



HIV/AIDS in the Baltimore-Towson Metropolitan Area: An Epidemiological Profile

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IDEHA Mission

- To improve the health of Marylanders by reducing the transmission of infectious diseases, helping impacted persons live longer, healthier lives, and protecting individuals and communities from environmental health hazards
- We work in partnership with local health departments, providers, community based organizations, and public and private sector agencies to provide public health leadership in the prevention, control, monitoring, and treatment of infectious diseases and environmental health hazards.



Outline

- Surveillance Overview
- National Data
- State Data
- Regional Data
- Regional Summary
- Enhancing Data Security
- Looking Forward



Surveillance Overview



Why Collect Data?

- Measure size of epidemic
- Assess populations affected
- Advocate for resources
- Target resources to affected populations
- Measure impact of programs

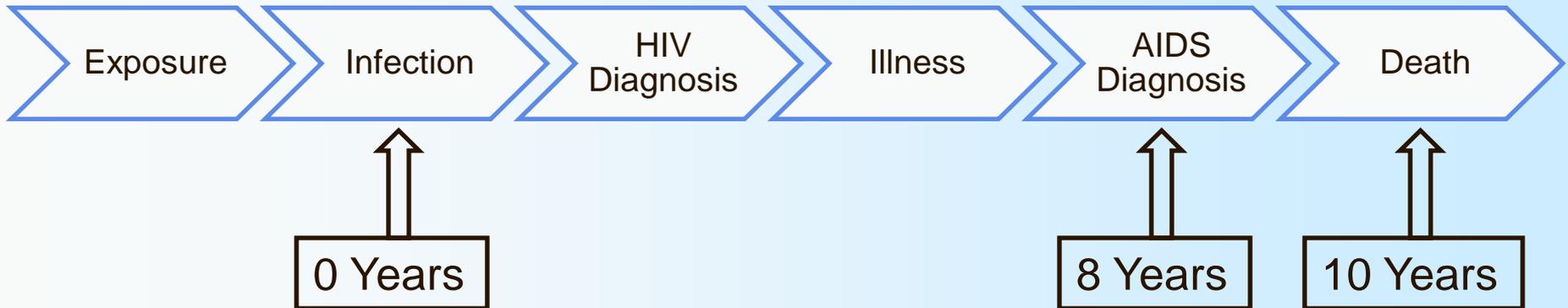


HIV Disease Spectrum



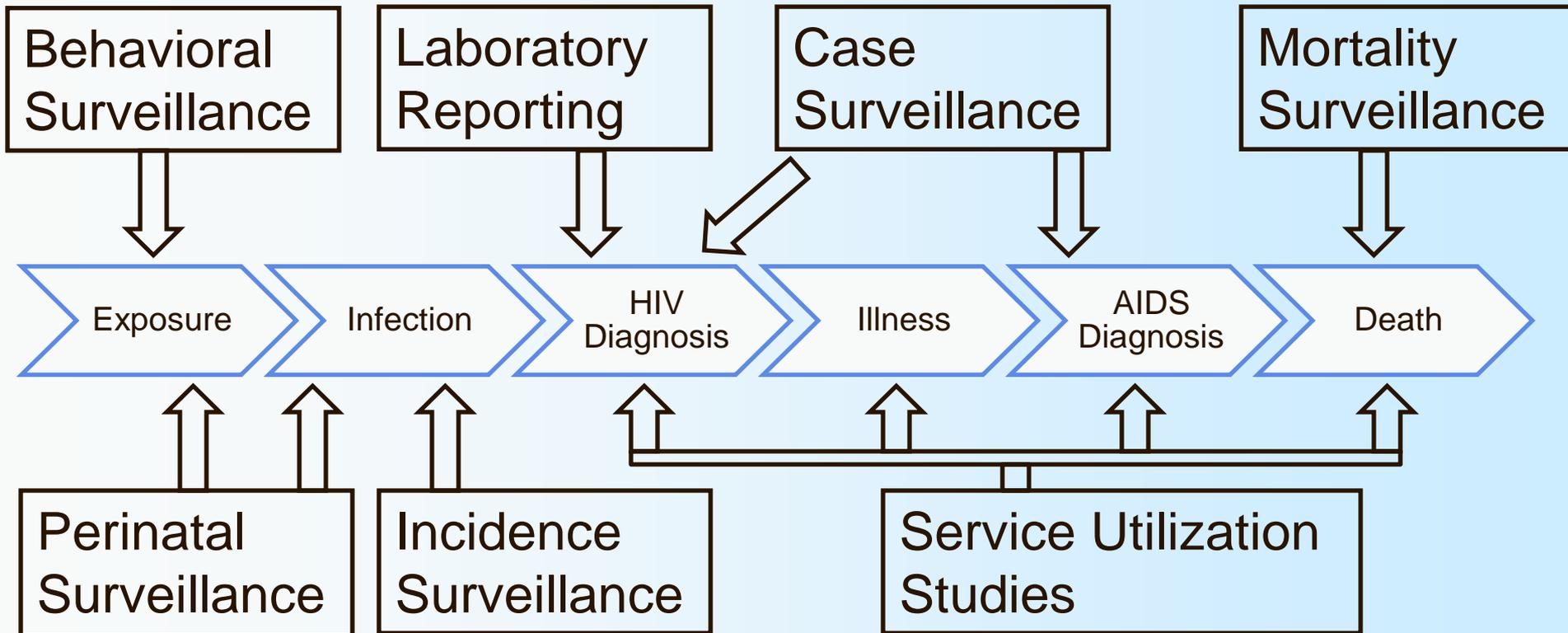


HIV Disease Spectrum and Timeline for Untreated Disease





HIV Disease Spectrum and Surveillance Activities





National Data



U.S. HIV/AIDS Prevalence



- At the end of 2009, an estimated 1.2 million Americans were infected with HIV
- It is also estimated that 20% of the infected were undiagnosed
 - CDC. HIV in the United States. Fact Sheet, Nov. 2011. Atlanta.



2010 Estimated HIV Diagnoses, Ranked by Rates

<u>STATE/TERRITORY</u>	<u>Cases</u>	<u>Rate per 100,000</u>
1. District of Columbia*	939	156.7
2. Virgin Islands	47	42.8
3. Florida	5,782	31.2
4. Maryland*	1,708	30.0
5. Louisiana	1,279	28.5
6. Puerto Rico	1,118	28.2
7. New York	5,321	27.2
8. Georgia	2,581	26.3
9. New Jersey	2,207	25.3
10. South Carolina	914	20.0
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<i>United States**</i>	48,298	16.3

CDC. HIV Surveillance Report, 2010. Vol. 22. Table 19.

* Maryland DHMH estimates from CDC data.

** Based on 46 states and 5 territories.

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2009 Estimated Adults Living with HIV, Ranked by Rates



<u>STATE/TERRITORY</u>	<u>Cases</u>	<u>Rate per 100,000</u>
1. District of Columbia*	13,973	2,330.2
2. New York	130,608	795.9
3. Virgin Islands	573	632.7
4. Florida	92,874	594.8
5. Puerto Rico	18,350	555.7
6. Maryland*	29,282	513.8
7. New Jersey	36,041	497.1
8. Georgia	35,129	442.6
9. Louisiana	16,211	440.4
10. Delaware	2,913	395.8
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<i>United States**</i>	<i>800,784</i>	<i>327.6</i>

CDC. HIV Surveillance Report, 2010. Vol. 22. Table 21.

* Maryland DHMH estimates from CDC data.

** Based on 46 states and 5 territories.

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2010 Estimated HIV Diagnoses, Ranked by Rates



<u>METROPOLITAN AREA</u>	<u>Cases</u>	<u>Rate per 100,000</u>
1. Miami, FL	2,757	49.7
2. Baton Rouge, LA	339	43.0
3. New Orleans-Metairie-Kenner, LA	439	36.9
4. <i>Washington, DC-VA-MD-WV*</i>	<i>1,995</i>	<i>36.4</i>
5. <i>Baltimore-Towson, MD*</i>	<i>951</i>	<i>35.4</i>
6. Jackson, MS	184	34.0
7. Memphis, TN-MS-AR	440	33.7
8. Orlando, FL	686	32.9
9. New York, NY-NJ-PA	6,160	32.3
10. Columbia, SC	230	30.9
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<i>United States**</i>	<i>47,692</i>	<i>16.3</i>

CDC. HIV Surveillance Report, 2010. Vol. 22. Table 24.

* Maryland DHMH estimates from CDC data.

** Based on 46 states and 5 territories.

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2009 Estimated Adults Living with HIV, Ranked by Rates



<u>METROPOLITAN AREA</u>	<u>Cases</u>	<u>Rate per 100,000</u>
1. Miami, FL	48,177	868.5
2. New York, NY-NJ-PA	140,988	739.3
3. Baltimore-Towson, MD*	18,116	673.3
4. New Orleans-Metairie-Kenner, LA	7,380	620.2
5. Jackson, MS	2,952	545.8
6. San Francisco, CA	23,101	535.0
7. Washington, DC-VA-MD-WV*	29,163	532.5
8. Memphis, TN-MS-AR	6,891	528.1
9. Baton Rouge-LA	3,779	480.2
10. San Juan-Caguas-Guaynabo, PR	12,505	477.8
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<i>United States**</i>	793,935	271.4

CDC. HIV Surveillance Report, 2010. Vol. 22. Table 24.

* Maryland DHMH estimates from CDC data.

** Based on 46 states and 5 territories.

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State Data

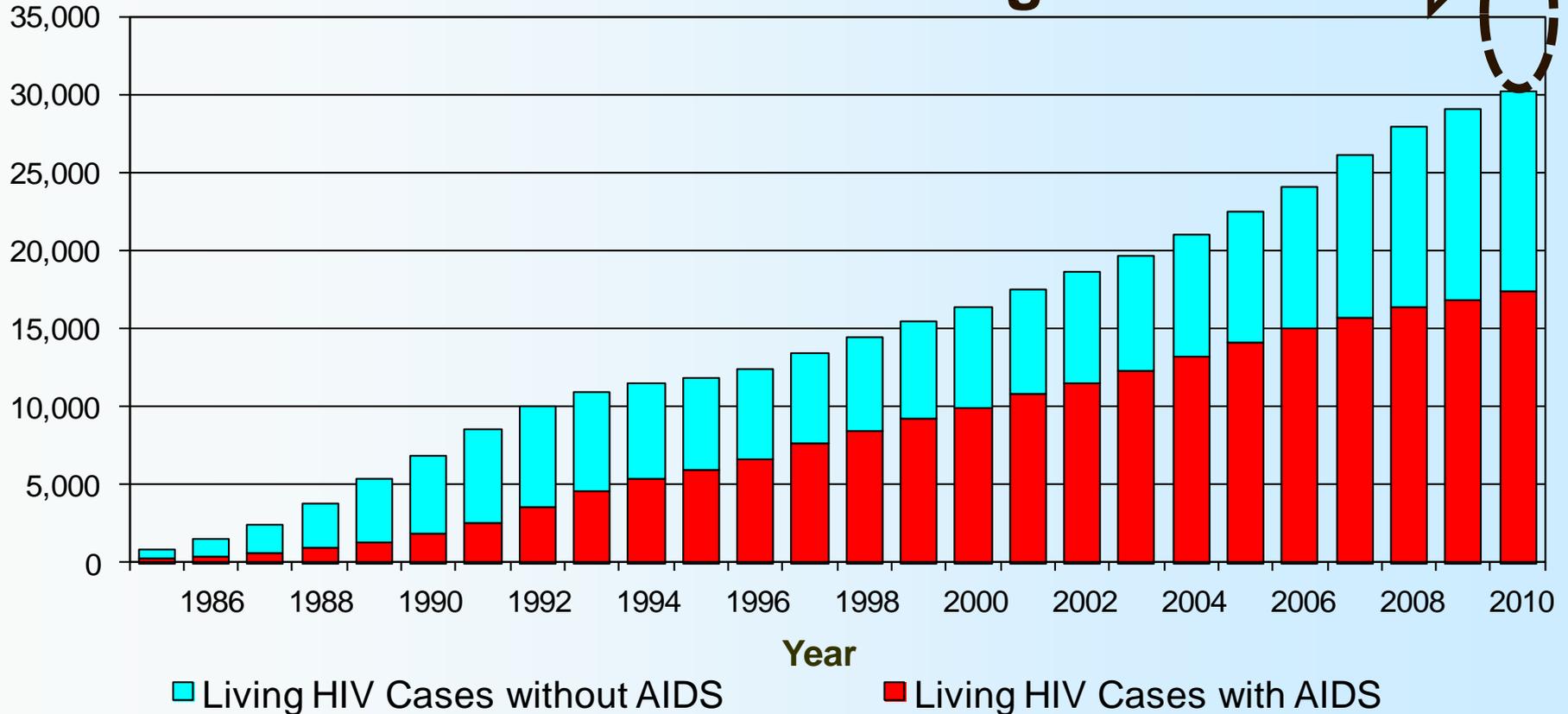
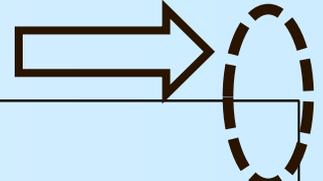


Maryland Living HIV Cases



Number of Cases

+20% Undiagnosed? →



Using data as reported through 12/31/2011



Maryland Adult/Adolescent HIV/AIDS Statistics



Reported Diagnoses (during 2010)	No.	per 100,000	
HIV	1,430	29.7	
AIDS	909	18.9	
Living Cases (on 12/31/10)	No.	per 100,000	1 in X
HIV without AIDS	12,465	258.8	
HIV with AIDS	17,177	356.6	
Total HIV	29,642	615.5	162

Using data as reported through 12/31/2011



Maryland Ryan White Eligible Metropolitan Areas

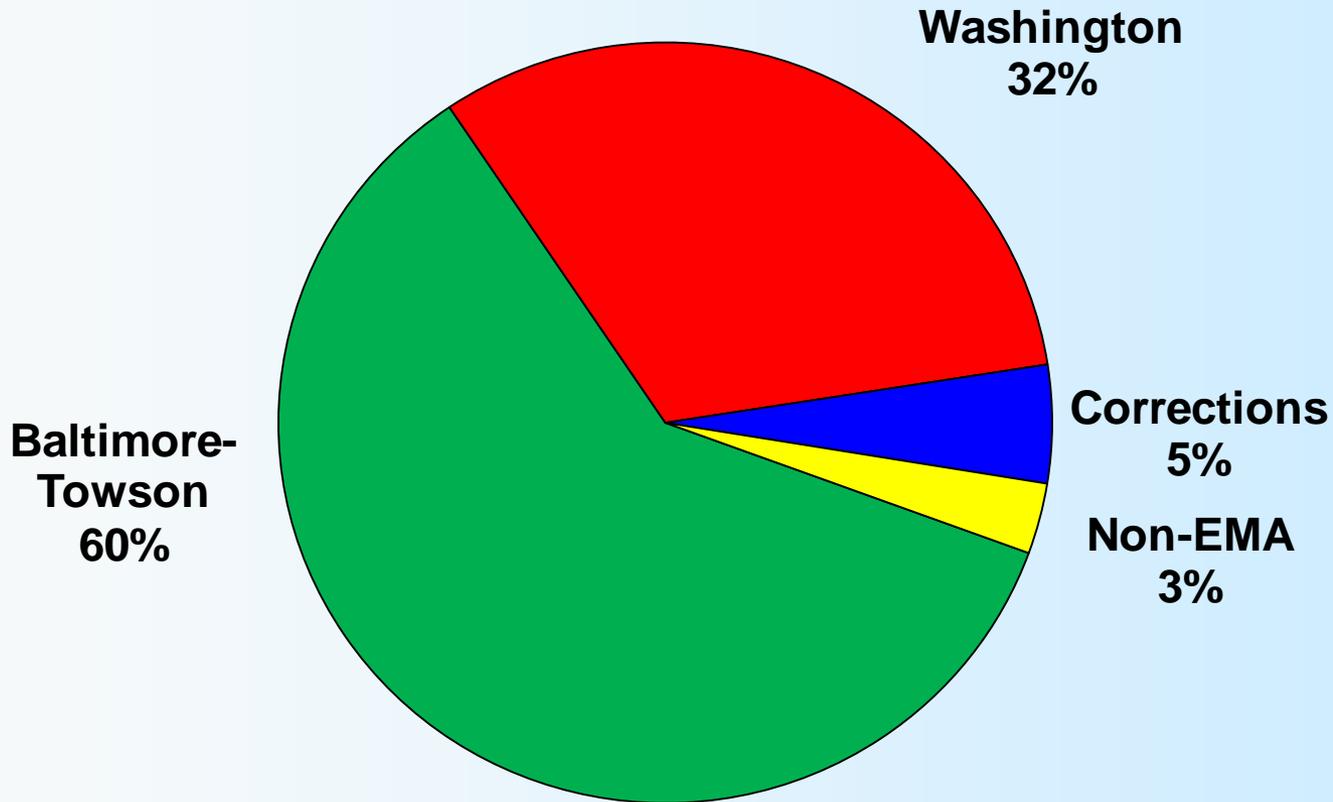
Baltimore-Towson





Maryland Living Adult/Adolescent HIV Cases by EMA, 12/31/10

N = 29,642



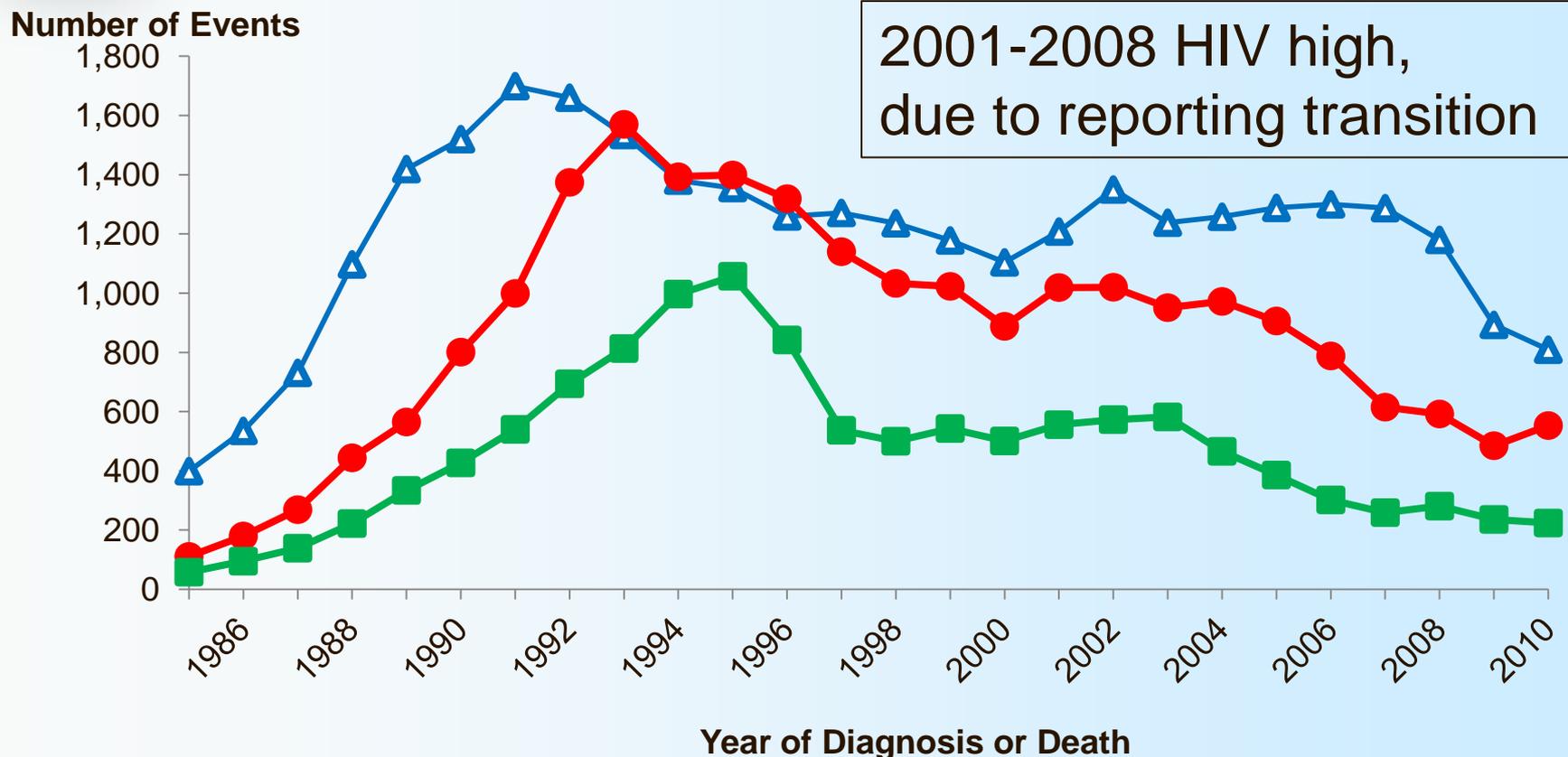
Using data as reported through 12/31/2011



Regional Data



HIV/AIDS Trends Baltimore-Towson EMA



▲ Reported HIV Diagnoses ● Reported AIDS Diagnoses ■ Reported AIDS Deaths

Using data as reported through 12/31/2011

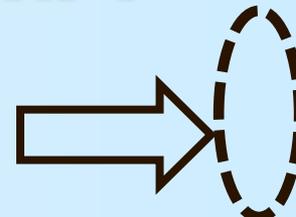
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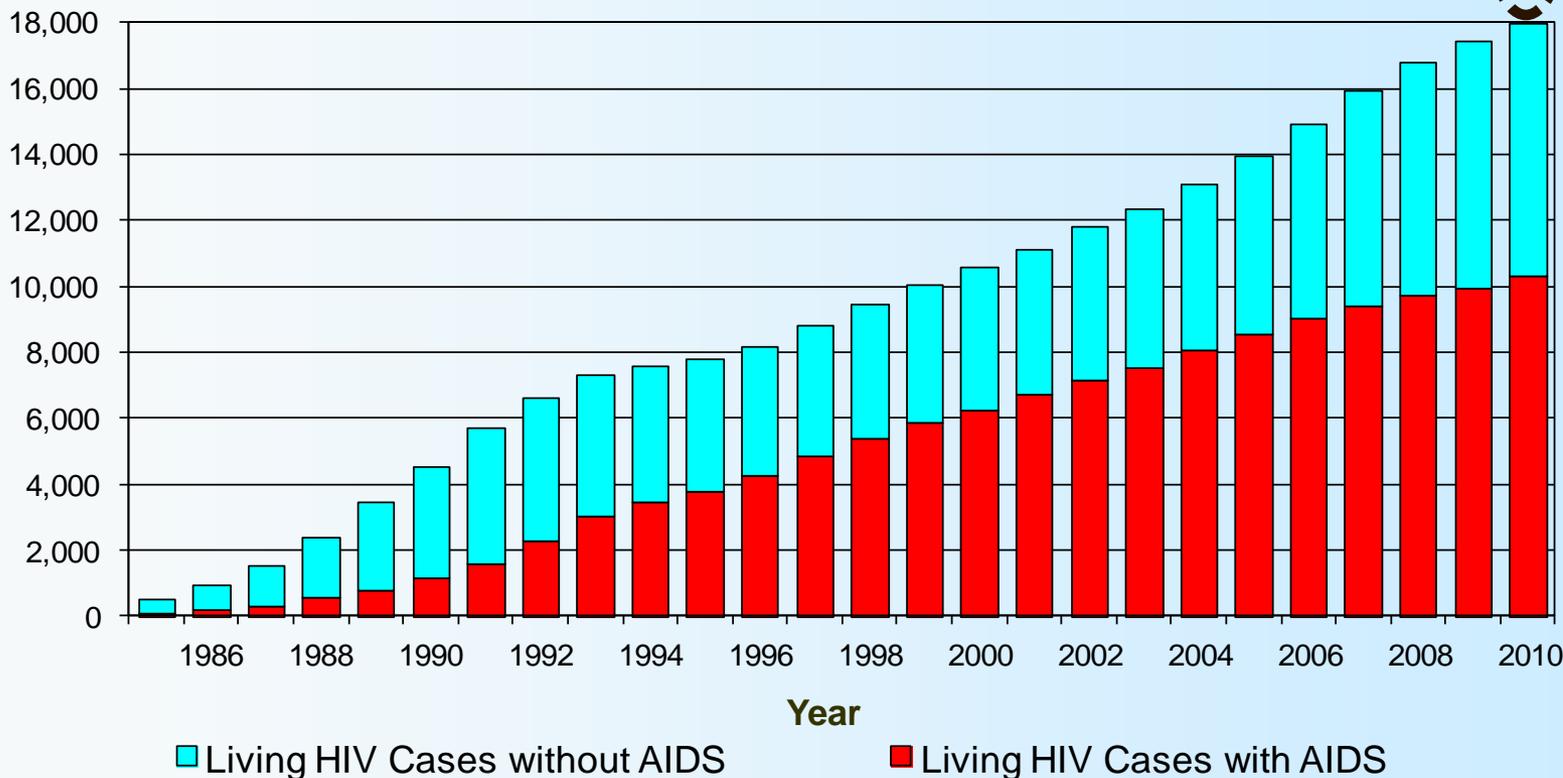
Living HIV Cases Baltimore-Towson EMA



+20% Undiagnosed?



Number of Cases



Using data as reported through 12/31/2011

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HIV Statistics

Adult/Adolescent Cases

Baltimore-Towson EMA

	Reported HIV Diagnoses during 2010	Living HIV Cases on 12/31/2010
Baltimore-Towson	807	17,678
Anne Arundel	63	1,044
Baltimore City	406	13,064
Baltimore County	291	2,645
Carroll	6	124
Harford	16	359
Howard	23	397
Queen Anne's	2	45

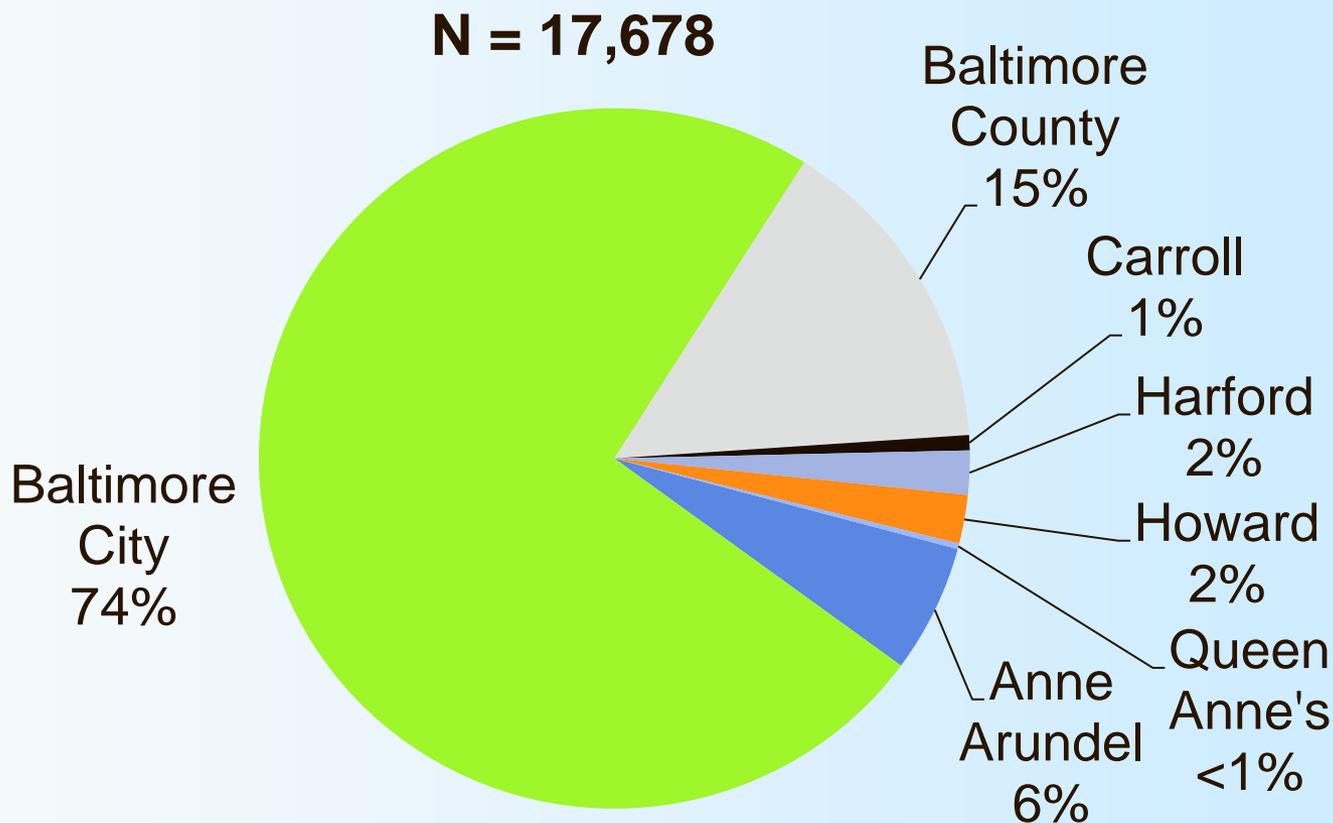
Using data as reported through 12/31/2011



Baltimore-Towson EMA

Living Adult/Adolescent HIV

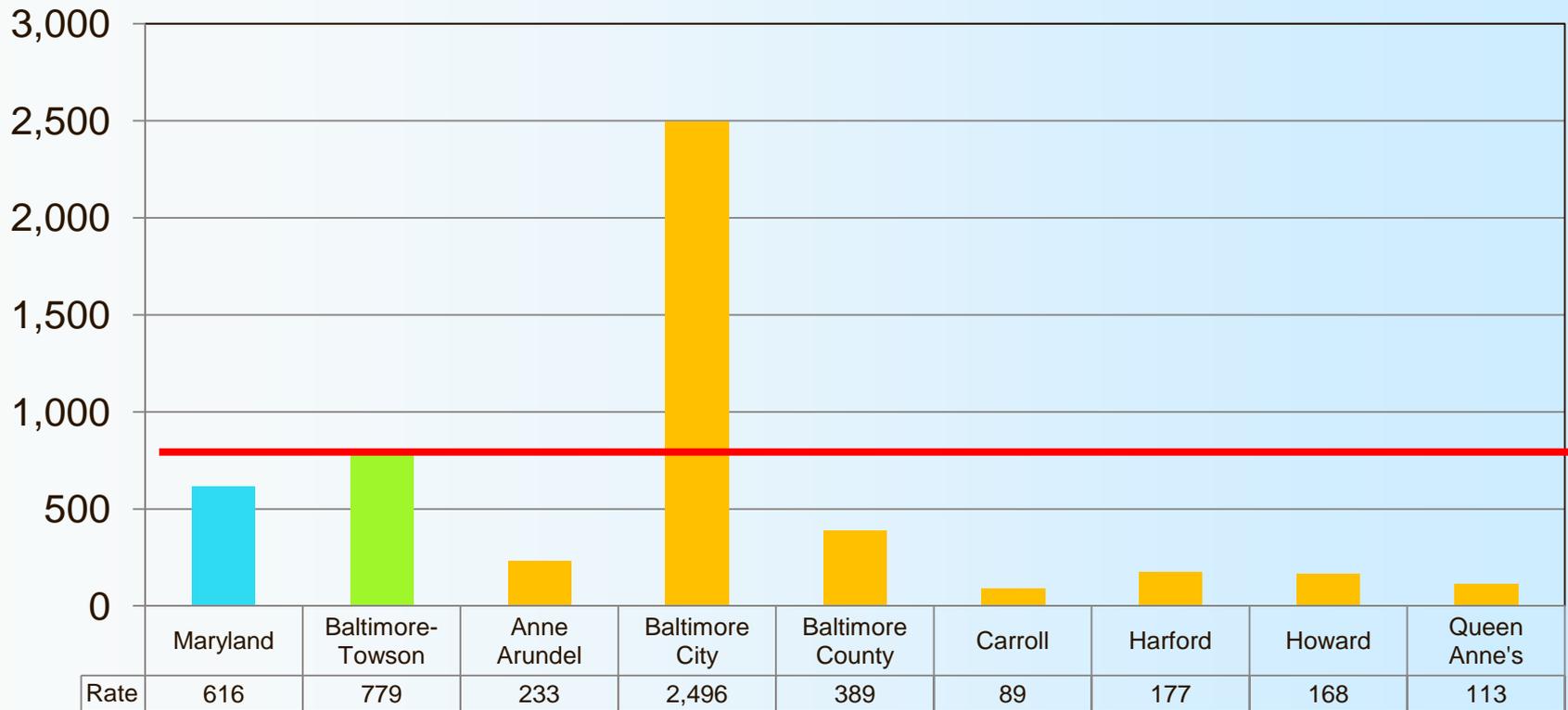
Cases by Jurisdiction, 12/31/10



Using data as reported through 12/31/2011



Living Adult/Adolescent HIV Cases Rates per 100,000 Population by Jurisdiction, Baltimore-Towson EMA, 12/31/10

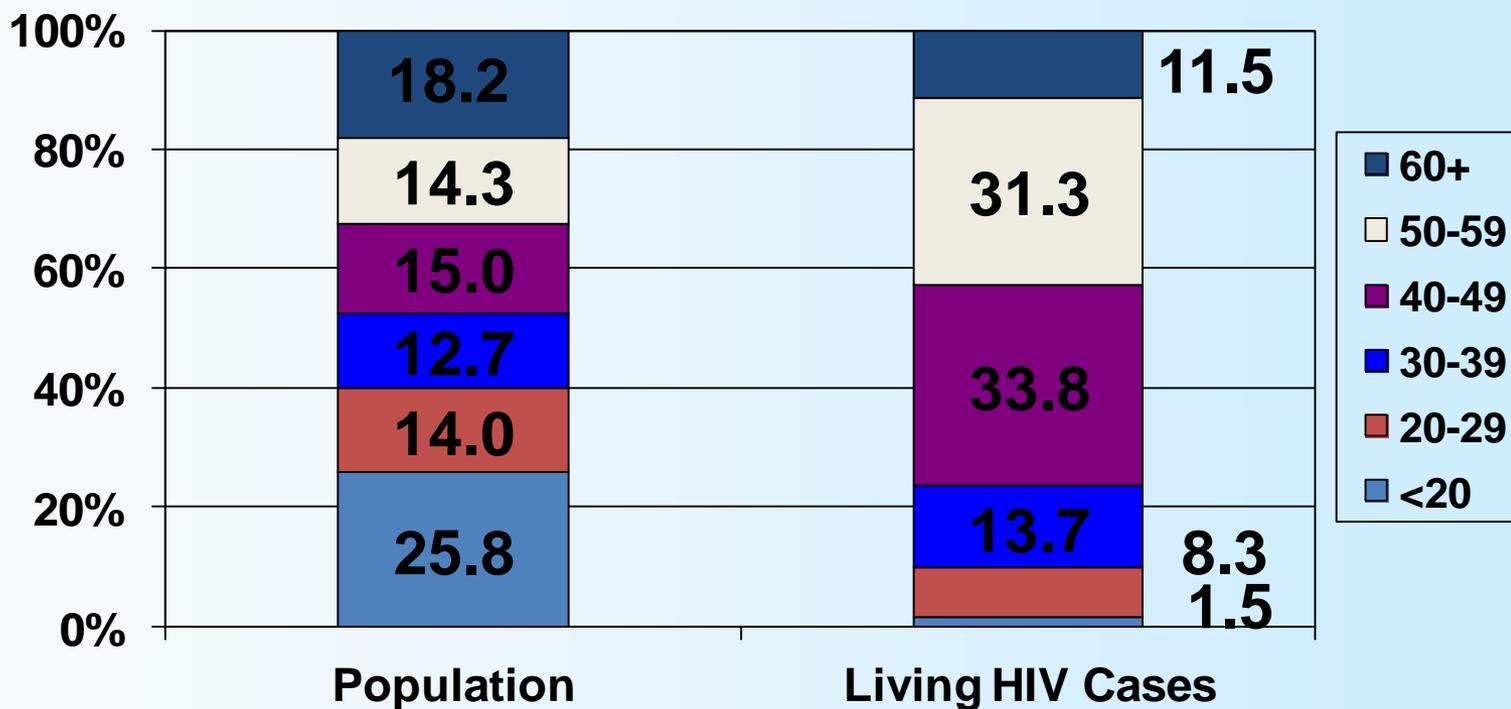


Population on 4/1/10. Cases on 12/31/10
as reported through 12/31/11

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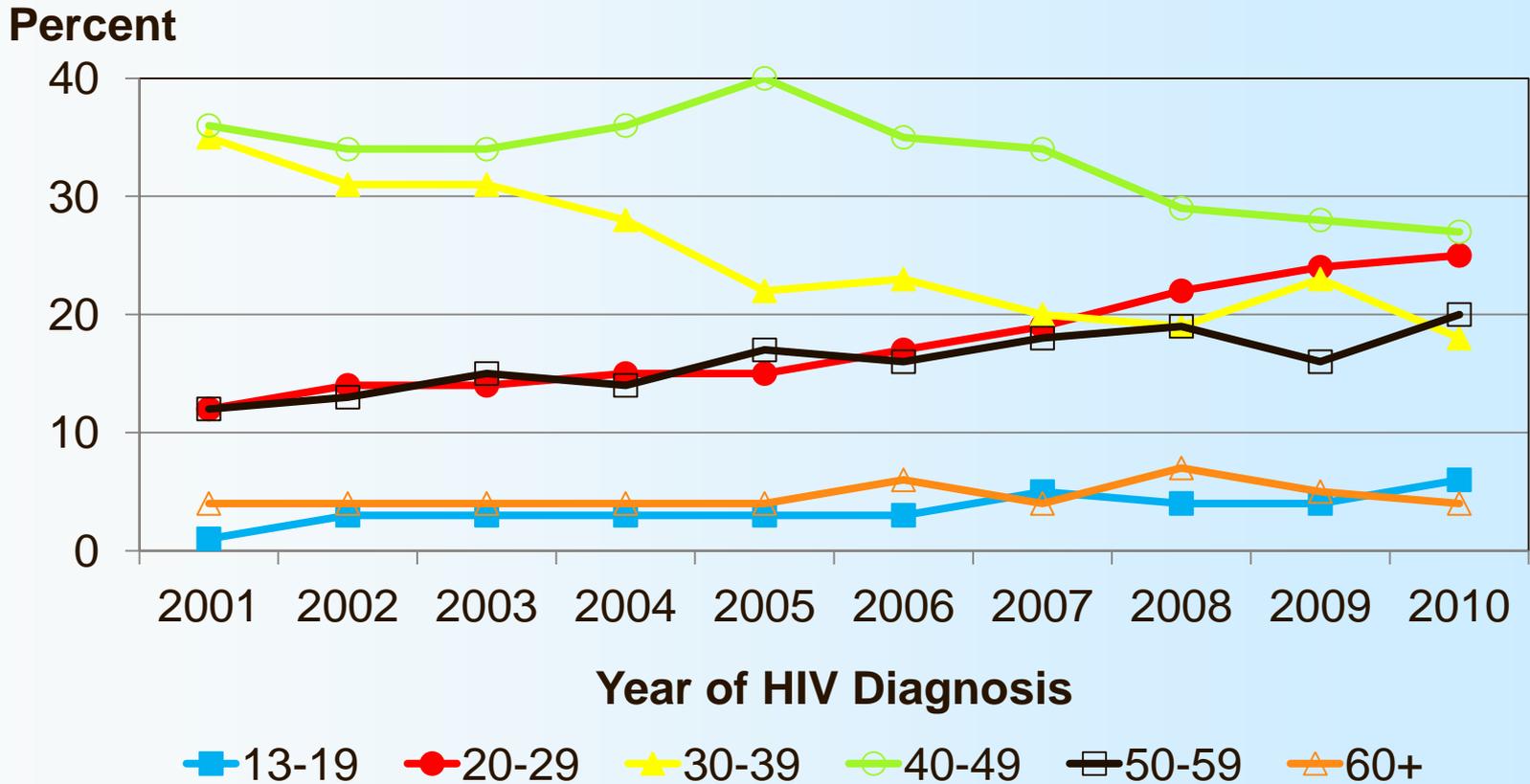
Population and Living HIV Cases by Age, Baltimore-Towson EMA



Population on 4/1/10. Cases on 12/31/10 as reported through 12/31/11



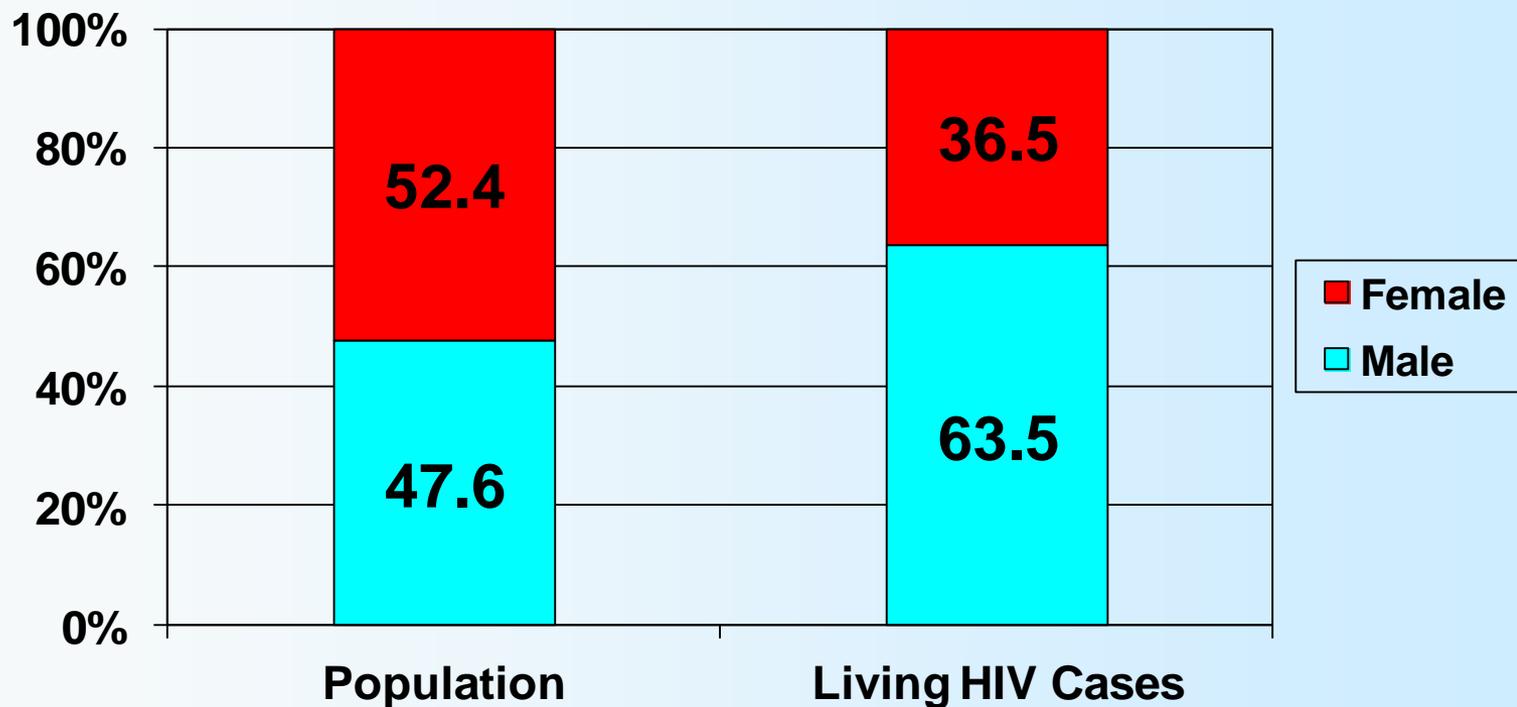
Reported Adult/Adolescent HIV Diagnosis Trends by Age at Diagnosis, Baltimore-Towson EMA



Using data as reported through 12/31/2011



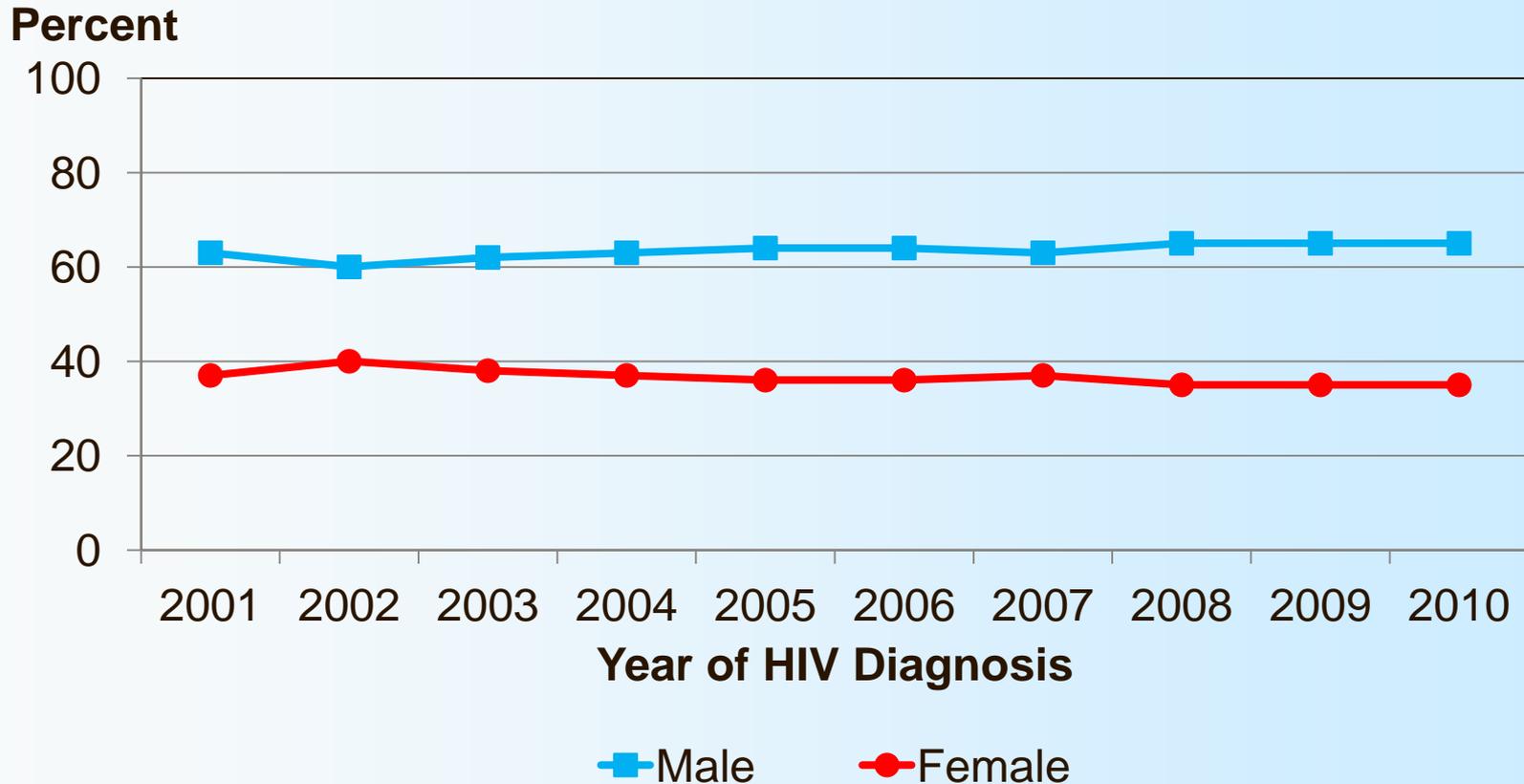
Adult/Adolescent Population and Living HIV Cases by Sex at Birth, Baltimore-Towson EMA



Population on 4/1/10. Cases on 12/31/10
as reported through 12/31/11



Reported Adult/Adolescent HIV Diagnosis Trends by Sex at Birth, Baltimore-Towson EMA

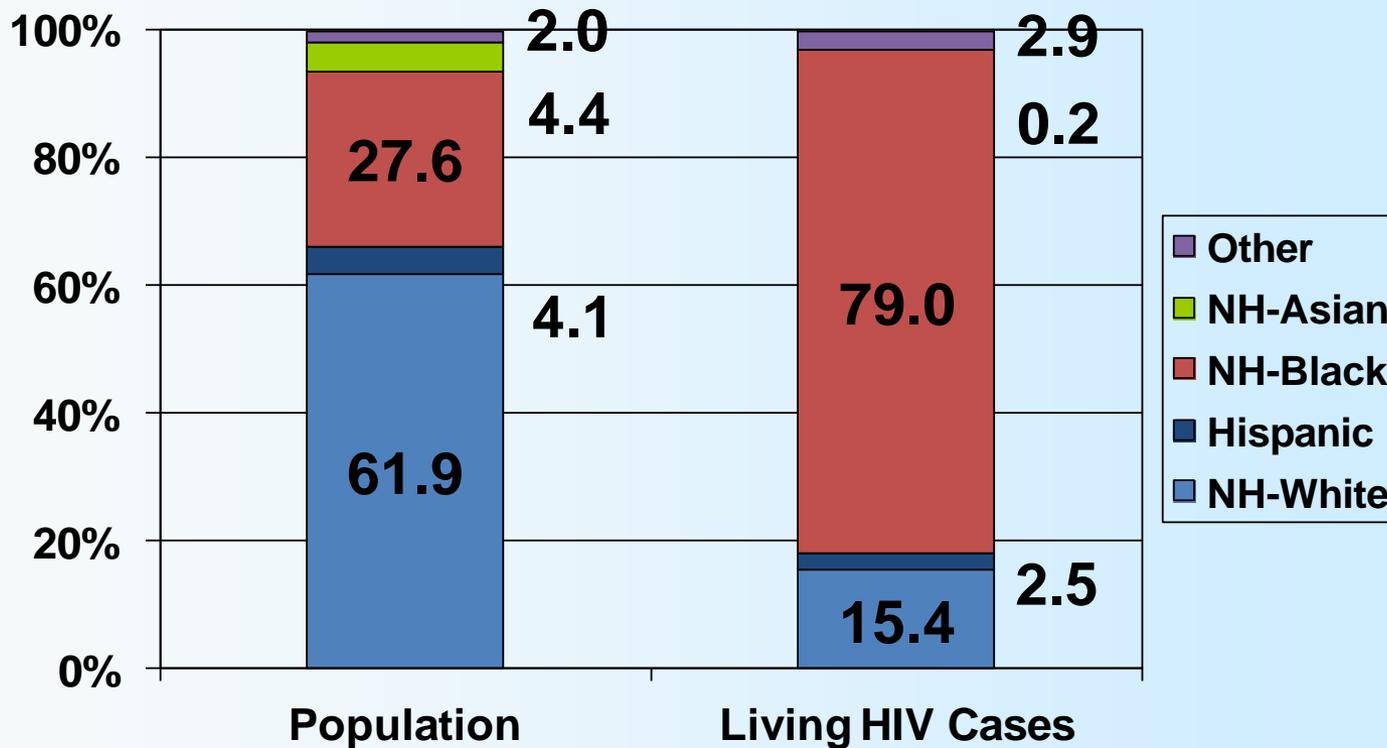


Using data as reported through 12/31/2011

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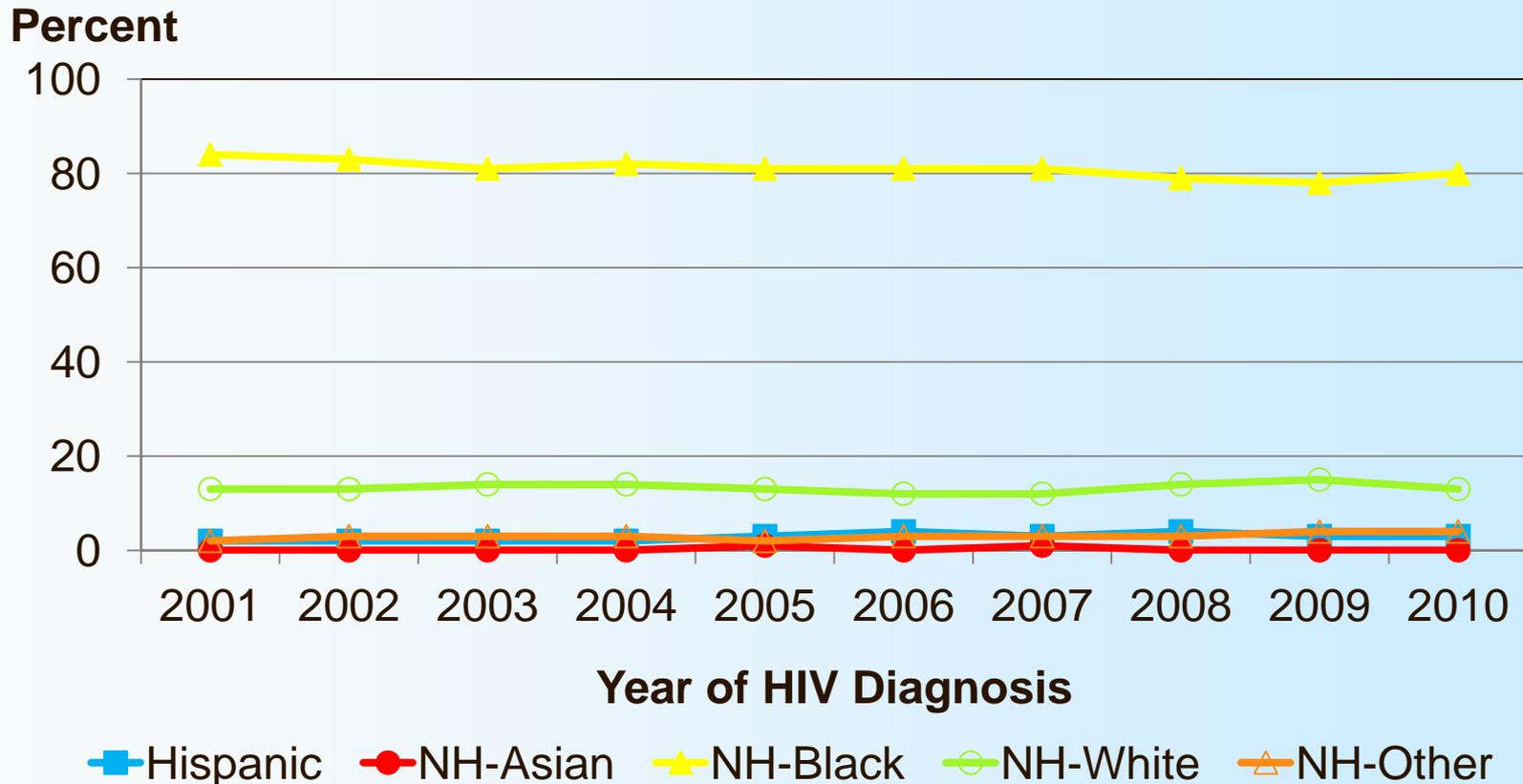
Adult/Adolescent Population and Living HIV Cases by Race/Ethnicity, Baltimore-Towson EMA



Population on 4/1/10. Cases on 12/31/10
as reported through 12/31/11



Reported Adult/Adolescent HIV Diagnosis Trends by Race/Ethnicity, Baltimore-Towson EMA



Using data as reported through 12/31/2011



Exposure Categories

MSM: Men who have Sex with Men

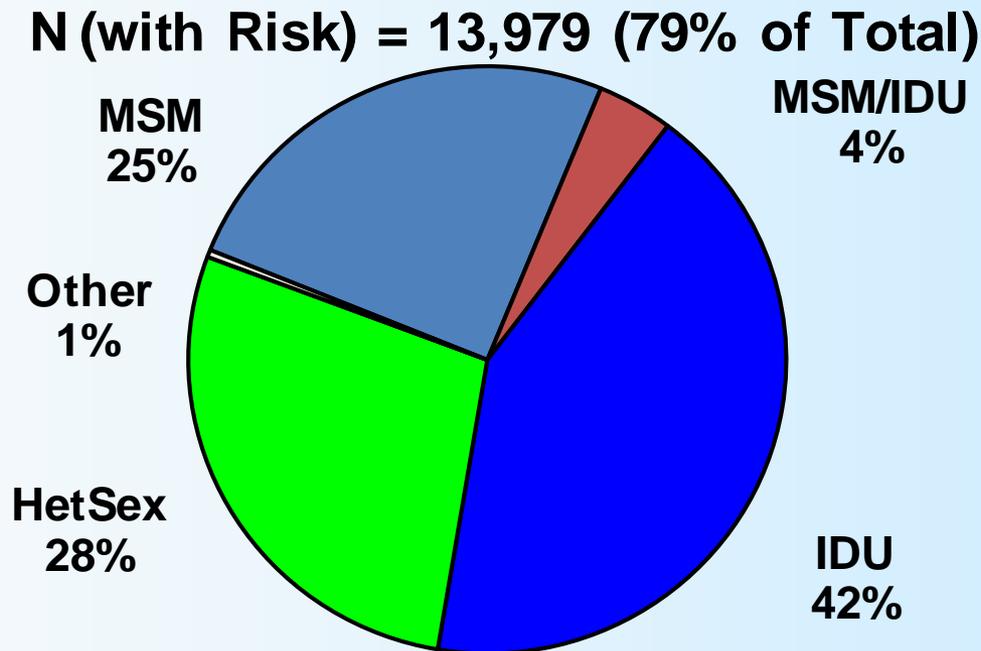
IDU: Injection Drug Use

MSM/IDU: Men who have Sex with Men AND Inject Drugs

HetSex: Heterosexual Contact with a Person that has or is at Risk for HIV Infection



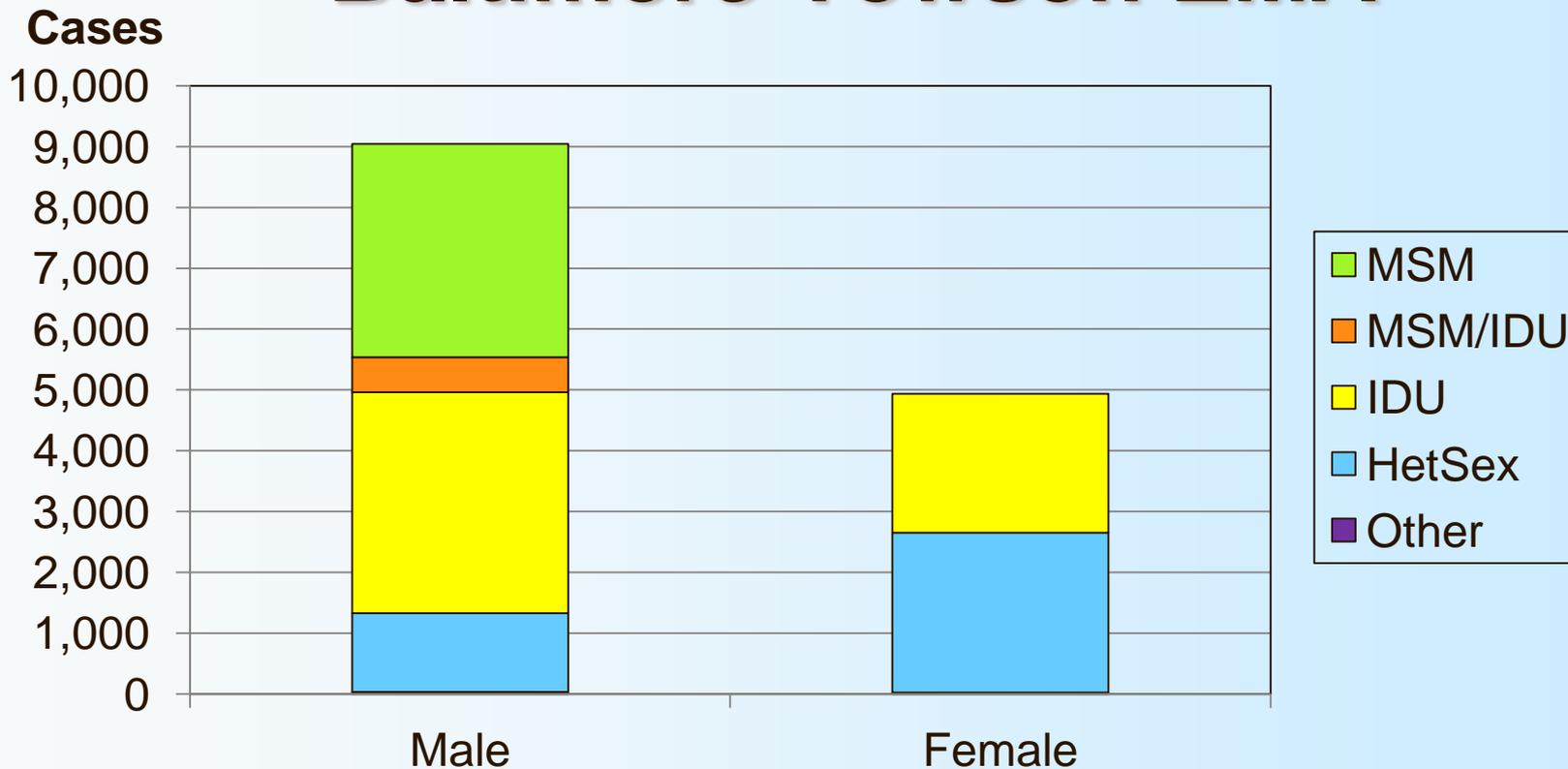
Living Adult/Adolescent HIV Cases 12/31/10 by Exposure Category, Baltimore-Towson EMA



Using data as reported through 12/31/2011



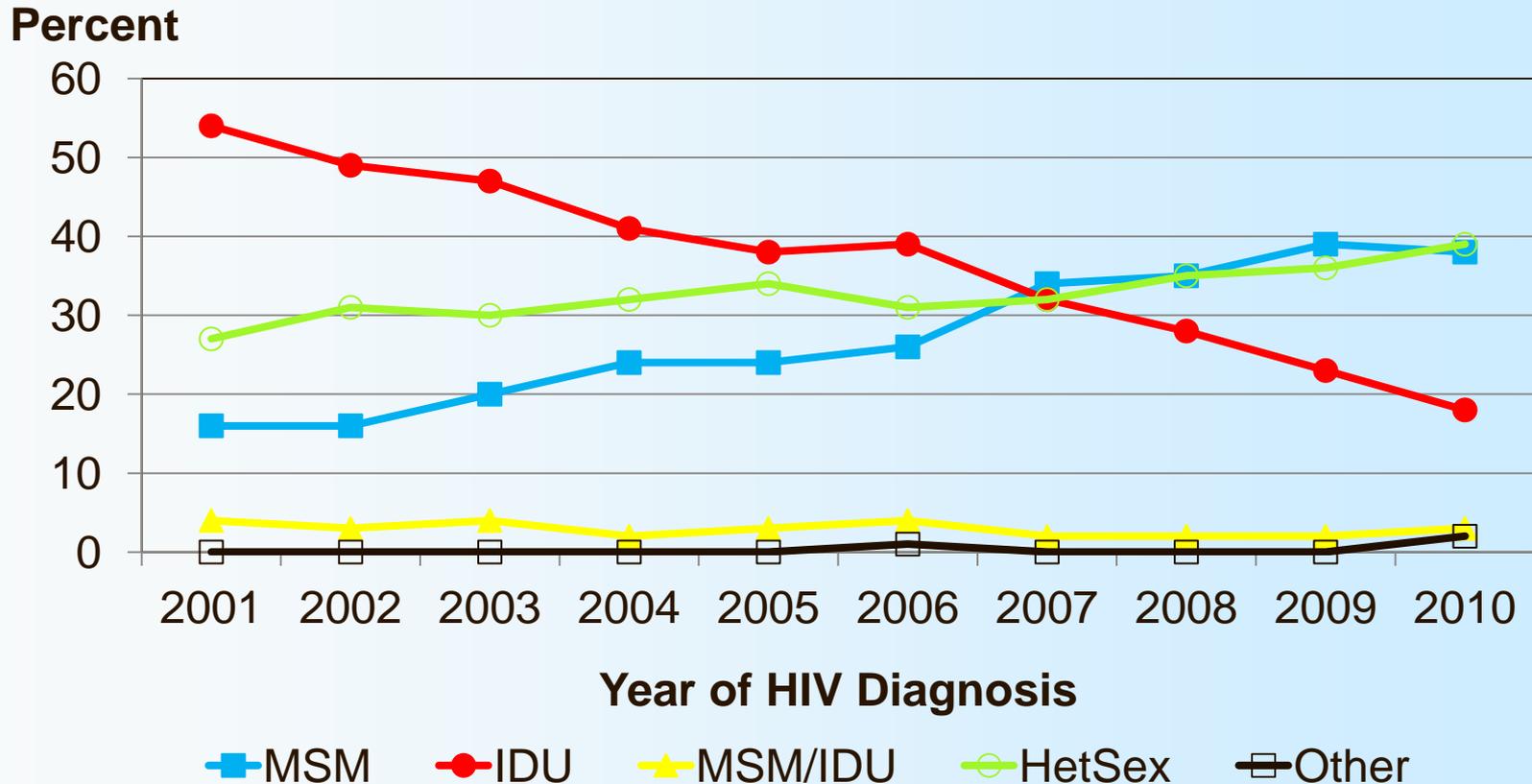
Living Adult/Adolescent HIV Cases 12/31/10 by Exposure Category and Sex at Birth, Baltimore-Towson EMA



Using data as reported through 12/31/2011



Reported Adult/Adolescent HIV Diagnosis Trends by Exposure Category, Baltimore-Towson EMA



Using data as reported through 12/31/2011



2010 Reported Adult/Adolescent HIV Diagnoses (N=807) Baltimore-Towson EMA



- Linkage to Care: 68% had a CD4 or VL test within 3 months of HIV diagnosis
- CD4 at Diagnosis: 70% had a CD4 test within 12 months of HIV diagnosis, and the median value was 338 cells/microliter
- Late HIV Diagnosis: 28% had an AIDS diagnosis within 12 months of their HIV diagnosis

Using data as reported through 12/31/2011



2010 Reported Adult/Adolescent AIDS Diagnoses (N=548) Baltimore-Towson EMA



- Progression: The average time from HIV diagnosis to AIDS diagnosis was 4.1 years
- Late HIV Diagnosis: 43% were diagnosed with AIDS within 12 months of their HIV diagnosis

Using data as reported through 12/31/2011



HIV/AIDS in the Baltimore-Towson EMA



- There were 17,678 living adult/adolescent HIV cases at the end of 2010 and 807 reported adult/adolescent HIV diagnoses during 2010
- Baltimore City had the greatest share of living cases (74%)
- Rates of living cases were 3 times higher in Baltimore City than the EMA average
- HIV was being diagnosed late (28% late, median CD4 338), contributing to many of the AIDS diagnoses (43% had late HIV diagnosis)



HIV/AIDS in the Baltimore-Towson EMA: Demographics



- Males were disproportionately affected (64% of cases vs. 48% of population), and the proportion male was increasing
- Non-Hispanic blacks were disproportionately affected (79% vs. 28%), and the proportion was stable
- Persons 30-59 years old were disproportionately affected (80% vs. 50%), but the proportions were decreasing among 30-49 year olds while increasing among 20-29 and 50-59 year olds



HIV/AIDS in the Baltimore-Towson EMA: Transmission Risk



- Sexual transmission predominates (>53%)
 - Homosexual and heterosexual transmission among men
 - Heterosexual transmission among women
 - Male homosexual transmission proportion was increasing
 - Heterosexual transmission was increasing
- Injection drug use is an important route of transmission (>42%), but the proportion IDU was decreasing



Enhancing Data Security



New CDC Guidelines

- Released December 2011
- Required of all CDC funded HIV, viral hepatitis, STD, and TB surveillance programs
- Established minimum standards for data security and confidentiality, in order to promote data sharing for public health action



New IDEHA Policy

- To be released in Spring 2012
- Will be required of all IDEHA HIV, viral hepatitis, STI, and TB surveillance, prevention, and health services programs, including all of their partners and contractors
- Clarifies and expands on the CDC Guidelines



Program Procedures

- Each IDEHA, local health department, and contractor program will be required to develop a program-specific procedures manual detailing how they meet or exceed the CDC Guidelines and IDEHA Policies
- Data sharing will be guided by written data sharing agreements between programs
- IDEHA will assist programs in the development of their procedures



Goals

- Enhanced program data security
- Protection of individual's confidentiality
- Increased data sharing between programs
- Increased program efficiencies
- Better service to individuals
- Improved public health



Looking Forward



National HIV/AIDS Strategy



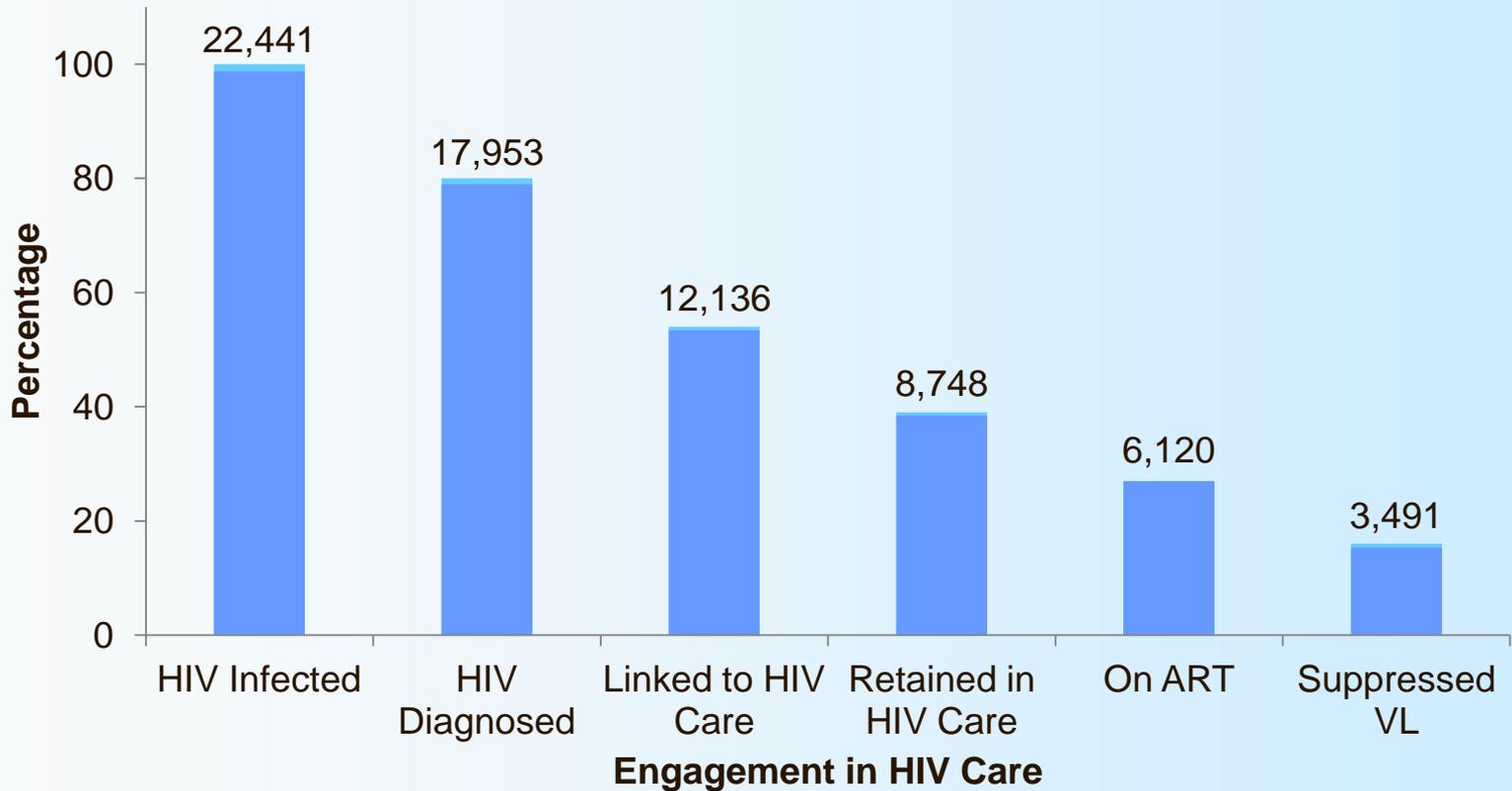
Goals:

- Reducing HIV incidence
- Increasing access to care and optimizing health outcomes
- Reducing HIV-related health disparities
- Achieving a more coordinated national response



Continuum of Care

Estimated number and percentage of HIV infected persons engaged in selected stages of the continuum of care, Central Maryland 2010





Maryland Infectious Disease and Environmental Health Administration

<http://ideha.dhmh.maryland.gov/oideor/chse>