</td>
<td>35</td>
<td>36%</td>
</tr>
<tr>
<td>35-44</td>
<td>26</td>
<td>26%</td>
</tr>
<tr>
<td>45+</td>
<td>27</td>
<td>28%</td>
</tr>
<tr>
<td>Transmission</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>88</td>
<td>90%</td>
</tr>
<tr>
<td>IDU-Related</td>
<td>8</td>
<td>8%</td>
</tr>
<tr>
<td>Unknown</td>
<td>2</td>
<td>2%</td>
</tr>
</tbody>
</table>
About 60% of prevalent cases in New Jersey were age 50 and older in 2018. According to CDC, those over age 50 living with HIV are rapidly increasing. The advances in treatment is a major driver of this increase, but at the same time, 22% of 2016 new cases of HIV are among 50 years or older in New Jersey.

Diagnoses among those 55 and older comprised 10% of adult/adolescent diagnosed in 2012 and 12.9% in 2016. In contrast those aged 13-24 constituted 19% of diagnoses in 2012 and 16.5% in 2016. The percent of those aged 25-34 also increased between 2012 and 2016 while the percent of those aged 35-44 decreased between 2012 and 2016.

The following 2 graphs represent diagnoses by age group for men and women. For men, the median age of HIV/AIDS diagnoses in 2016 was 34 (in 2013 was 36). For women, the median age of diagnoses in 2016 was 40.
Number and Percent for Adult\Adolescent diagnosed with HIV/AIDS in 2016 by Sex and Age Group

NJ Women (aged 13+) 2016
diagnosed HIV/AIDS N=290

NJ Men (aged 13+) 2016
diagnosed HIV/AIDS N=905

52.7% 37.2%
HIV/AIDS and Race/Ethnicity

• A disparity persists with regards to the disproportionately high percentage of cases occurring among minorities. Diagnoses among Blacks accounted for 42.3% of new HIV/AIDS diagnoses in 2016 and diagnoses among Hispanics accounted for 34.6% of new diagnoses.

• Women of color represent the majority of new diagnoses among females in NJ with 84% of new diagnoses in 2016. Among men, 78% in 2016 new diagnoses were persons of color.

• The disparity of new cases in minorities is particularly pronounced for persons ages 13-24. Minorities accounted for 86% of all diagnoses occurring among persons within this age group in 2016 compared with 78% for other age groups.
# and % of HIV/AIDS Diagnosed in 2016 by Race/Ethnicity and Sex – New Jersey

NJ males diagnosed HIV/AIDS
New Jersey, 2016, N=907

- White: 195 (21.5%)
- Black: 353 (38.9%)
- Hispanic: 330 (36.4%)
- Other/Unknown: 29 (3.2%)

NJ Females diagnosed HIV/AIDS
New Jersey, 2016, N=293

- White: 48 (16.4%)
- Hispanic: 84 (28.7%)
- Black: 157 (53.6%)
- Other/Unknown: 4 (1.4%)

NJ eHARS as of 12/31/2018.
Number Adult/Adolescent HIV/AIDS Diagnoses by Race/Ethnicity and Age Group -- New Jersey, 2016

- **Black**
  - 25-34: 164 (32.4%)
  - 35-44: 87 (17.9%)
  - 45-54: 93 (18.4%)
  - 55+: 42 (13.4%)

- **Hispanic**
  - 25-34: 144 (34.8%)
  - 35-44: 72 (17.4%)
  - 45-54: 68 (16.4%)
  - 55+: 48 (19.8%)

- **White**
  - 25-34: 70 (28.9%)
  - 35-44: 54 (22.4%)
  - 45-54: 48 (19.8%)
  - 55+: 42 (17.4%)

Age groups: 0, 40, 80, 120, 160

New Jersey Population
2017, N=9,005,644

- White: 5,024,565 (55.8%)
- Black: 1,204,854 (13.4%)
- Hispanic: 1,840,433 (20.4%)
- Other: 935,792 (10.4%)

Persons Living with HIV/AIDS
New Jersey, 2018, N=37,801

- White: 7,796 (20.6%)
- Black: 10,764 (28.5%)
- Hispanic: 18,601 (49.2%)
- Other/Unknown: 640 (1.7%)

July 2018 Bridged-Race estimates for 2017 population
NJ eHARS as of 12/31/ 2018.
Rate per 100,000 NJ Persons 2018 Living with HIV/AIDS by Sex and Race/Ethnicity -- Bridged-race estimates for 2017 NJ population

- **Males**
  - Black: 1,986
  - Hispanic: 844
  - White: 250
  - Asian/Pac Isl: 106

- **Females**
  - Black: 1,148
  - Hispanic: 325
  - White: 65
  - Asian/Pac Isl: 33
HIV/AIDS and Mode of transmission

• The number and percentage of new HIV/AIDS diagnoses due to IDU transmission in NJ diminished in recent years. In 2016, only 2% of men diagnosed with HIV/AIDS were IDU, this figure was 3% for women. Currently, 2018, 16% of PLWHA is attributed to IDU exposure (19% of females and 15% of males living with HIV/AIDS are IDUs).

• The heterosexual exposure remained largely unchanged among men (23%) and women (70%) of new HIV infections between 2012 to 2016.


• MSM is the highest HIV/AIDS exposure category for both U.S. and NJ population. Fifty-three percent of NJ men diagnoses in 2016 are MSM. Forty-nine percent of Black and white men diagnosed are MSM, but 58% of Hispanic men were diagnosed in 2016 are MSM. The median age of MSM HIV/AIDS diagnoses in 2016 is 29.
2016 New HIV/AIDS cases diagnosed by Gender and Exposure Category – New Jersey
NJ eHARS data as of 12/31/2018

Men diagnosed with HIV/AIDS
2016, N=905

- Heterosexual: 211 (23.3%)
- MSM: 486 (53.7%)
- IDU: 18 (2%)
- Other/Unknown: 190 (15.1%)

Women Diagnosed HIV/AIDS
2016, N=290

- Heterosexual: 217 (74.8%)
- Other/Unknown: 64 (22.1%)
- IDU: 9 (3.1%)
PLWHA by Exposure Category – New Jersey eHARS data as of 12/31/2018

Males Living with HIV/AIDS 2018, N=25,687

- IDU: 3,757 (15%)
- MSM: 12,002 (46%)
- Heterosexual: 6,441 (25%)
- Other/unknown: 3,487 (14%)

Females Living with HIV/AIDS 2018, N=12,114

- Heterosexual: 8,214 (67%)
- Other/Unknown: 1,576 (13%)
- IDU: 2,324 (19%)
- Other/unknown: 1,576 (13%)
MSM only diagnosed HIV/AIDS by Race/Ethnicity—New Jersey, 2012-2016

- White
- Hispanic
- African American

- 2012: 18 diagnoses (73% 13-24, 86% 25-34, 171% 35-44, 156% 45-54, 156% 55+)
- 2013: 23 diagnoses (62% 13-24, 75% 25-34, 150% 35-44, 120% 45-54, 120% 55+)
- 2014: 21 diagnoses (62% 13-24, 83% 25-34, 183% 35-44, 147% 45-54, 147% 55+)
- 2015: 23 diagnoses (55% 13-24, 91% 25-34, 208% 35-44, 151% 45-54, 151% 55+)
- 2016: 29 diagnoses (51% 13-24, 78% 25-34, 200% 35-44, 128% 45-54, 128% 55+)
# and % of HIV/AIDS Diagnosed in 2016 by Race/Ethnicity and Sex–for Heterosexual people

Heterosexual NJ men diagnosed HIV/AIDS 2016, N=211

- White: 31 (14.7%)
- Black: 104 (49.30%)
- Hispanic: 71 (35.1%)
- Other/Unknown: 2 (1%)

Heterosexual NJ women diagnosed HIV/AIDS 2016, N=217

- White: 29 (13.4%)
- Black: 114 (52.5%)
- Hispanic: 71 (32.7%)
- Other/Unknown: 3 (1.4%)

NJ eHARS as of 12/31/2018.
Persons Living with HIV/AIDS in 2018 by County

Prevalence Rate: Persons Living with HIV/AIDS as of 12/31/2018 per 100,000
2017 population (Bridged Race Estimates at June 2018)
Statewide rate= 419 per 100,000

Counties:        N  (Rates)
1 Essex         9716 (1221)
2 Hudson      5007 ( 748)
3 Union 2866 (518)
4 Atlantic       1414 (514)
5 Passaic       2505 (492)
6 Mercer         1506 (405)
7 Cumberland  599 (381)
8 Camden       1869 (366)
9 Monmouth   1913 (304)
10 Middlesex   2142 (257)
11 Salem           160 (247)
12 Cape May      212 (222)
13 Burlington    862 (192)
14 Bergen 1781 (191)
15 Somerset       612 (184)
16 Morris           867 (174)
17 Warren        179 (167)
18 Gloucester   443 (152)
19 Ocean          779 (133)
20 Hunterdon     159 (126)
21 Sussex          173 (119)

Data as of 12/31/2018
Socio-economic Status in New Jersey

- As of 2017, ten percent of New Jersey’s population live in poverty (lower than the national rate (14.6%).
- Incomes below the poverty level for 20 counties in 2017 improved than in 2016. Only one county (Cumberland) where poverty level has not changed.
- Counties with the lowest percentage of residents living below the poverty level (richest counties) are Hunterdon, Morris and Somerset. The richer counties tend to have lower HIV/AIDS prevalence.
- Conversely, counties with the highest percentage of residents living below the poverty level (poorest counties) tend to have higher HIV incidence and prevalence rates.
Living with HIV/AIDS, 2018

Poverty Rates in 2017

Statewide rate = 10.0%

- 3.9 – 6.5 (17-21)
- 6.6 – 10.0 (11-16)
- 10.2 – 12.0 (7-10)
- 13.0+ (1-6)

Counties:        N  (Rates)
1 Essex         9716 (1221)
2 Hudson      5007 ( 748)
3 Union 2866 (518)
4 Atlantic       1414 (514)
5 Passaic       2505 (492)
6 Mercer         1506 (405)
7 Cumberland  599 (381)
8 Camden      1869 (366)
9 Monmouth 1913 (304)
10 Middlesex   2142 (257)
11 Salem            160 (247)
12 Cape May     212 (222)
13 Burlington 862 (192)
14 Bergen      1781 (191)
15 Somerset 612 (184)
16 Morris           867 (174)
17 Warren     179 (167)
18 Gloucester 443 (152)
19 Ocean          779 (133)
20 Hunterdon 159 (126)
21 Sussex         173 (119)

Data as of 12/31/2018
Various Measures of HIV Care in New Jersey: 2018

- Adjusted Denominator: 29,955
- Retained in any care in 2018 (≥CD4/VL/ART): 21,281
- Continuously Retained in care in 2018 (≥2 CD4/vl/3 mons. Apart): 13,920
- Suppressed vi <200 Copies/ML in 2018: 15,966
HIV Continuum of Care in NJ 2018: Percentages

Denominator: N=29,955

- Retained in any care: 71%
- Continuously Retained in care: 46%
- Suppressed VL: 53%
Key Points

• New HIV infections are down overall; between 2012 and 2016 there was about 8% decline in new infections: among non-Hispanic Blacks by 17%, only 2% among non-Hispanic Whites, but increased among Hispanics by 5%. The goal is to reduce the rate of new HIV infection by 75% toward to end the HIV epidemic by 2025.

• The only demographic group experiencing a growth in new infections is MSM, particularly for Hispanic men. MSM become the highest HIV/AIDS risk for both U.S. and NJ. 53.7% or more of new HIV/AIDS cases among men is MSM, For MSM in NJ, the median age of HIV/AIDS diagnoses in 2016 is 29. The disparity of new cases in minorities is particularly pronounced for young MSM.

Racial ethnic disparities still exist. Seventy nine percent (79%) of persons 2018 living with HIV were minorities.

Seventy percent were retained in any HIV care in 2018, 48% were in continuous HIV care and 53% were virally suppressed.