

# An Overview of HIV Epidemiology in Pennsylvania

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Pennsylvania HIV Conference  
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## Quick Note

Data for the years 2020 and 2021 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state/local jurisdictions. Therefore, more time and data are needed to accurately assess COVID-19's impact on HIV in Pennsylvania (Pa.).

# Overview of HIV Epidemiology in Pa.

- As of year-end 2022, a total of 64,669 people have been diagnosed and reported with HIV in Pa.
- In 2022, a total of 916 people newly diagnosed with HIV
- A total of 4,597 people were newly diagnosed and reported from 2018 to 2022
- There are an estimated 41,364 people living with HIV (PLWH) at year-end 2022

# Number of People Newly Diagnosed With HIV by Selected Characteristics in Pa., 2022 (N=916)

| <b>Selected characteristics</b>   | <b>Number</b> | <b>Percent</b> |
|-----------------------------------|---------------|----------------|
| <b>Total</b>                      | <b>916</b>    | <b>100</b>     |
| <b>Birth sex</b>                  |               |                |
| Female                            | 194           | 21.2           |
| Male                              | 722           | 78.8           |
| <b>Transmission mode</b>          |               |                |
| Heterosexual contact              | 138           | 15.1           |
| Injection drug use (IDU)          | 82            | 9.0            |
| Male-to-male sexual (MSM) contact | 472           | 51.5           |
| MSM&IDU                           | 34            | 3.7            |
| Pediatric mode                    | 2             | 0.2            |
| Unknown                           | 188           | 20.5           |

Data source: Pa. HIV surveillance

# Number of People Newly Diagnosed with HIV by Selected Characteristics in Pa., 2022 (N=916)

| Selected characteristics               | Number     | Percent    |
|--|------------|------------|
| <b>Total</b>                           | <b>916</b> | <b>100</b> |
| <b>Age at diagnosis</b>                |            |            |
| 0-12                                   | 1          | 0.1        |
| 13-14                                  | 1          | 0.1        |
| 15-24                                  | 149        | 16.3       |
| 25-34                                  | 357        | 39.0       |
| 35-44                                  | 212        | 23.1       |
| 45-54                                  | 108        | 11.8       |
| 55-64                                  | 66         | 7.2        |
| ≥65                                    | 22         | 2.4        |
| <b>Race/ethnicity</b>                  |            |            |
| American Indian/Alaskan Native (AI/AN) | 3          | 0.3        |
| Asian                                  | 15         | 1.6        |
| Black/African American                 | 389        | 42.5       |
| Hispanic                               | 194        | 21.2       |
| Multiple race                          | 35         | 3.8        |
| White                                  | 280        | 30.6       |

Hispanic/Latino people can be of any race

Data source: Pa. HIV surveillance

# Number of People Newly Diagnosed HIV by Age at Diagnosis and Transmission Mode in Pa., 2022 (N=916)

| Age at diagnosis (years) | Transmission Mode    |           |            |           |                |            |            |            |
|--------------------------|----------------------|-----------|------------|-----------|----------------|------------|------------|------------|
|                          | Heterosexual contact | IDU       | MSM        | MSM& IDU  | Pediatric mode | Unkn own   | Total      |            |
|                          | No.                  | No.       | No.        | No.       | No.            | No.        | No.        | %          |
| 0-12                     | 0                    | 0         | 0          | 0         | 1              | 0          | 1          | 0.1        |
| 13-14                    | 0                    | 0         | 0          | 0         | 0              | 1          | 1          | 0.1        |
| 15-24                    | 18                   | 2         | 105        | 5         | 1              | 18         | 149        | 16.3       |
| 25-34                    | 49                   | 32        | 206        | 16        | 0              | 54         | 357        | 39.0       |
| 35-44                    | 36                   | 26        | 89         | 7         | 0              | 54         | 212        | 23.1       |
| 45-54                    | 17                   | 15        | 43         | 2         | 0              | 31         | 108        | 11.8       |
| 55-64                    | 13                   | 7         | 23         | 4         | 0              | 19         | 66         | 7.2        |
| ≥65                      | 5                    | 0         | 6          | 0         | 0              | 11         | 22         | 2.4        |
| <b>Total</b>             | <b>138</b>           | <b>82</b> | <b>472</b> | <b>34</b> | <b>2</b>       | <b>188</b> | <b>916</b> | <b>100</b> |

Data source: Pa. HIV surveillance

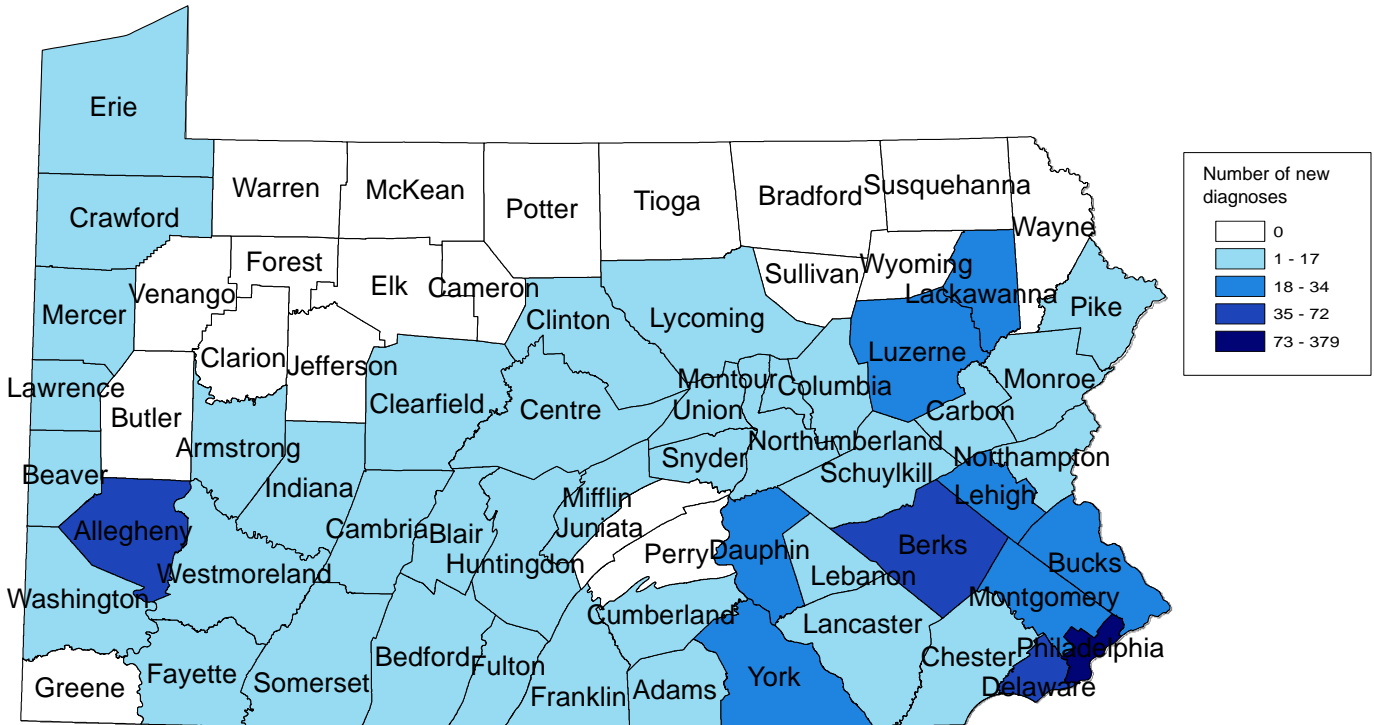
# Number of People Newly Diagnosed HIV by Transmission Mode and Race/Ethnicity in Pa., 2022 (N=916)

| Race/ ethnicity        | Transmission mode    |           |            |           |                |            |            |            |
|------------------------|----------------------|-----------|------------|-----------|----------------|------------|------------|------------|
|                        | Heterosexual contact | IDU       | MSM        | MSM& IDU  | Pediatric mode | Unknown    | Total      |            |
|                        | No.                  | No.       | No.        | No.       | No.            | No.        | No.        | %          |
| Asian                  | 1                    | 1         | 10         | 0         | 1              | 2          | 15         | 1.6        |
| Black/African American | 65                   | 18        | 204        | 7         | 0              | 95         | 389        | 42.5       |
| Hispanic/Latino        | 30                   | 13        | 101        | 5         | 1              | 44         | 194        | 21.2       |
| Multiple race          | 9                    | 2         | 16         | 1         | 0              | 7          | 35         | 3.8        |
| NHPI                   | 0                    | 0         | 3          | 0         | 0              | 0          | 3          | 0.3        |
| White                  | 33                   | 48        | 138        | 21        | 0              | 40         | 280        | 30.6       |
| <b>Total</b>           | <b>138</b>           | <b>82</b> | <b>472</b> | <b>34</b> | <b>2</b>       | <b>188</b> | <b>916</b> | <b>100</b> |

Hispanic/Latino people can be of any race

Data source: Pa. HIV surveillance

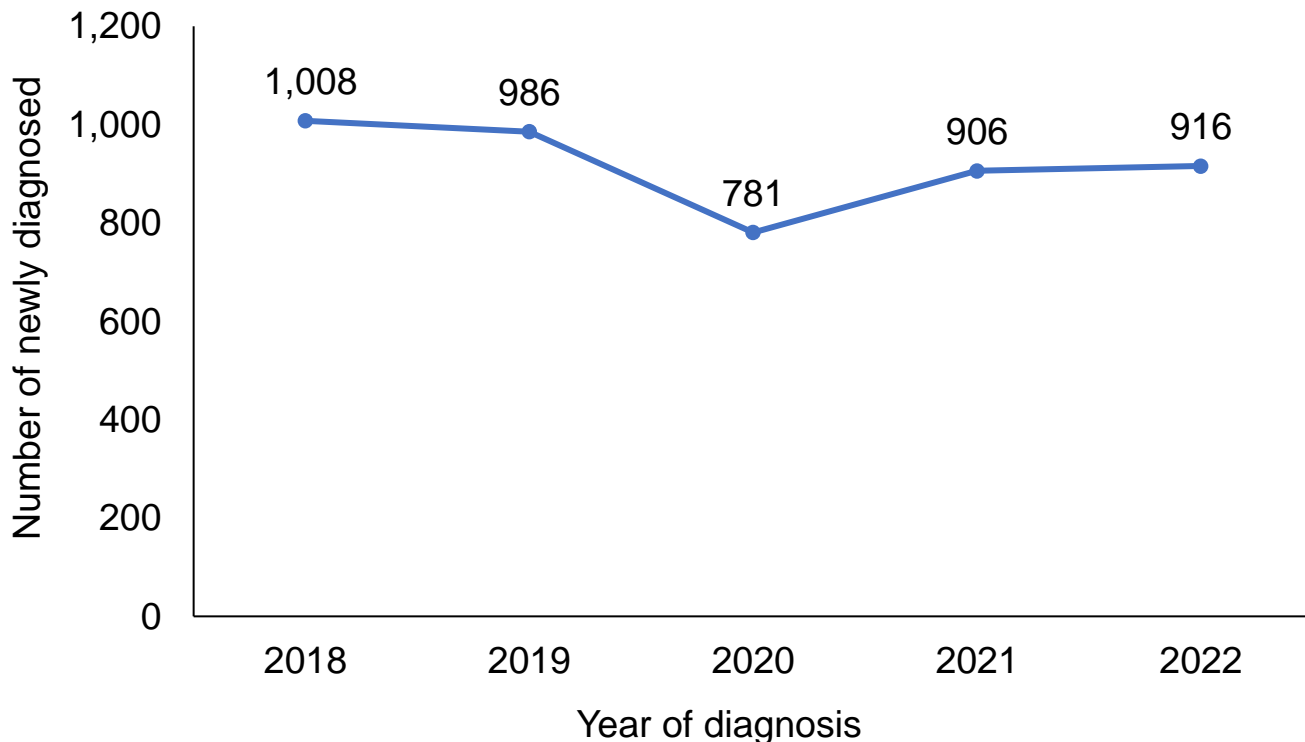
# Number of New Diagnoses of HIV Disease by County in Pa., 2022



Data source: Pa. HIV surveillance



# Number of People Newly Diagnosed With HIV in Pa., 2018-2022

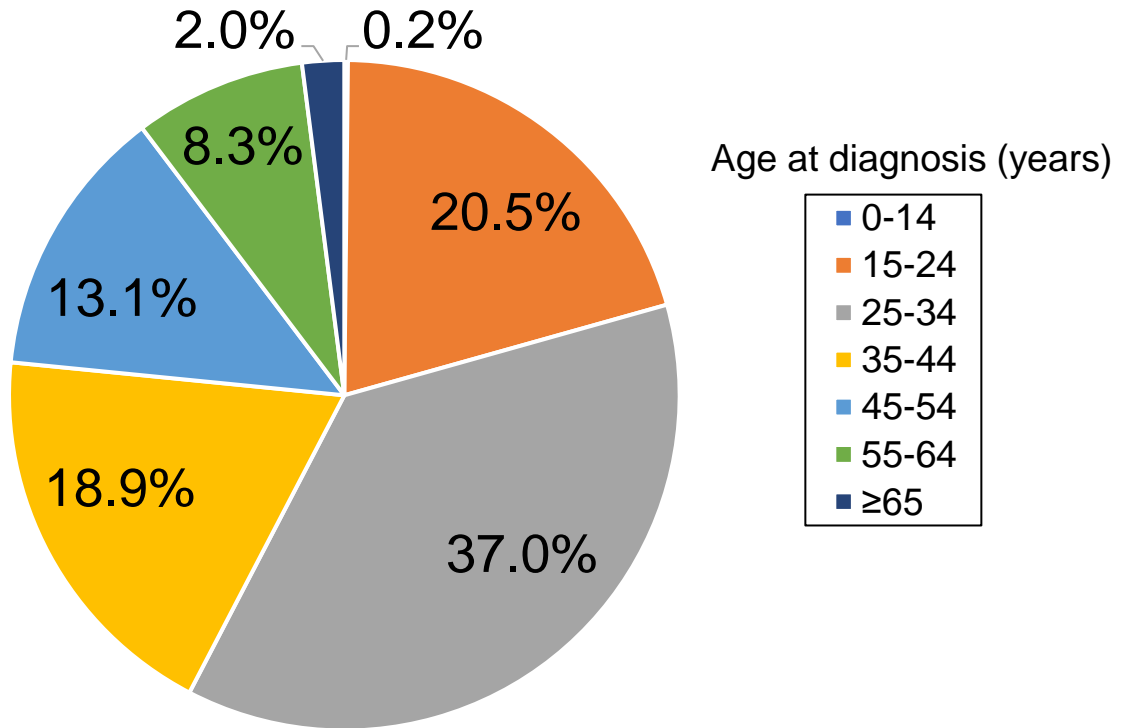


Data source: Pa. HIV surveillance

# Selected Characteristics of Newly Diagnosed HIV in Pa., 2018-2022

- By sex at birth, the number of newly diagnosed individuals that were females was 1,000 (21.8%) compared to 3,597 (78.2%) males in the five-year period
- Considering race/ethnicity among newly diagnosed individuals, 11 (0.2%) were American Indian/Alaskan Native (AI/AN), 62 (1.3%) identified as Asian, 2,106 (45.8%) were Black/African American, 884 (19.2%) were Hispanics, 172 (3.7%) were multiple race, and 1,360 (29.6%) identified as white, and 2 were Native Hawaiian Pacific Islander (NHPI)

# Percentage of Newly Diagnosed HIV by Age at Diagnosis in Pa., 2018-2022 (N= 4,597)



# Risk Characteristics of Newly Diagnosed HIV in Pa., 2018-2022

- In Pennsylvania, 2,366 (51.5%) of all newly diagnosed HIV individuals in the five-year period were MSM. Heterosexual contact accounted for 924 (20.1%), 403 (8.8%) were IDU related, 197 (4.3%) were MSM&IDU, 9 (0.2%) were pediatric mode, and 698 (15.2%) had unknown transmission risk
- The proportion of newly diagnosed HIV that were attributable to MSM was 47.8% (482/1,008) in 2018 and 51.5% (472/916) in 2022
- The proportion of newly diagnosed HIV attributable to heterosexual contact was 22.5% (227/1,008) in 2018 and 15.1% (138/916) in 2022
- There were 104 (10.3%) individuals newly diagnosed with HIV which was IDU-related in 2018 compared to 82 (9%) individual in 2022

# Number of PLWH by Selected Characteristics in Pa., 2022

| <b>Selected characteristics</b> | <b>Number</b> | <b>Percent</b> |
|---------------------------------|---------------|----------------|
| <b>Total</b>                    | <b>41,364</b> | <b>100</b>     |
| <b>Sex</b>                      |               |                |
| Female                          | 11,102        | 26.8           |
| Male                            | 29,797        | 72.0           |
| Transgender                     | 465           | 1.1            |
| <b>Transmission mode</b>        |               |                |
| Heterosexual contact            | 11,956        | 28.9           |
| IDU                             | 6,524         | 15.8           |
| MSM                             | 17,142        | 41.4           |
| MSM&IDU                         | 1,854         | 4.5            |
| Other*                          | 3,192         | 7.7            |
| Pediatric mode**                | 696           | 1.7            |

Other\*= No Risk Reported (NRR), No Identified Risk(NIR)

Pediatric mode\*\*=Pediatric mode, Pediatric NRR, and pediatric other

Data source: Pa. HIV surveillance



# Number of PLWH by Selected Characteristics in Pa., 2022 (Cont'd)

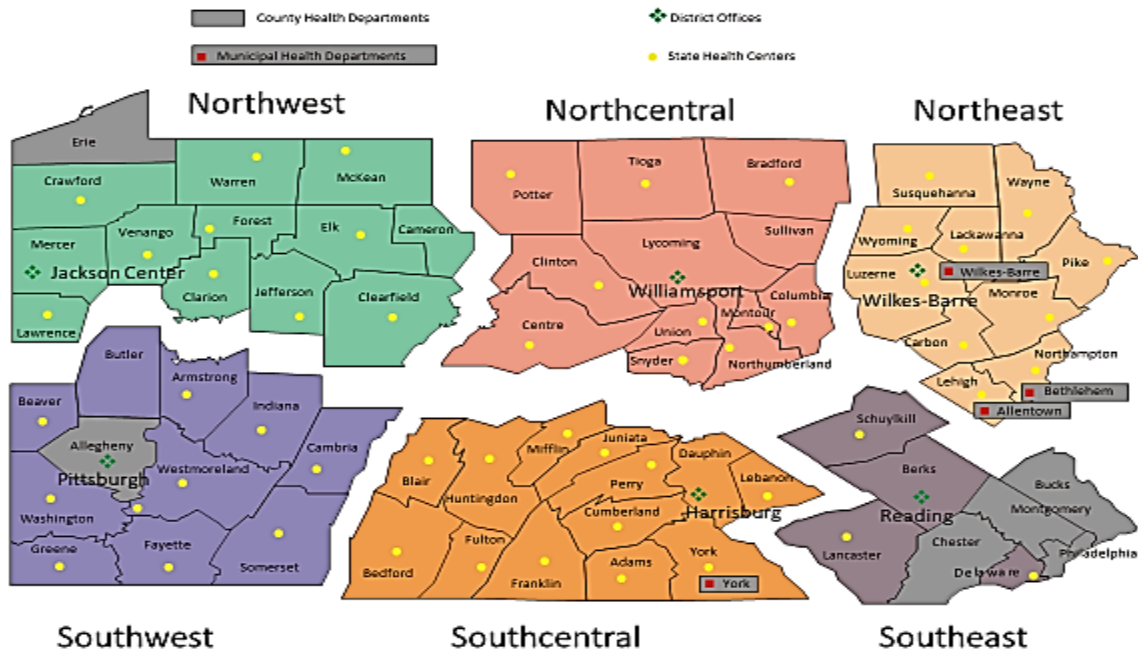
| Selected characteristics                | Number | Percent |
|---|--------|---------|
| <b>Race/ethnicity</b>                   |        |         |
| American Indian/Alaskan Native (AI/AN)  | 54     | 0.1     |
| Asian                                   | 384    | 0.9     |
| Black/African American                  | 18,920 | 45.7    |
| Hispanic/Latino                         | 7,783  | 18.8    |
| Multiple race                           | 1,974  | 4.8     |
| Native Hawaiian Pacific Islander (NHPI) | 23     | 0.1     |
| White                                   | 12,226 | 29.6    |
| <b>Age at year-end 2022 (years)</b>     |        |         |
| 0-12                                    | 41     | 0.1     |
| 13-14                                   | 16     | 0.0     |
| 15-24                                   | 877    | 2.1     |
| 25-34                                   | 5,573  | 13.5    |
| 35-44                                   | 7,309  | 17.7    |
| 45-54                                   | 8,810  | 21.3    |
| 55-64                                   | 12,023 | 29.1    |
| ≥65                                     | 6,715  | 16.2    |

Hispanic/Latino people can be of any race

Data source: Pa. HIV surveillance

# Pa. Department of Health (PADOH) Health Districts

## Pennsylvania Department of Health Community Health Districts



# Number of PLWH in PADOH Regions, Pa., 2022

| Region            | Number        | Percent    |
|-------------------|---------------|------------|
| Northcentral (NC) | 1,180         | 2.9        |
| Northeast (NE)    | 3,874         | 9.4        |
| Northwest (NW)    | 970           | 2.3        |
| Southcentral (SC) | 3,884         | 9.4        |
| Southeast (SE)    | 26,555        | 64.2       |
| Southwest (SW)    | 4,901         | 11.8       |
| <b>Total</b>      | <b>41,364</b> | <b>100</b> |

Data source: Pa. HIV surveillance



# Number of PLWH in PADOH Regions by Sex/Gender in Pa., 2022

| PADOH Regions | Sex/Gender    |               |             | Total         |
|---------------|---------------|---------------|-------------|---------------|
|               | Female        | Male          | Transgender |               |
|               | No.           | No.           | No.         |               |
| NC            | 226           | 950           | 4           | 1,180         |
| NE            | 1,278         | 2,578         | 18          | 3,874         |
| NW            | 237           | 733           | 0           | 970           |
| SC            | 1,090         | 2,772         | 22          | 3,884         |
| SE            | 7,395         | 18,791        | 369         | 26,555        |
| SW            | 876           | 3,973         | 52          | 4,901         |
| <b>Total</b>  | <b>11,102</b> | <b>29,797</b> | <b>465</b>  | <b>41,364</b> |

# Number of PLWH in PADOH Regions by Transmission Mode in Pa., 2022

| Transmission mode    | PADOH Regions |              |            |              |               |              |               |
|----------------------|---------------|--------------|------------|--------------|---------------|--------------|---------------|
|                      | NC            | NE           | NW         | SC           | SE            | SW           | Total         |
|                      | No.           | No.          | No.        | No.          | No.           | No.          | No.           |
| Heterosexual contact | 268           | 1,263        | 244        | 1,091        | 8,133         | 957          | 11,956        |
| IDU                  | 227           | 619          | 134        | 598          | 4,577         | 369          | 6,524         |
| MSM                  | 452           | 1,311        | 387        | 1,647        | 10,445        | 2,900        | 17,142        |
| MSM&IDU              | 81            | 153          | 73         | 169          | 1,119         | 259          | 1,854         |
| Other                | 127           | 436          | 109        | 304          | 1,848         | 368          | 3,192         |
| Pediatric mode       | 25            | 92           | 23         | 75           | 433           | 48           | 696           |
| <b>Total</b>         | <b>1,180</b>  | <b>3,874</b> | <b>970</b> | <b>3,884</b> | <b>26,555</b> | <b>4,901</b> | <b>41,364</b> |

Other\* = No Risk Reported (NRR), No Identified Risk (NIR)  
 Pediatric mode\*\* = Pediatric, Pediatric NRR, Pediatric NIR, and Pediatric other  
 Data source: Pa. HIV surveillance

# Number of PLWH in PADOH Regions Race/Ethnicity in Pa., 2022

| Race/ethnicity         | PADOH Regions |              |            |              |               |              | Total No.     |
|------------------------|---------------|--------------|------------|--------------|---------------|--------------|---------------|
|                        | NC No.        | NE No.       | NW No.     | SC No.       | SE No.        | SW No.       |               |
| AI/AN*                 | 2             | 2            | 1          | 2            | 46            | 1            | 54            |
| Asian                  | 11            | 24           | 3          | 27           | 275           | 44           | 384           |
| Black/African American | 343           | 882          | 276        | 1,095        | 14,474        | 1,850        | 18,920        |
| Hispanic               | 229           | 1,398        | 105        | 874          | 4,850         | 327          | 7,783         |
| Multiple race          | 62            | 232          | 60         | 235          | 1,032         | 353          | 1,974         |
| NHPI**                 | 0             | 0            | 0          | 3            | 14            | 6            | 23            |
| Unknown                | 0             | 0            | 0          | 0            | 1             | 0            | 1             |
| White                  | 533           | 1,336        | 525        | 1,648        | 5,863         | 2,320        | 12,225        |
| <b>Total</b>           | <b>1,180</b>  | <b>3,874</b> | <b>970</b> | <b>3,884</b> | <b>26,555</b> | <b>4,901</b> | <b>41,364</b> |

\*AI/AN=American Indian/Alaska Native \*\*NHPI= Native Hawaiian Pacific Islander

Hispanic/Latino people can be of any race  
Data source: Pa. HIV surveillance

# Summary

- Overall, the number of people newly diagnosed with HIV dropped by 9.1% in 2022 compared to 2018
- Females and individuals aged 15 to 24 years old who are MSM were mainly responsible for the decline
- However, males, Black/African American, individuals aged 25 to 34 years old, and MSM continue to be disproportionately impacted by the pandemic

# Summary, Cont'd

- In 2022, males accounted for 79% of all newly diagnosed individuals while making up 49% of the population
- MSM accounted for 52% of all newly diagnosed individuals while making up 3.6% of the population <sup>2</sup>
- Individuals aged 25 to 34 years old were 39% of all newly diagnosed individuals while making up 13% of the population
- Black/African American were 43% of all newly diagnosed individuals while making up 12% of the population

## Data sources:

1. Pa. HIV surveillance

2. Grey, J. A., Bernstein, K. T., Sullivan, P. S., Purcell, D. W., Chesson, H. W., Gift, T. L., & Rosenberg, E. S. (2016). Estimating the Population Sizes of Men Who Have Sex With Men in US States and Counties Using Data From the American Community Survey. *JMIR public health and surveillance*, 2(1), e14. <https://doi.org/10.2196/publichealth.5365>

## Summary, Cont'd

- Among PLWH, 72% were male, 41.4% were MSM, 45.7% were blacks/African American, 45.3% were aged 55 years and older, and 16.2% are aged 65 years and older
- Individuals who identify as transgender accounted for 1.1% of PLWH
- The SE region accounted for about 2 out 3 PLWH in Pa.
- Overall, while the number of new diagnosis of HIV have been decreasing the number of PLWH in Pa. has been increasing

# Questions



# Contact Information

HIV/AIDS Surveillance and Epidemiology  
Bureau of Epidemiology  
Health and Welfare Building, Room 933  
625 Forster Street, Harrisburg, PA 17120  
Phone: 717-783-0481  
Fax: 717-772-6975

For epidemiology data request, please email:

[c-hivepi@pa.gov](mailto:c-hivepi@pa.gov)



# Pennsylvania Medical Monitoring Project

**Michelle Clarke**

Medical Monitoring Project Coordinator  
Bureau of Epidemiology

Pennsylvania HIV Conference  
September 14, 2023



**MEDICAL  
MONITORING  
PROJECT**

# What is the Medical Monitoring Project?

- The Medical Monitoring Project (MMP) is a surveillance system designed to learn more about the experiences and needs of people who are living with HIV
- It is funded by the Centers for Disease Control and Prevention (CDC)
- It is supported by several government agencies and conducted by state and local health departments

# Participants for Recruitment

- There are two MMP sites in Pennsylvania:
  - Pennsylvania (66 counties) with 200 people
  - Philadelphia with Philadelphia county with 400 people
- People who have tested positive for HIV (positive labs are reported to the Pennsylvania Department of Health) are maintained in a surveillance system
- The amount of federal money sent to Pennsylvania depends on the number of people in the surveillance system
- People chosen for this project are randomly picked from the surveillance system

# Time Frame for MMP Cycle

- Starting June 1 of each year, recruitment begins
- Last day of recruitment is April 15 of the next year. Example 6-1-2023 to 4-14-2024
- Medical records are also obtained during the cycle to see how many times participants went for care and medications

# Benefits to Participants

- The questionnaire is called a “Health Survey” in letters and phone calls
- Participation is voluntary
- CDC hopes at least 50% of people on the list would agree to participate
- Participants receive a \$50 gift card (VISA, Target, Walmart, a choice) and information if asked about services

# MMP Questionnaire

- Participants need to be a resident of Pennsylvania (excluding Philadelphia County) on December 31 of the previous year and over 18 years of age
- A statement of consent is read about the project beforehand
- The questions take about 45 minutes to an hour
- Questions can be done in person or over the phone
- The questions are about stigma, discrimination, insurance, trouble paying for medical bills and medicines, ability to take of yourself and your family, sex practices, along with met and unmet needs, etc.

# Interviews and Medical Record Abstraction (MRA) Completed

| Sample Size   | 200 | Interviews | MRAs      |
|---|-----|------------|-----------|
| <b>Current Total</b>  |     | <b>29</b>  | <b>10</b> |
| <b>Target (50% of Eligible Sample   95% of Interviewed)</b> |     | <b>89</b>  | <b>85</b> |
| <b>October 15<sup>th</sup> Benchmark (60%   30%)</b>        |     | <b>53</b>  | <b>25</b> |
| Weeks to 1 <sup>st</sup> Benchmark                          |     | <b>6</b>   | <b>6</b>  |
| Number per week to reach 1 <sup>st</sup> Benchmark          |     | 4          | 3         |
| <b>January 15<sup>th</sup> Benchmark (80%   60%)</b>        |     | <b>71</b>  | <b>51</b> |
| Weeks to 2 <sup>nd</sup> Benchmark                          |     | <b>19</b>  | <b>19</b> |
| Number per week to reach 2 <sup>nd</sup> Benchmark          |     | 3          | 3         |
| <b>Final Benchmarks (100%   100%)</b>                       |     | <b>89</b>  | <b>28</b> |
| Weeks to April 15 <sup>th</sup> /May 15 <sup>th</sup>       |     | <b>32</b>  | <b>36</b> |
| Number per week to reach Final Benchmarks                   |     | 2          | 1         |

# What Happens with the Information

- Information collected is sent to the CDC, but the participant's name is not shared
- The data is used to help decide funding at the federal level for future services to see where more money is needed or needs adjustment
- Participant responses help to align funds to what services are needed most



# What Does the Data Tell us?

- By collecting locally and nationally representative behavioral and medical record data from people living with HIV, MMP helps to answer the following questions:
  - How many people living with HIV are receiving medical care for HIV?
  - How easy is it to access medical care, prevention, and support services?
  - What are the met and unmet needs of people living with HIV?
  - How is treatment affecting people living with HIV?

# Why Participate in MMP?

- MMP is unique in that it describes comprehensive clinical and behavioral information from persons randomly sampled to represent everyone diagnosed with HIV
- Because MMP's estimates are designed to be representative, information gathered may be used by prevention planning groups, policy leaders, health care providers, and people living with HIV to highlight disparities in care and services and advocate for needed resources

# Everybody wins with MMP

- Participants receive a \$50 gift card for their time
- CDC receives the data (no PII) to see where needs are met or unmet
- Funding decisions at CDC are made based on the data to help with program activities

Thank you

Michelle Clarke  
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# **An Overview of Data-To-Care Project**

**Aditi Anand, MPA  
Division of HIV Prevention  
Data-to-Care Public Health Program  
Administrator**

# Outline

- What is Data to Care (D2C)?
- Why is it important?
- Main steps in D2C
- A high-level workflow on the D2C model
- D2C review of Quarter 1 and 2 results

# What is D2C?

- A public health strategy using HIV surveillance and other data to identify individuals living with HIV who are out of care and re-engage them
- D2C activities require collaborative efforts between the health department, HIV medical providers, and essential support service providers

## Goals:

- To increase the number of persons living with HIV who are engaged in medical care
- To increase the number of persons living with HIV who are virally suppressed

# What is D2C, Cont'd?

- **A significant component of D2C is evaluation of evidence of care**, which is measured by a presence of at least one HIV care marker in the previous 12-months.
- Care markers include:
  - A documented CD4 count/percent
  - A documented HIV viral load
  - A documented HIV genotype sequencing lab
  - A confirmed HIV medical appointment
  - A documented HIV antiretroviral therapy (ART) prescription



## Main Steps in D2C Program

Step 1

**Identify** PLWH who are not receiving medical care.

Step 2

**Investigate** other databases & conduct outreach to locate, interview, and verify patient care status.

Step 3

**Linkage to HIV Medical Care** for individuals confirmed not be in care.

Step 4

Identify and address clients' need for **support services** to facilitate retention in care and adherence to HIV treatment

Step 5

Provide appropriate **HIV prevention services**.

Step 6

Update and improve surveillance data with information obtained through D2C process

# Determining Presumptive Not in Care (NIC) Clients

## Responsibility of Central Office

- Generate a monthly list of presumptive NIC patients who meet the eligibility criteria
- Use data sources across HIV Prevention and Care

## D2C Eligibility Criteria:

- Must have a confirmed HIV diagnosis reported to Department of Health (DOH)
- Must have their last known residence in Pennsylvania
- Must be currently living at the time of the NIC list generation
- Meets the Presumptively NIC definition

# Presumptively NIC

**A client is considered presumptively NIC if they meet the following eligibility criteria:**

- Having no care marker in the twelve months prior to creation of the NIC list (NIC period), with evidence of care (at least one care marker) within a year prior to the start of the NIC period.
- Living and residing in the Commonwealth of Pennsylvania (excluding the city of Philadelphia) at the time of creating the NIC list

# Data Sources for D2C

- **PA-NEDSS** (Pennsylvania National Electronic Disease Surveillance System) - a laboratory-based data system which captures specific provider and laboratory information for clients
- **eHARS** (Enhanced HIV/AIDS Reporting System) contains a comprehensive HIV/AIDS surveillance data system
- ART claims data from the **Special Pharmaceutical Benefits Program (SPBP)** - a Commonwealth of Pennsylvania assistance program which provides pharmaceutical assistance and specific lab services to low to moderate income PLWH
- **People Search Software**- a government-use people search software which provides most recent address and updated vital status for PLWH
- **CAREWare** - an electronic health and social support services information system for HRSA's Ryan White HIV/AIDS Program recipients and providers

## High-level Central Output workflow

HIV Surveillance completes data review from PA-NEDSS, SPBP, People Search, eHARS, CAREWare, and death records to extract a NIC client list from each county every month to create presumptive not-in-care list



Central Office emails NIC list to CMHD and Department field staff by jurisdiction every month



CMHD and Department field staff conduct re-engagement activities (speak with providers, call clients, send letters, and field visits) to ensure PLWH are in care



D2C Coordinator reports activity at monthly D2C meeting



D2C Coordinator reviews the follow-up activities for completeness and accuracy

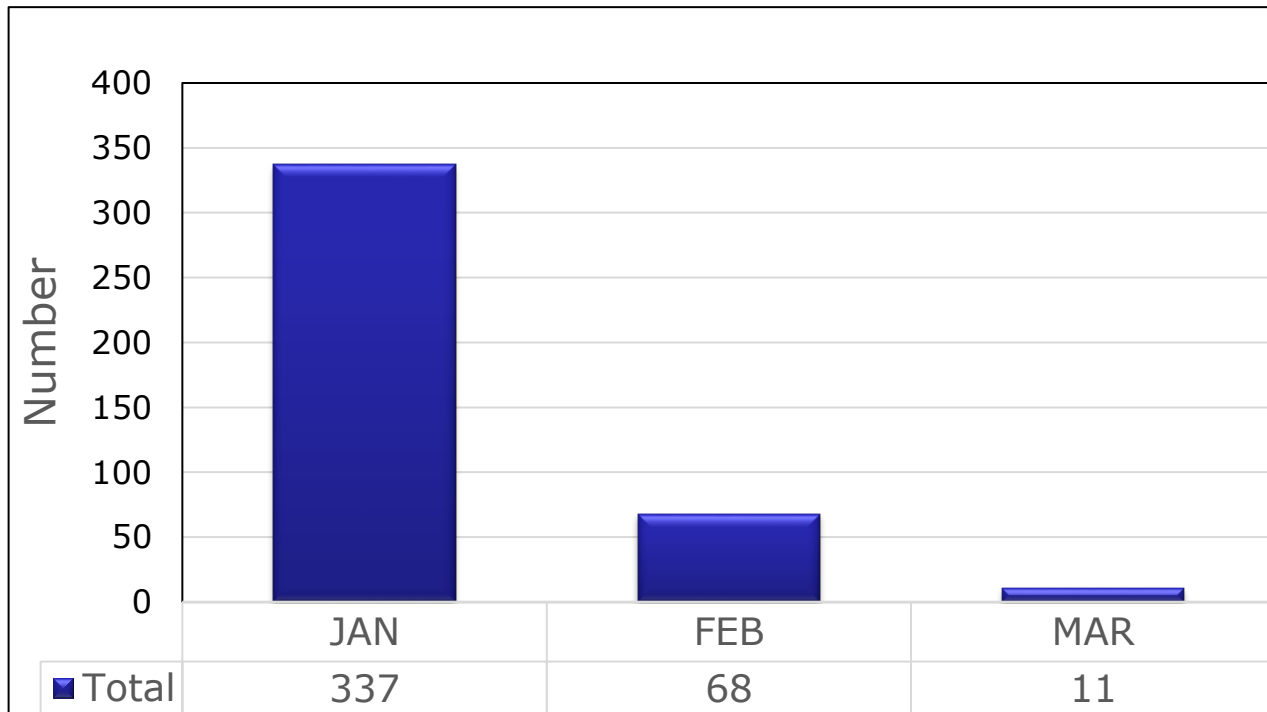


CMHD and Department field staff complete follow-up activity in PA-NEDSS to document re-engagement efforts

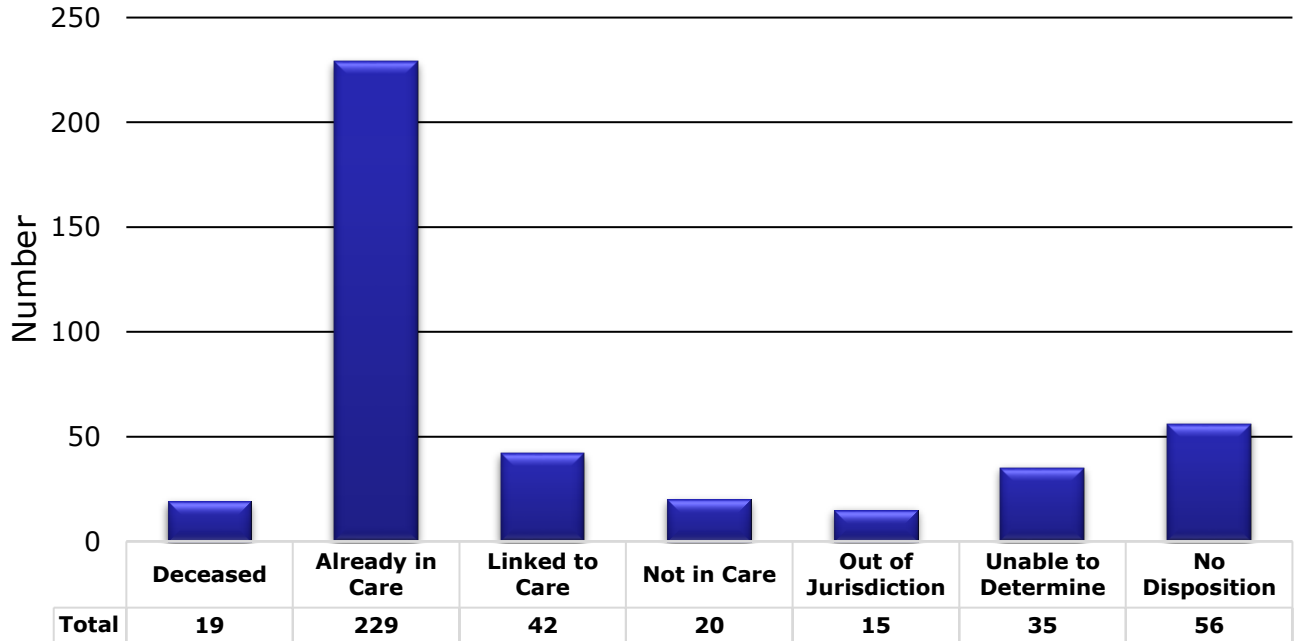
# Summary of activities from Jan '23 to May/June '23

| <b>Cycle</b>        | <b>Total NIC</b> | <b>Completed cases</b> | <b>Percent Completion</b> |
|---------------------|------------------|------------------------|---------------------------|
| <b>January '23</b>  | 337              | 297                    | 88%                       |
| <b>February '23</b> | 68               | 53                     | 78%                       |
| <b>March '23</b>    | 11               | 10                     | 91%                       |
| <b>April '23</b>    | 41               | 31                     | 76%                       |
| <b>May/June '23</b> | 56               | 22                     | 39%                       |

# First Quarter D2C Results (n=416)

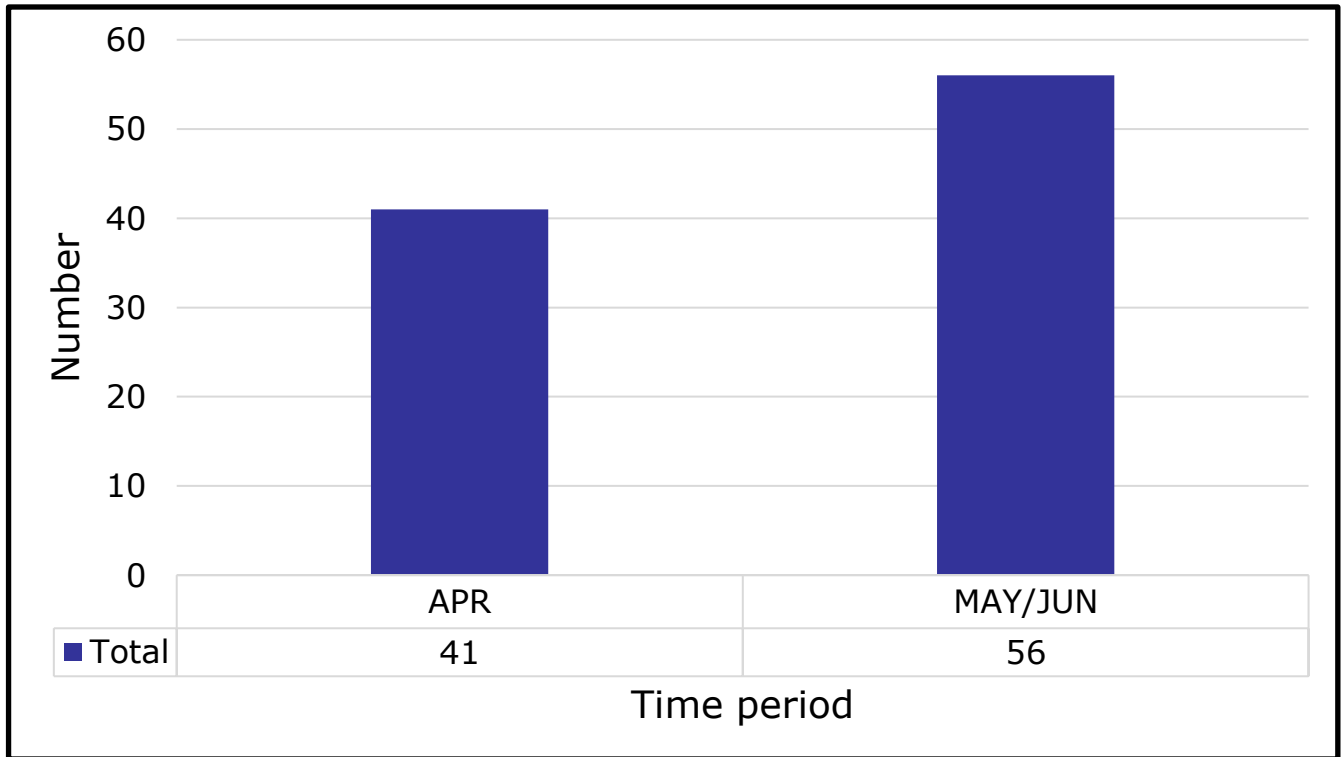


# First Quarter D2C Results (n=416)

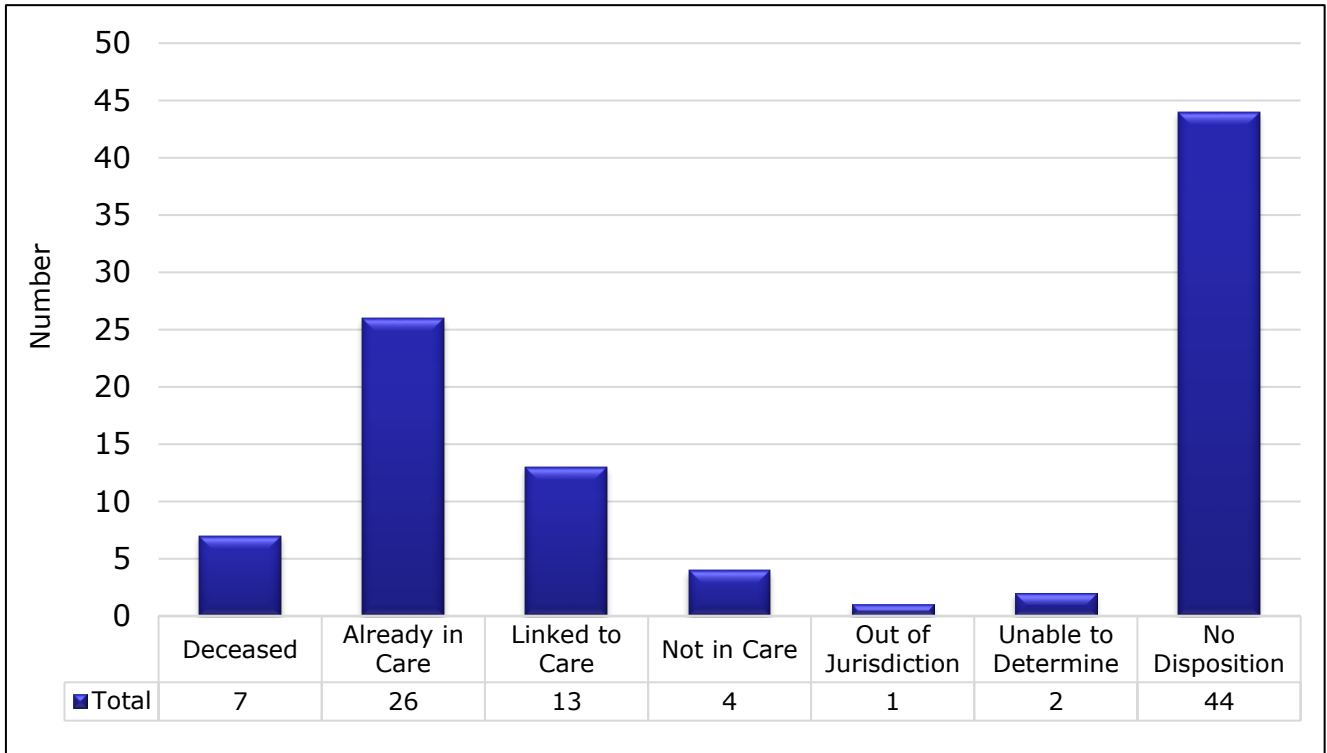




# Second Quarter D2C Results (n=97)



# Second Quarter D2C Results (n=97)



# Summary

- The first round (in January) had the highest number of cases as predicted.
  - Given that some counties had a huge number of cases, we extended the deadline from 30 days to 60 days
- Benchmark for first two quarters (January to June) was 75%.
  - **Completion rate for Quarter 1 was 87%** and for Quarter 2 was 66%.
  - 42 cases were linked to care in Quarter 1 and 13 cases were linked to care in Quarter 2.
- Among the individuals who were re-linked to care, follow up investigation showed the following:
  - 24 individuals had undetectable viral load.
  - 15 individuals showed decrease in their viral load.
  - 6 individuals showed increase in their viral load.

## Summary, Cont'd

- Improvements in D2C code:
  - Reduce the number of cases “already in care.”
  - Addresses were Accurant verified for accuracy and updated directly in PA-NEDSS.
- Issues were identified regarding provider CD4 and viral load reporting. This led to a delay in a few counties.
  - The issue has been resolved.



# **An Overview of Pennsylvania Department of Health HIV Cluster Detection and Response Activities**



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# Objectives

- Provide an overview of the Pennsylvania HIV Cluster Detection and Response (PA HIV CDR) activities
- Provide the definition of the different types of HIV clusters/outbreaks
- Summarize some of the benefits of the CDR activities
- Discuss roles, responsibilities, and participation of communities as stakeholders to the CDR activities

# Introduction to the PA HIV CDR Activities

A Cluster Detection and Response is a CDC grant requirement that includes different actions:

- Develop
- Maintain
- Implement a plan to respond to HIV transmission clusters and outbreaks



# What is the PA HIV CDR

- A new tool in the fight against HIV
- Part of ongoing routine Core HIV Surveillance and Prevention activities
- Required activity by CDC since 2018
- All states, territories and metropolitan areas are required to carry out similar activities
- Future HIV funding is related to what extent PA DOH met CDR performance measures

# What is the PA HIV CDR, Cont'd

- PA HIV CDR is a strategy to monitor, detect and respond to any potential HIV transmission cluster and outbreak in PA
- To be used in conjunction with the PADOH Emergency Operations Plan (EOP), and any other plans that may be applicable to the management of major clusters and outbreaks in PA

# Goals of the PA HIV CDR

Enable the PADOH and stakeholders to:

- Provide a strategic framework for PADOH and its partners in detecting, responding to and containing HIV transmission clusters
- Rapidly detect the most recent, active and ongoing HIV transmission clusters before they become outbreaks
- Implement quickly appropriate responses to stop HIV transmission

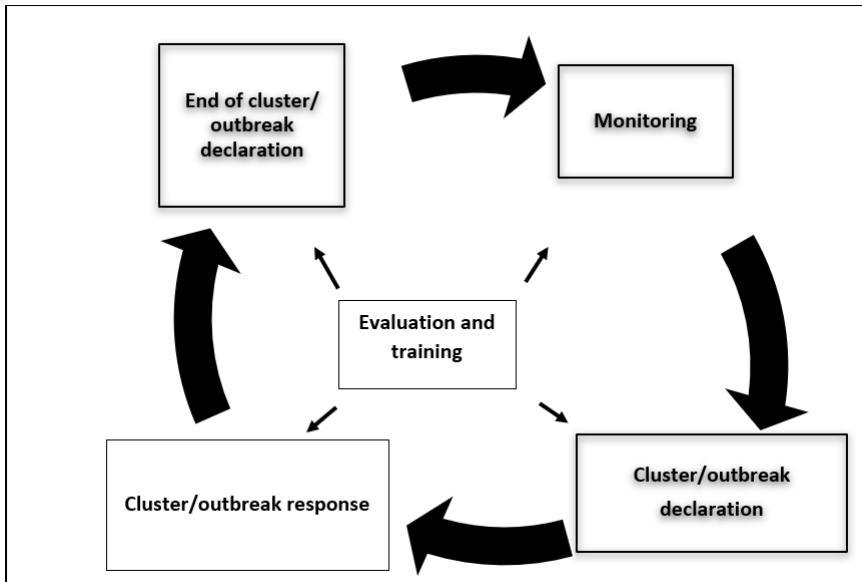
## Goals of the PA HIV CDR, Cont'd

Enable the PADOH and stakeholders to:

- Carries out long term actions and interventions to prevent HIV clusters and large outbreaks in the future
- Reduce HIV transmission, risk and related stigma by directing prevention activities and resources to the community where they are needed the most

# Phases of PA HIV CDR

## Cumulative Activities



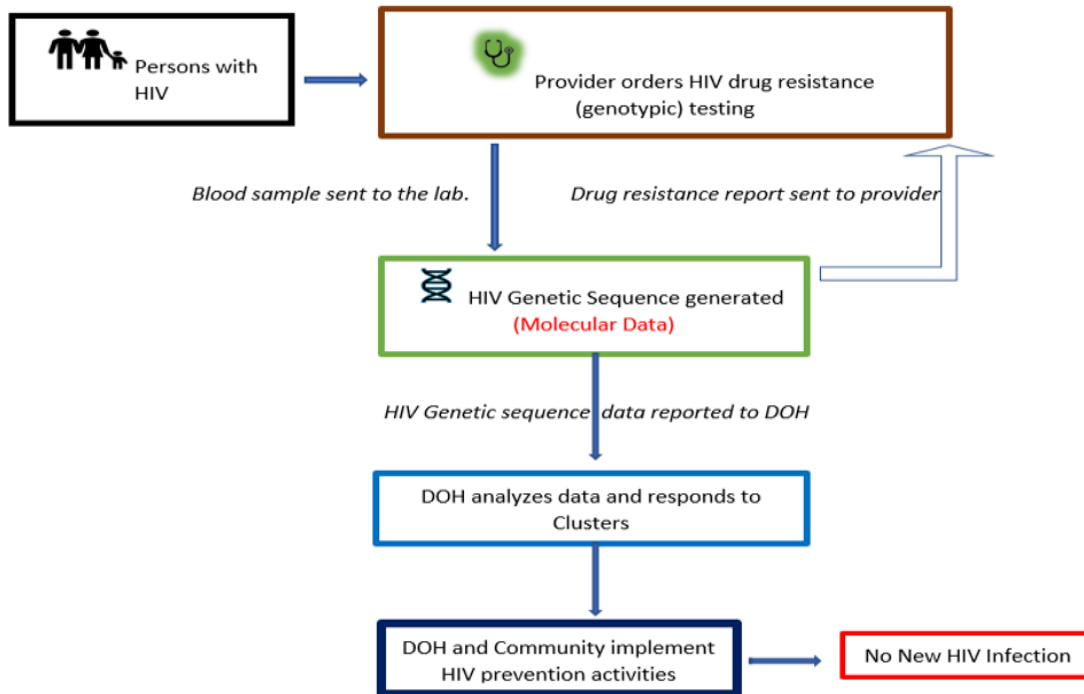
# What is a HIV Transmission Cluster/Outbreak

- A HIV cluster is an increase of cases above the expected numbers in a limited time such as months or years in a particular geographic area
- HIV clusters or outbreaks refer to groups of people that are experiencing rapid HIV transmission

# Types of HIV Transmission Clusters

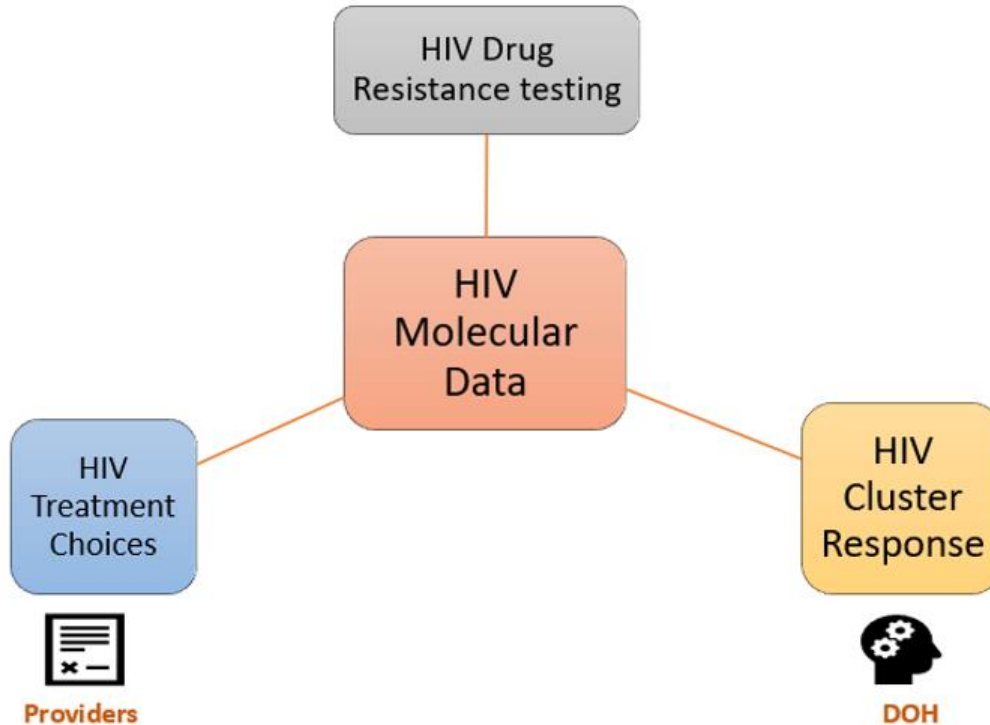
- Time-space Clusters
  - Time and space
  - Based on analysis of HIV diagnosis data
- Molecular Clusters
  - The cluster shares the same HIV strains
  - Based on analysis of the genetic material of the HIV virus reported by the laboratories as HIV drug resistance test results
  - This analysis is like the one done for foodborne outbreaks such as E.coli, salmonella -----> recalls of products (Example: Baby Formula)

# Molecular Cluster Data Origin





# Importance of HIV Drug Resistance Testing



# Number of Identified Clusters by Type, Entity and Year, 2018-2022, PA

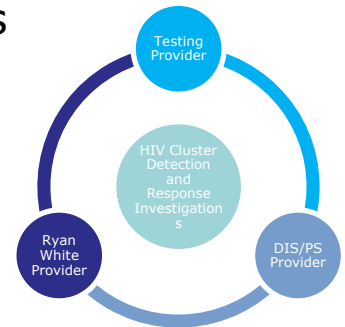
| Cluster Type      | CDC National Clusters |          |          |          |          | PA Clusters |          |          |          |          |           |            |
|-------------------|-----------------------|----------|----------|----------|----------|-------------|----------|----------|----------|----------|-----------|------------|
|                   | 2018                  | 2019     | 2020     | 2021     | 2022     | 2018        | 2019     | 2020     | 2021     | 2022     | Total     |            |
|                   | No.                   | No.      | No.      | No.      | No.      | No.         | No.      | No.      | No.      | No.      | No.       | %          |
| <b>Molecular</b>  | 1                     | 1        | 0        | 0        | 1        | 0           | 6        | 1        | 1        | 0        | <b>8</b>  | <b>40</b>  |
| <b>Time-Space</b> | 0                     | 0        | 0        | 0        | 0        | 1           | 1        | 5        | 5        | 2        | <b>14</b> | <b>60</b>  |
| <b>Total</b>      | <b>1</b>              | <b>1</b> | <b>0</b> | <b>0</b> | <b>1</b> | <b>1</b>    | <b>7</b> | <b>6</b> | <b>6</b> | <b>2</b> | <b>22</b> | <b>100</b> |

# Some Benefits of PA HIV CDR Activities

- Allow to more effectively reach and serve more people with or at risk for HIV
  - Make testing easier and faster and can detect infection to prevent transmission
  - Link individuals to care. Treatment saves lives and prevents transmission and new infections
  - Refer HIV-negative individuals to PrEp or PEP to prevent new infections
- Reach out to the networks in the clusters
  - Provide the services they need
  - Identify gaps in care and services
  - Understand barriers to care and prevention
  - Develop approaches to overcome them

# Roles of Community and Stakeholders in HIV CDR Activities

- Your participation is crucial in this initiative because you, the stakeholders are at the front line of the HIV detection and response activities
- You know your community, available local resources, concerns and potential solutions
- You can help in the detection and implementation of HIV outbreak response activities
- You can help in identifying gaps in services and resources



# Roles of Community and Stakeholders in HIV CDR Activities, Cont'd

- Encourage the communities and stakeholders to participate in efforts to stop transmission and end HIV
- Encourage clients to engage in Partner Services
- Assist in preventing HIV transmission and related stigma
- Advocate for CDR initiatives so we can end HIV in Pennsylvania

# Summary

- The presence of an HIV cluster or outbreak is a sign of increased HIV transmission among a group of people in an area or in a sexual or social network
- CDR requires input and collaboration from diverse groups for optimal outcomes
- Your collaboration and participation are crucial to
  - ▣ Stop and prevent HIV transmission
  - ▣ Reduce risk and related stigma
  - ▣ Enhance linkage to care and prevention activities

# Together We Can End HIV

- Yes, with your participation WE CAN END THE HIV EPIDEMIC in PA



# Questions?





# For More Information

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