



# **HIV/AIDS in the Central Region: An Epidemiological Profile**

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March 14, 2011



# 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.



# National Data



# U.S. HIV/AIDS Prevalence



- At the end of 2006, an estimated 1.1 million Americans were infected with HIV
- It is also estimated that 21% of the infected were undiagnosed
  - CDC. Morbidity and Mortality Weekly Report; October 3, 2008; 57:1073-6. Atlanta.



# 2009 Estimated AIDS Diagnoses, Ranked by Rates



<u>STATE/TERRITORY</u>	<u>Cases</u>	<u>Rate per 100,000</u>
1. District of Columbia	718	119.8
2. New York	4,799	24.6
3. Florida	4,392	23.7
<b>4. Maryland</b>	<b>1,134</b>	<b>19.9</b>
5. Louisiana	869	19.4
6. Puerto Rico	735	18.5
7. Delaware	159	18.0
8. New Jersey	1,475	16.9
9. South Carolina	713	15.6
10. Georgia	1,391	14.1
<hr/>		
<i>United States</i>	<i>34,993</i>	<i>11.2</i>



# 2009 Estimated AIDS Diagnoses, Ranked by Rates



<u>METROPOLITAN AREA</u>	<u>Cases</u>	<u>Rate per 100,000</u>
1 Miami, FL	2,061	37.2
2. Baton Rouge, LA	241	30.6
3. Jacksonville, FL	387	29.1
4. New York, NY-NJ-PA	5,153	27.0
<b>5. Washington, DC-VA-MD-WV</b>	<b>1,455</b>	<b>26.6</b>
6. Columbia, SC	175	23.5
7. Memphis, TN-MS-AR	305	23.3
8. Orlando, FL	485	23.3
9. New Orleans-Metairie-Kenner, LA	274	23.0
<b>10. Baltimore-Towson, MD</b>	<b>614</b>	<b>22.8</b>
<hr/>		
<i>United States</i>	<b>34,981</b>	<b>11.2</b>



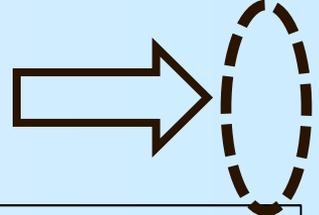
# State Data



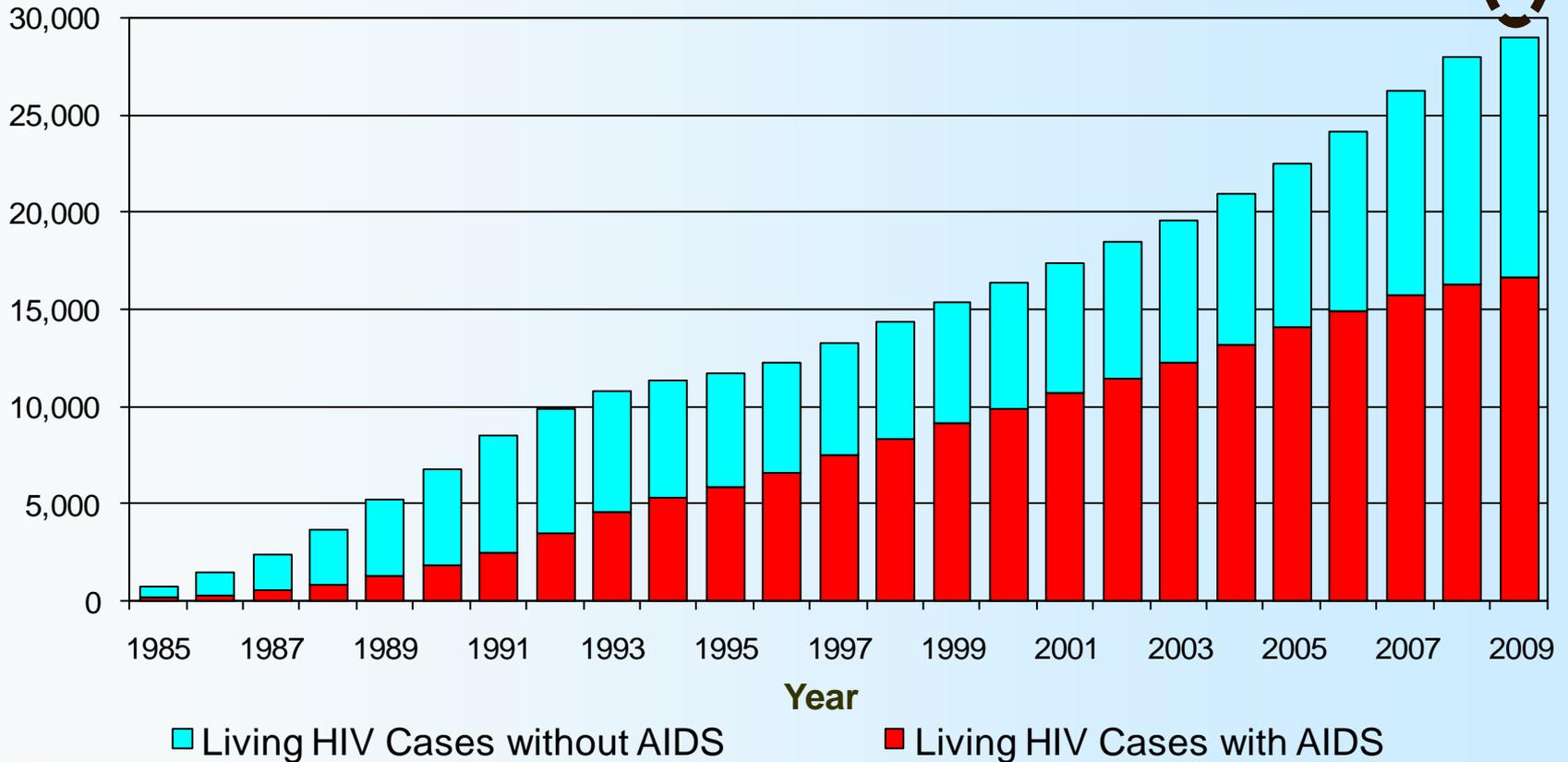
# Maryland Living HIV Cases



**+21% Undiagnosed?** →



Number of Cases



Using data as reported through 12/31/2010

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# Maryland HIV/AIDS Statistics

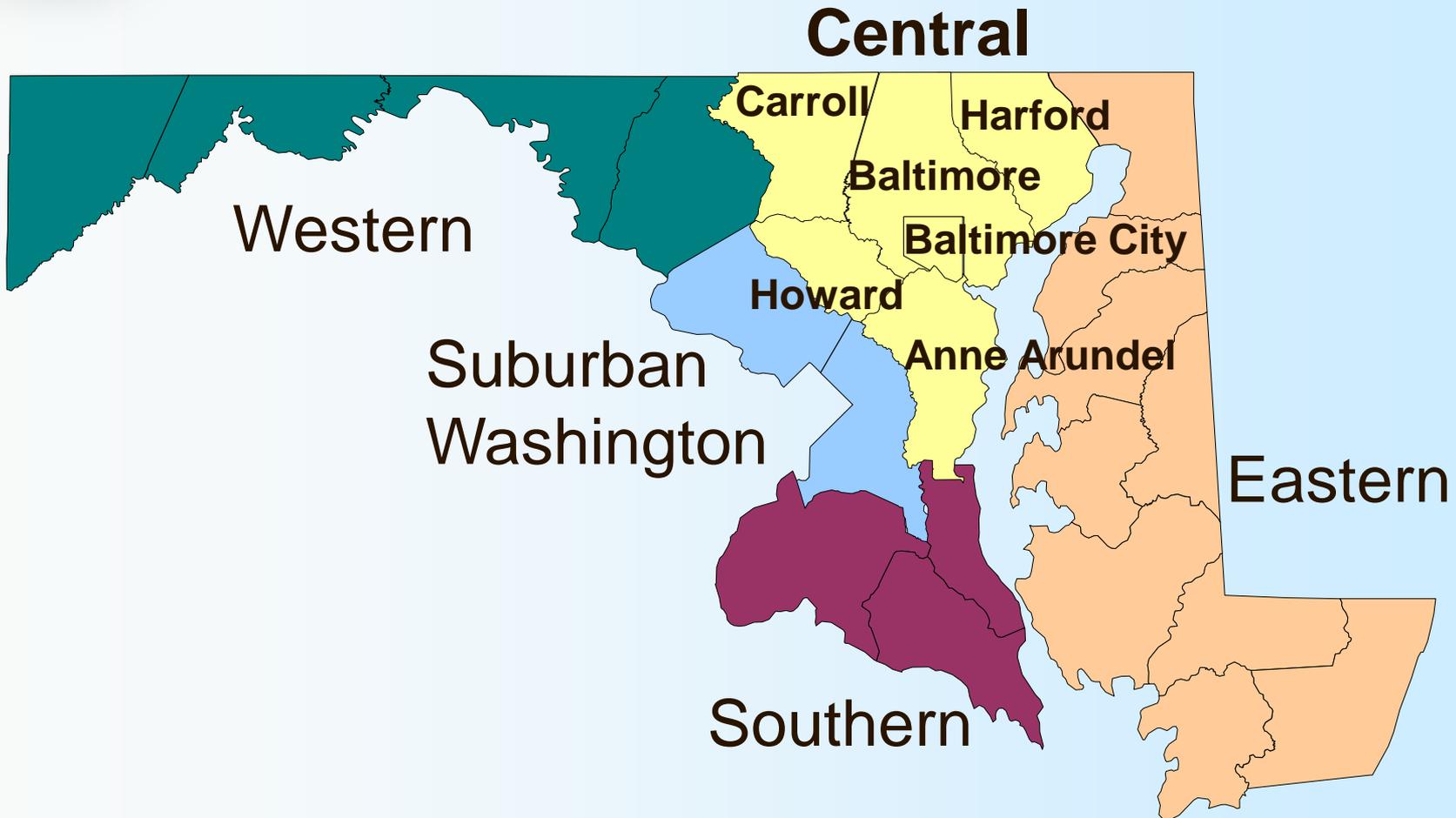


Reported Diagnoses (during 2009)	No.	per 100,000	1 in X
HIV	1,521	26.7	
AIDS	692	12.1	
Living Cases (on 12/31/09)			
HIV without AIDS	12,373	217.1	
HIV with AIDS	16,707	293.1	
<b>Total HIV</b>	<b>29,080</b>	<b>510.2</b>	<b>196</b>
Cumulative (through 12/31/10)			
Total HIV	48,812		
HIV with AIDS	34,809	(71.3% of HIV)	
<b>AIDS Deaths</b>	<b>17,741</b>	<b>(51.0% of AIDS)</b>	

Using data as reported through 12/31/2010

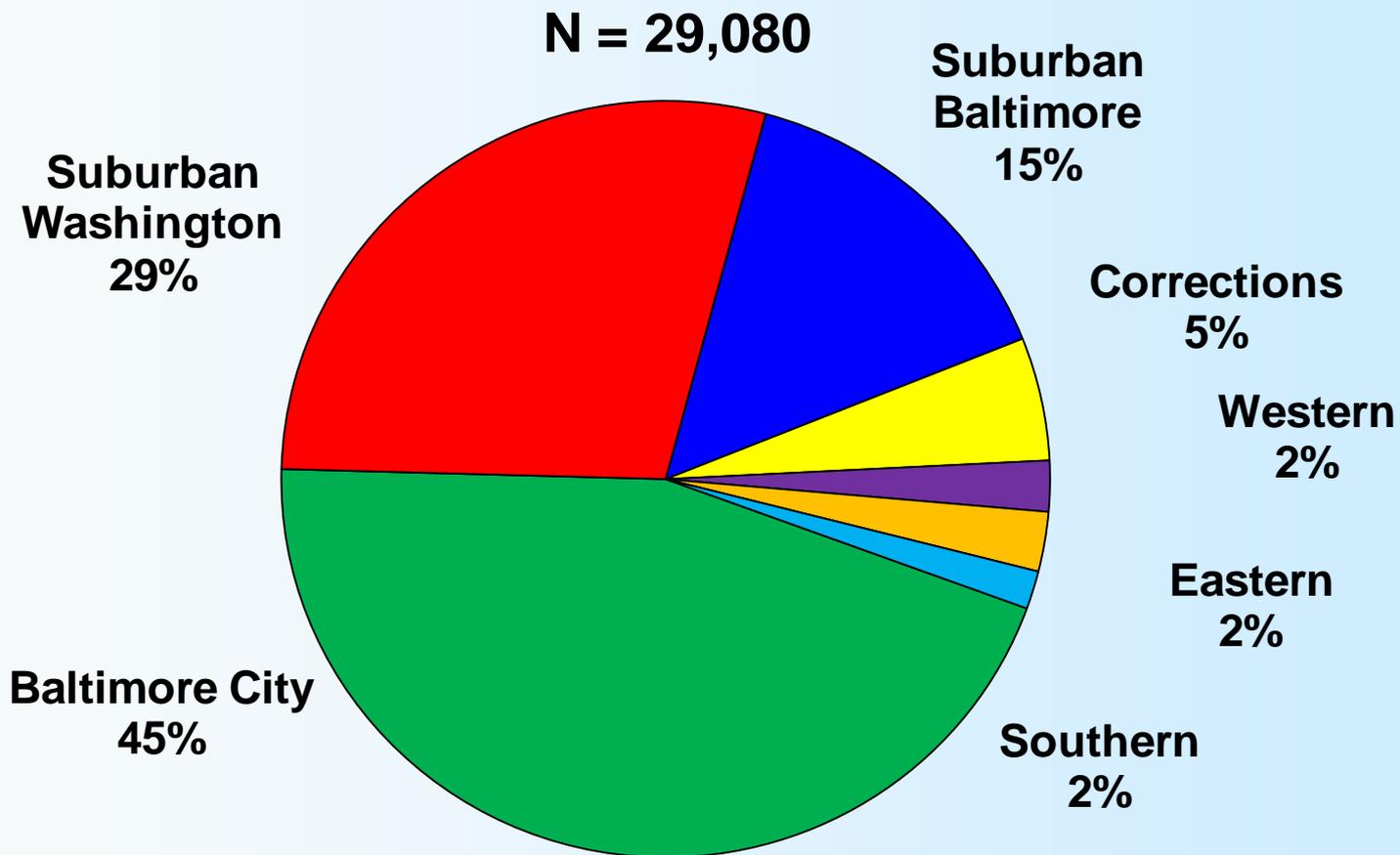


# Maryland Regional Advisory Committee Regions





# Maryland Living HIV Cases by Region, 12/31/09



Using data as reported through 12/31/2010



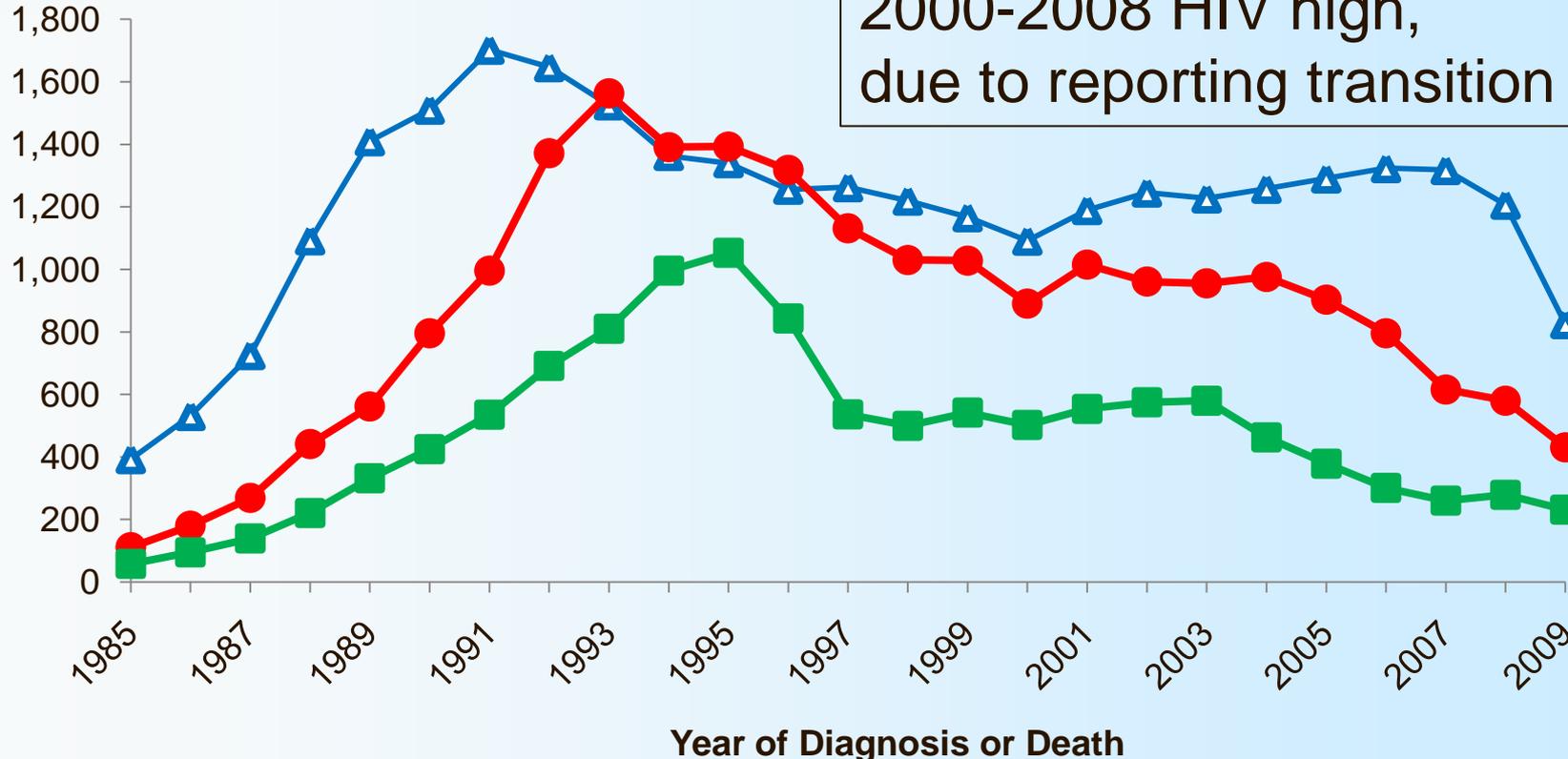
# Regional Data



# HIV/AIDS Trends Central Region



Number of Events



2000-2008 HIV high,  
due to reporting transition

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

Using data as reported through 12/31/2010

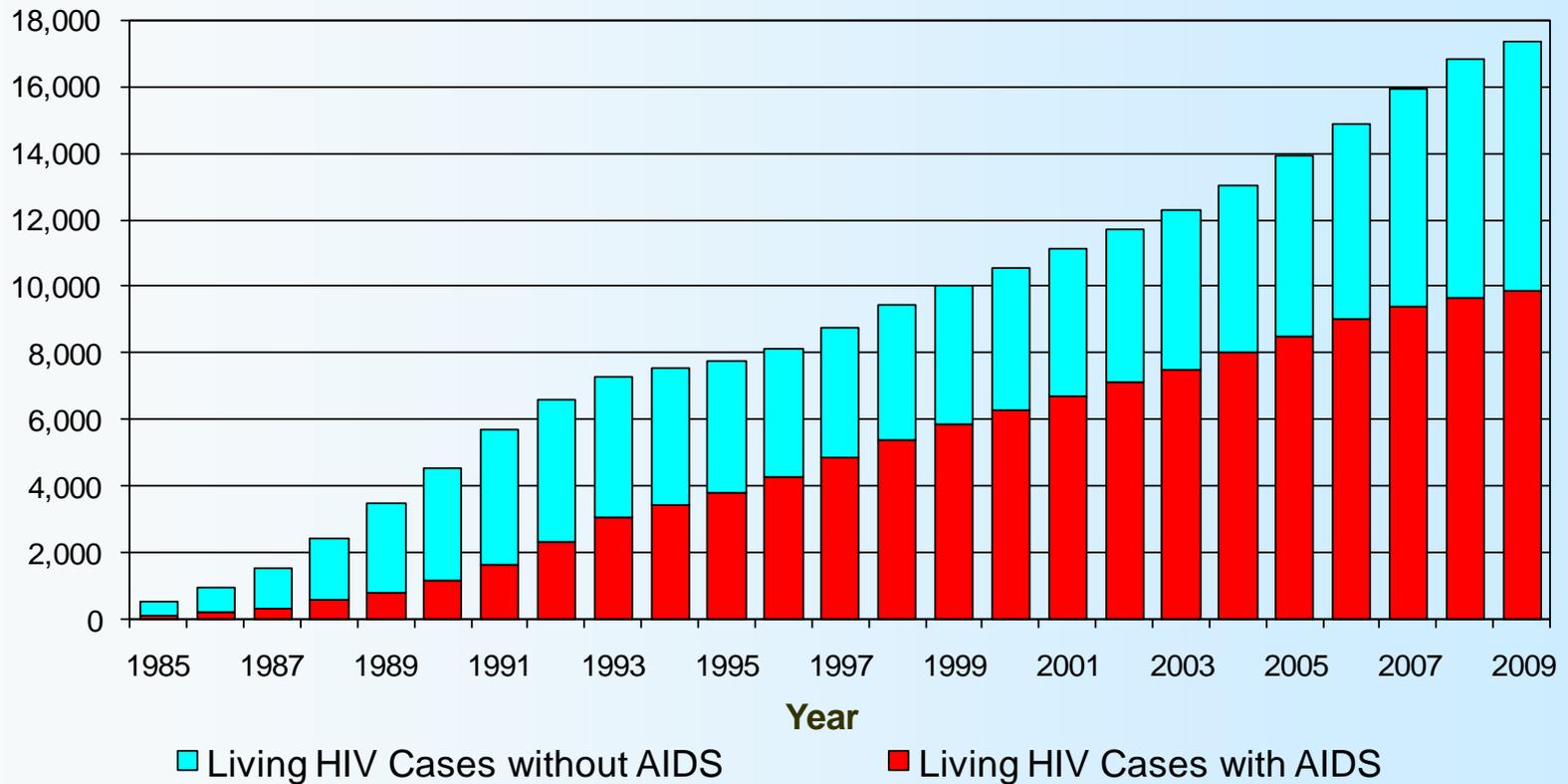
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# Living HIV Cases Central Region



Number of Cases



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# HIV Statistics

## Central Region

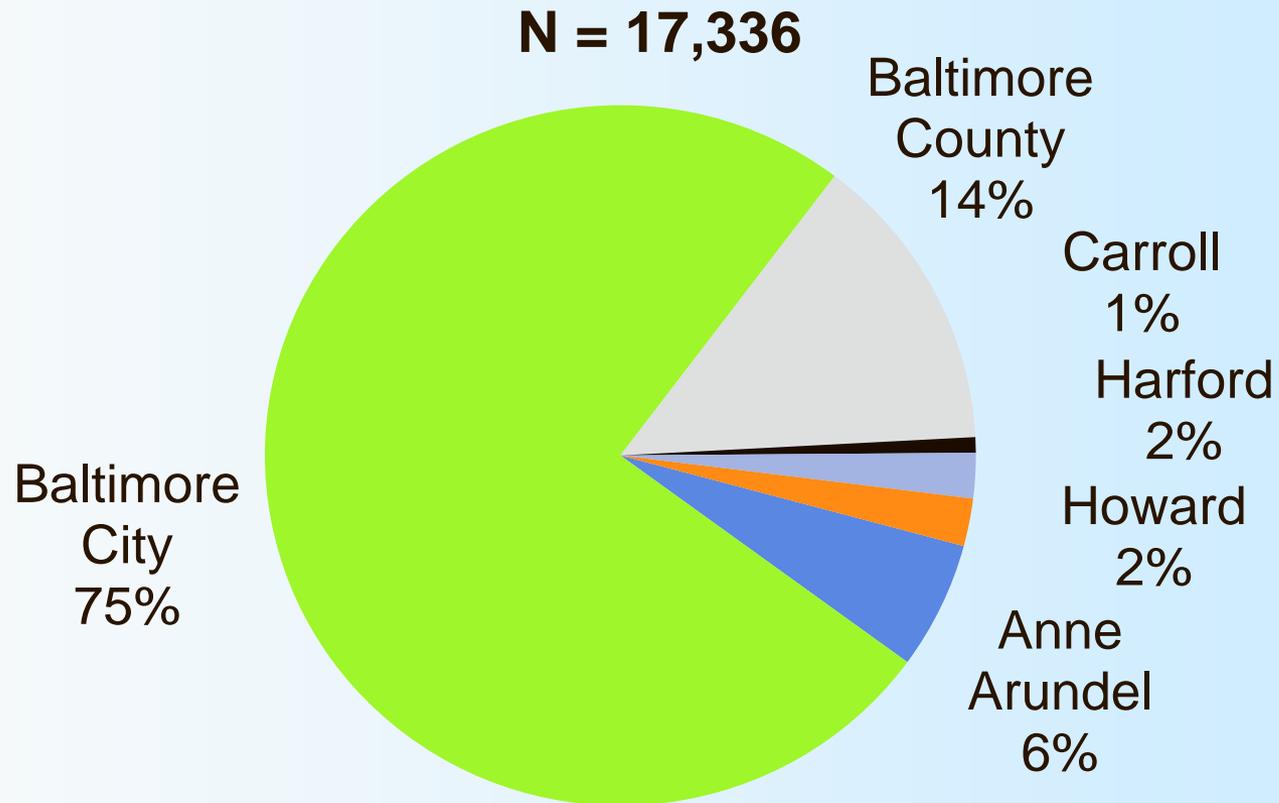


	Reported HIV Diagnoses during 2009	Living HIV Cases on 12/31/2009
Central Region	825	17,336
Anne Arundel	67	1,019
Baltimore City	505	13,047
Baltimore County	209	2,403
Carroll	8	124
Harford	14	362
Howard	22	381

Using data as reported through 12/31/2010



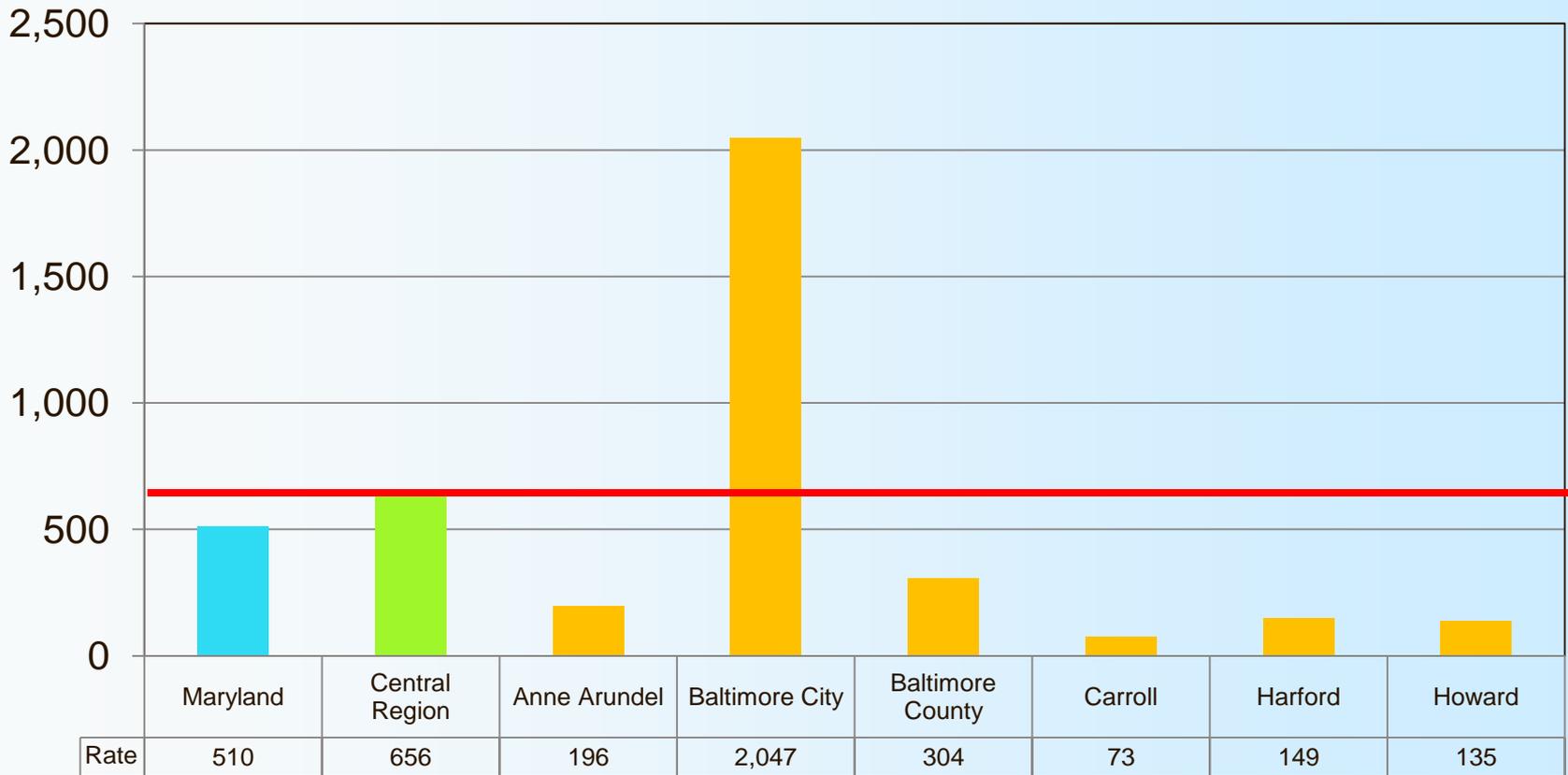
# Central Region Living HIV Cases by County, 12/31/09



Using data as reported through 12/31/2010



# Living HIV Cases Rates per 100,000 Population by County, Central Region, 12/31/09



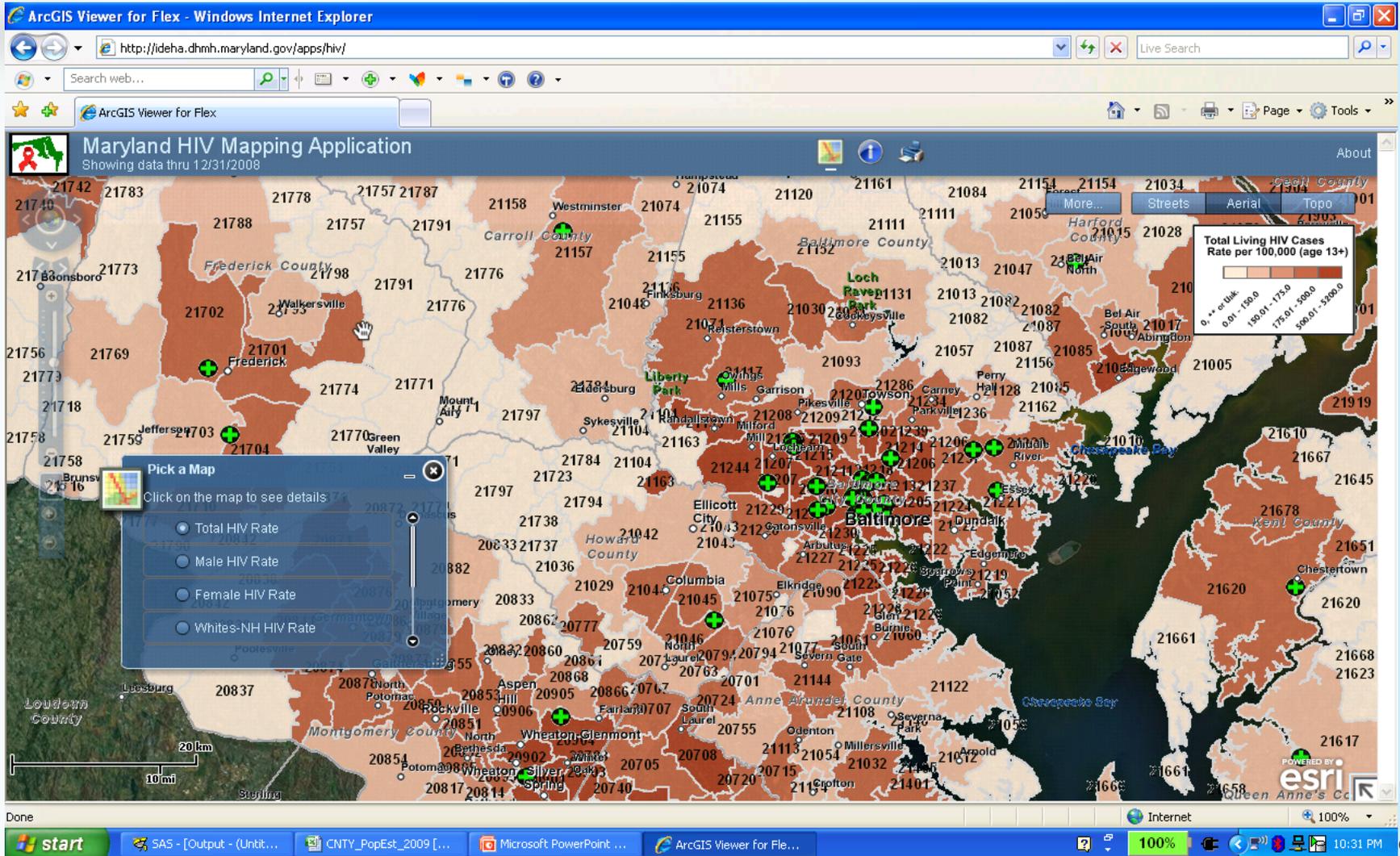
Population on 7/1/09. Cases on 12/31/09  
as reported through 12/31/10

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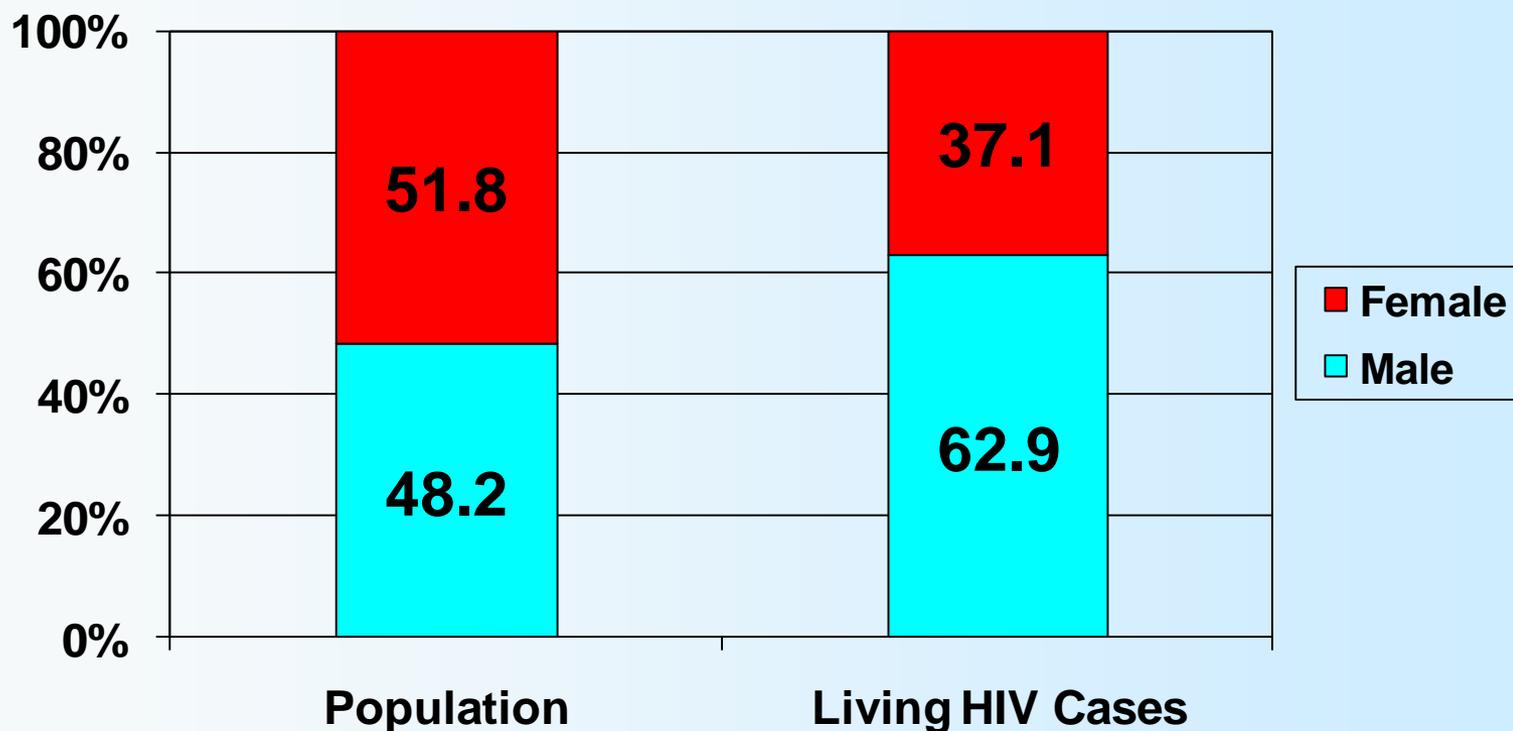


# HIV Rates by ZIP Code





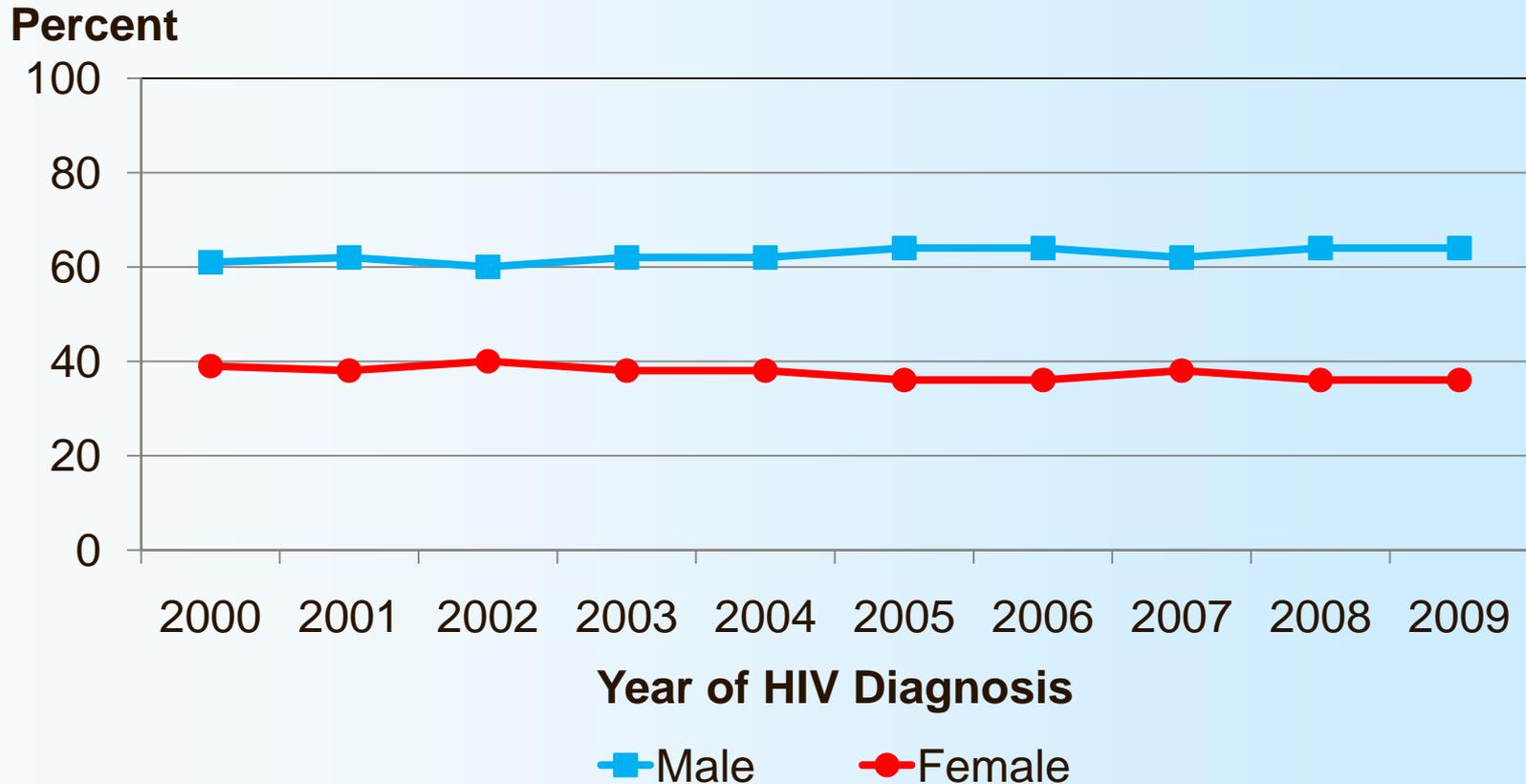
# Population and Living HIV Cases by Sex, Central Region



Population on 7/1/09, Cases on 12/31/09  
as reported through 12/31/10



# Reported HIV Diagnosis Trends by Sex Central Region

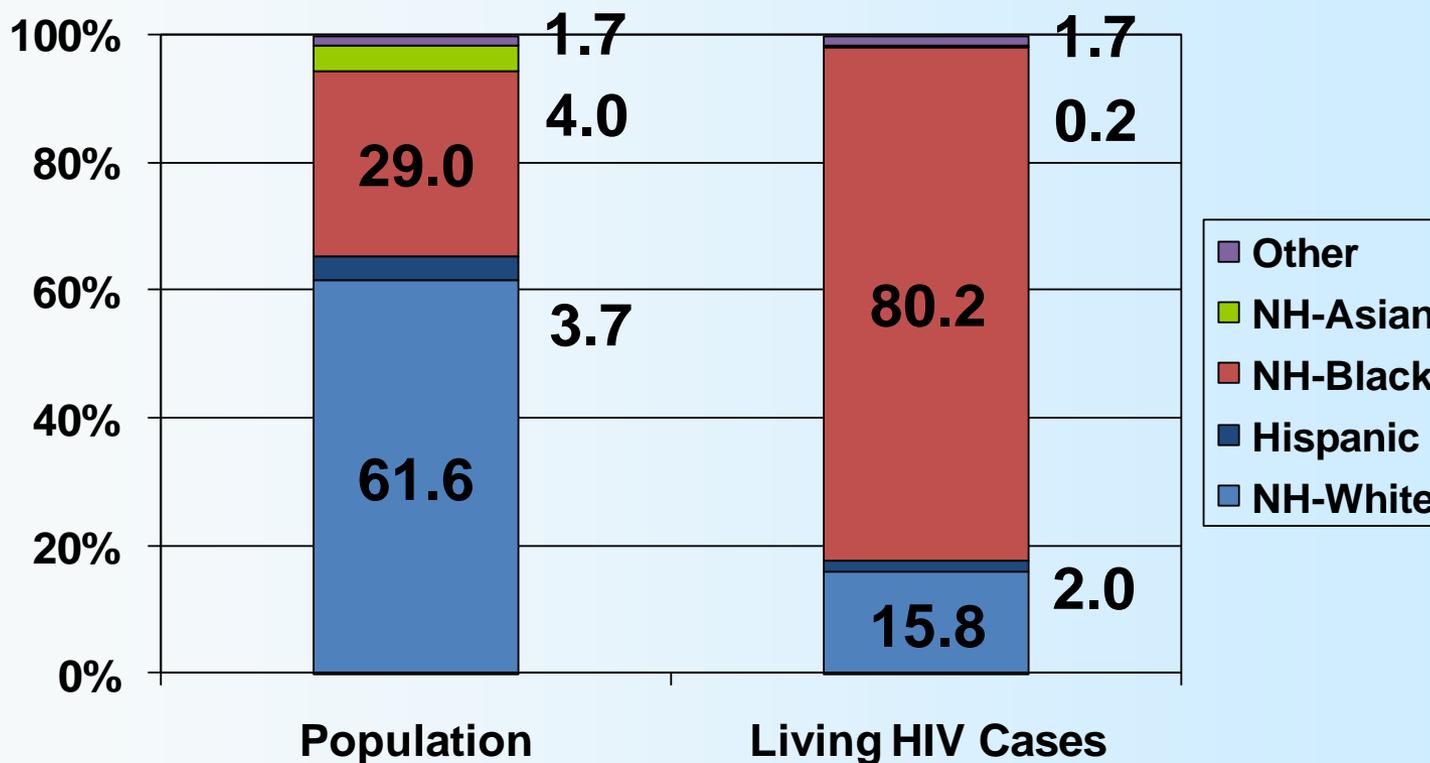


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# Population and Living HIV Cases by Race/Ethnicity Central Region

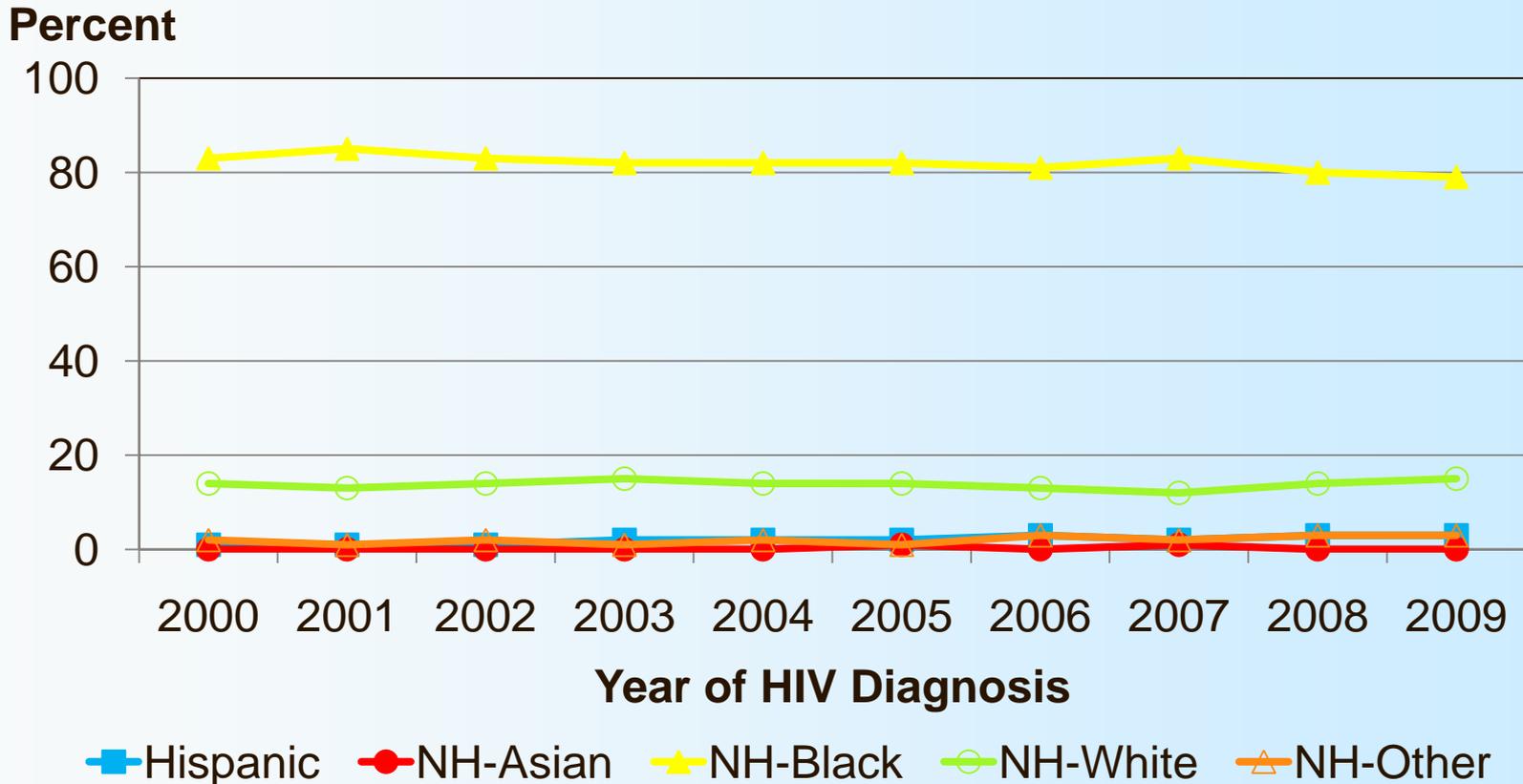


Population on 7/1/09, Cases on 12/31/09  
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# Reported HIV Diagnosis Trends by Race/Ethnicity Central Region

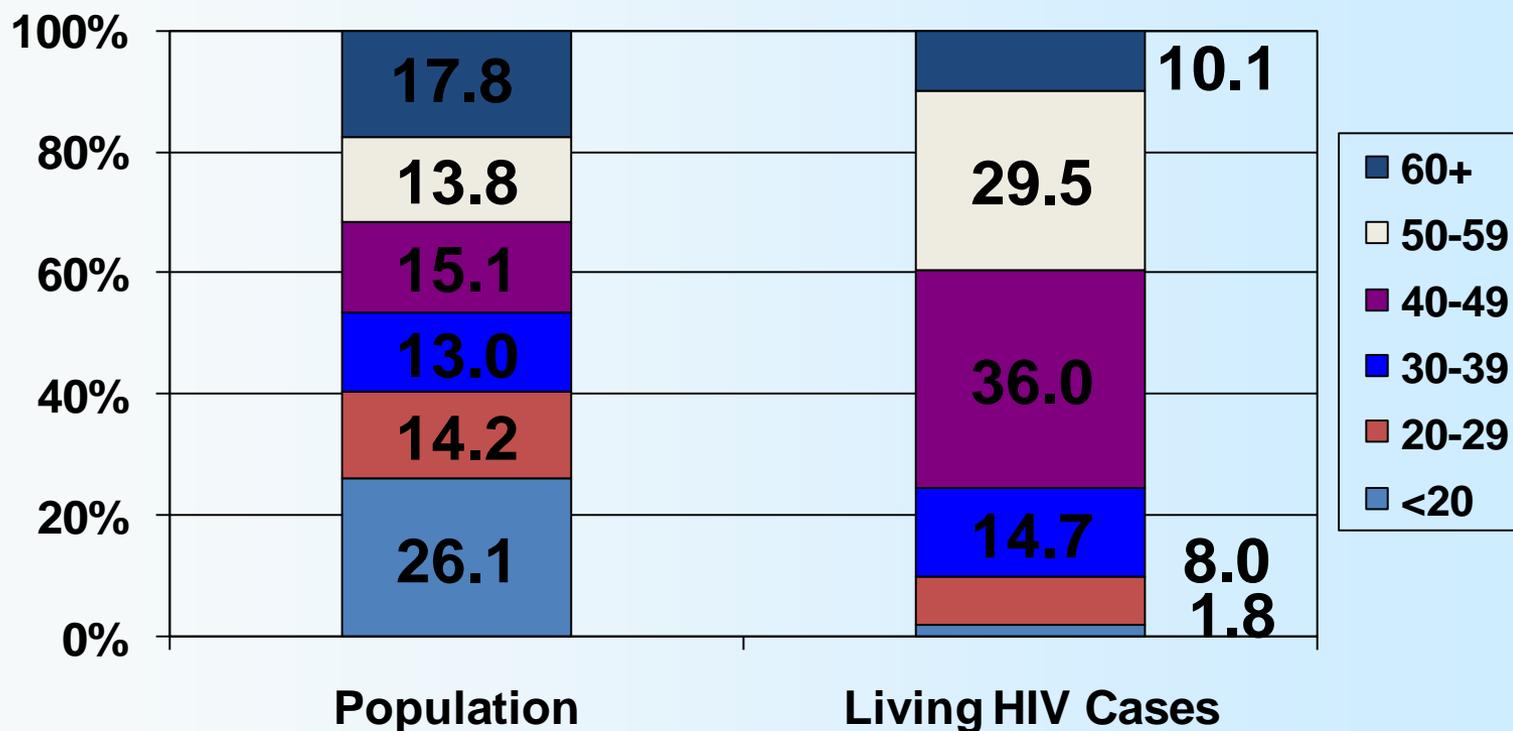


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# Population and Living HIV Cases by Age, Central Region

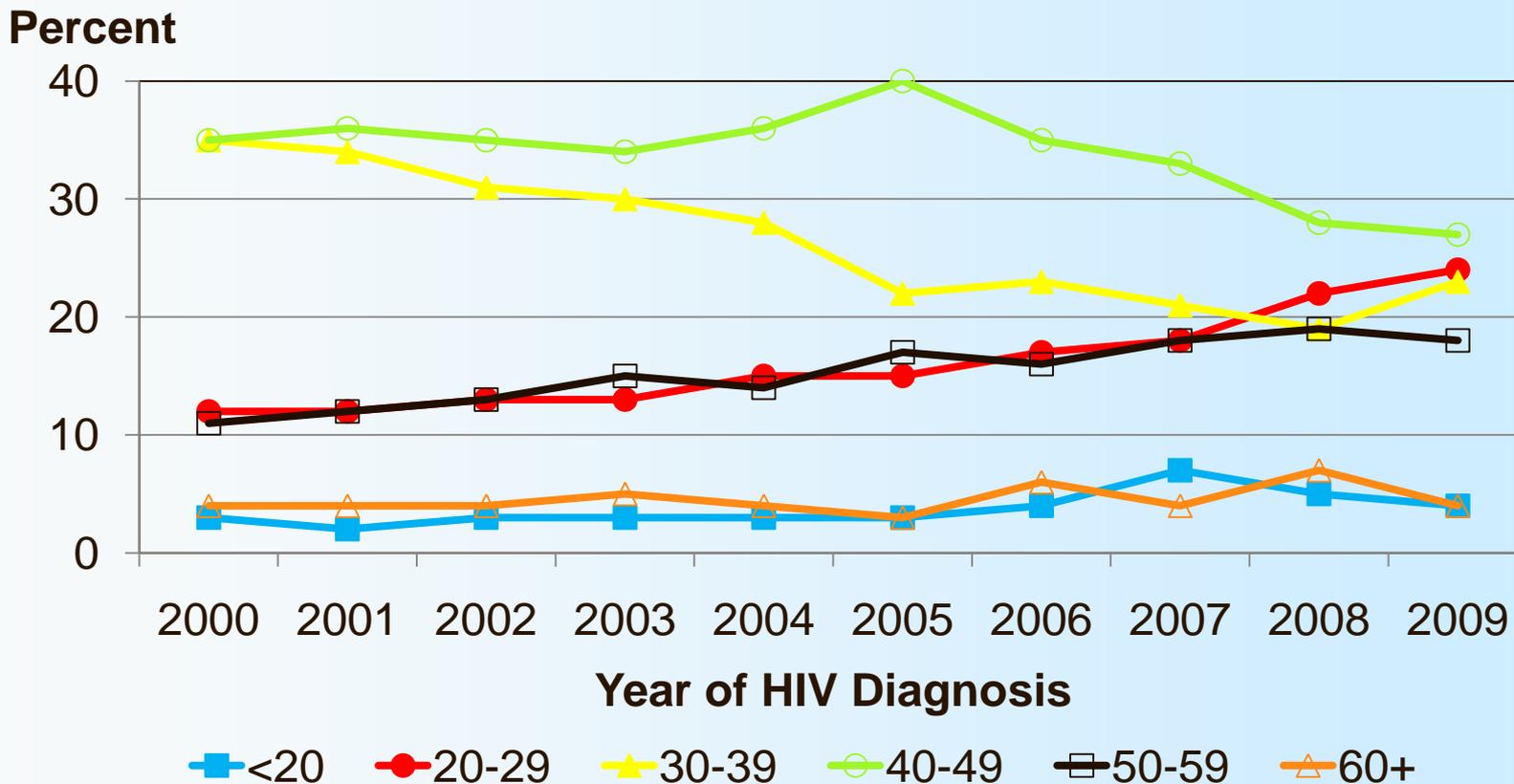


Population on 7/1/09, Cases on 12/31/09  
as reported through 12/31/10

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# Reported HIV Diagnosis Trends by Age at Diagnosis Central Region



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# Risk Categories

**MSM:** Men who have Sex with Men

**IDU:** Injection Drug Use

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

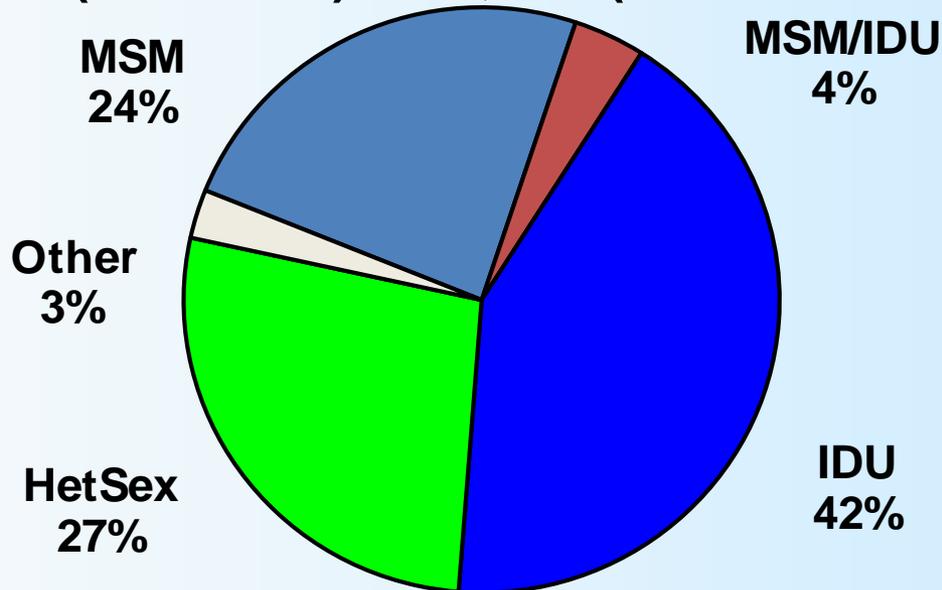
**HetSex:** Heterosexual Contact with a Person that has or is at Risk for HIV Infection



# Living HIV Cases 12/31/09 by Exposure Category Central Region



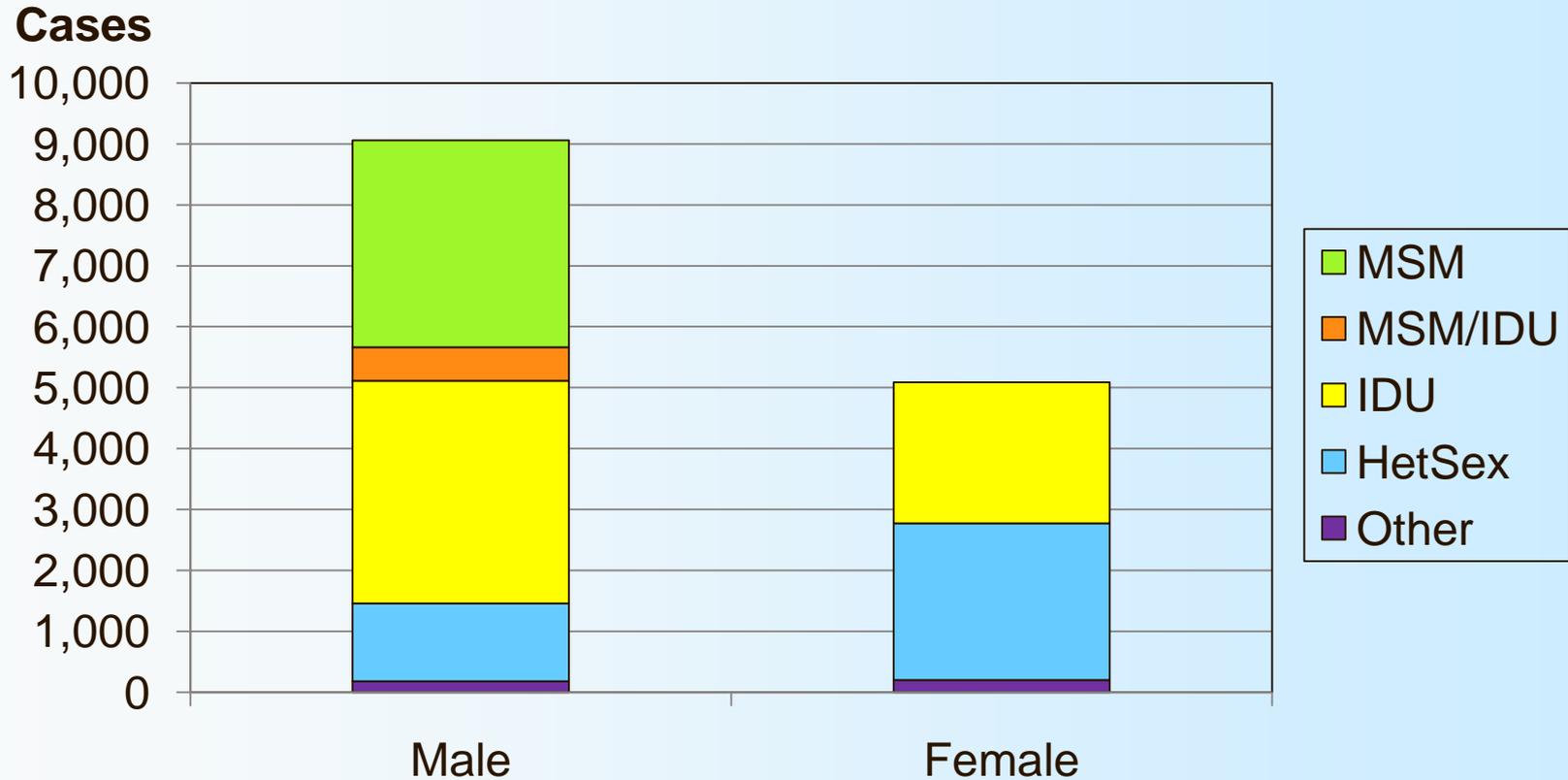
**N (with Risk) = 14,150 (82% of Total)**



Using data as reported through 12/31/2010



# Living HIV Cases 12/31/09 by Risk and Sex at Birth Central Region



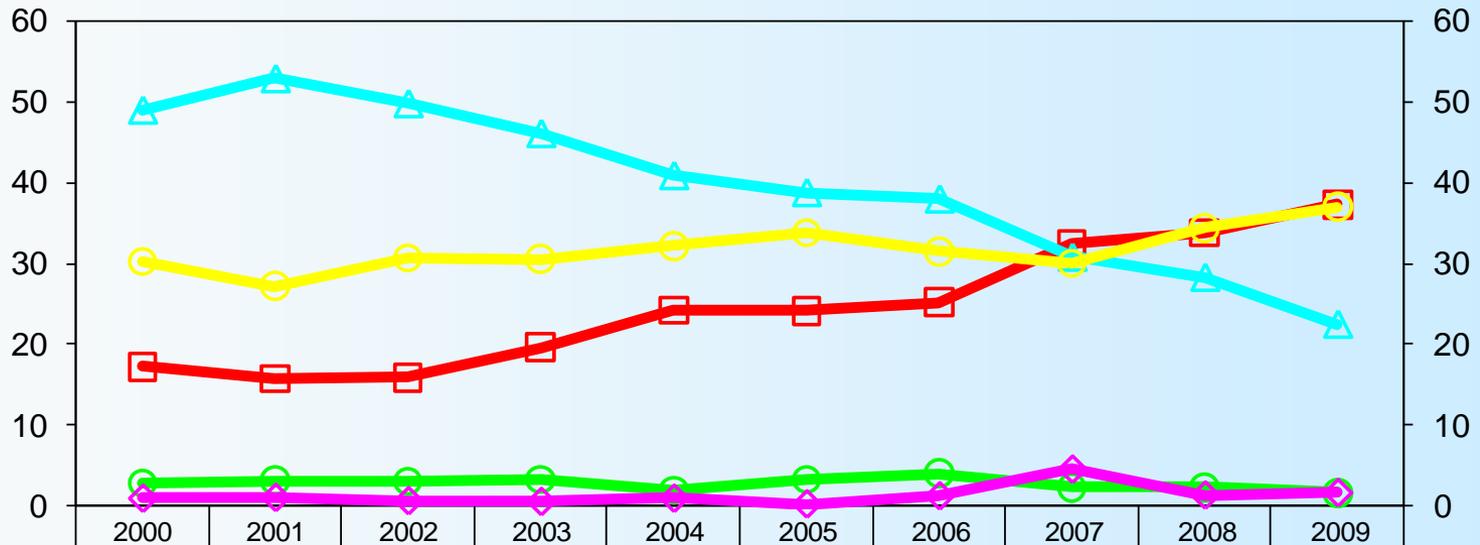
Using data as reported through 12/31/2010



# Reported HIV Diagnoses Exposure Category Trends, Central Region



Percent



MSM	17.2	15.7	15.9	19.6	24.2	24.1	25.2	32.5	33.8	37.3
IDU	49.0	52.9	49.8	46.1	40.9	38.8	38.0	30.8	28.3	22.5
HetSex	30.2	27.2	30.7	30.5	32.2	33.8	31.5	30.0	34.4	37.0
MSM/IDU	2.8	3.1	3.0	3.2	1.9	3.2	4.0	2.3	2.3	1.6
Other	0.9	1.0	0.6	0.5	0.9	0.2	1.2	4.5	1.3	1.6

Year of Diagnosis

Using data as reported through 12/31/2010



# 2009 Reported Adult/Adolescent HIV Diagnoses (N=821) Central Region



- Linkage to Care: 57% had a CD4 or VL test within 3 months of HIV diagnosis
- CD4 at Diagnosis: 62% had a CD4 test within 12 months of HIV diagnosis, and the median value was 312 cells/microliter
- Late HIV Diagnosis: 27% had an AIDS diagnosis within 12 months of their HIV diagnosis

Using data as reported through 12/31/2010



# 2009 Reported Adult/Adolescent AIDS Diagnoses (N=430) Central Region



- Progression: The average time from HIV diagnosis to AIDS diagnosis was 3.4 years
- Late HIV Diagnosis: 51% were diagnosed with AIDS within 12 months of their HIV diagnosis

Using data as reported through 12/31/2010



# Regional Summary



# HIV/AIDS in the Central Region



- There were 17,336 living HIV cases at the end of 2009 and 825 reported HIV diagnoses during 2009
- Baltimore City had the greatest share of living cases (75%)
- Rates of living cases were 3 times higher in Baltimore City than the Central Region average
- HIV was being diagnosed late (27% late, median CD4 312), contributing to many AIDS diagnoses (51% had late HIV diagnosis)



# HIV/AIDS in the Central Region: Demographics



- Males were disproportionately affected (63% of cases vs. 48% of population), and the proportion male was increasing
- Non-Hispanic blacks were disproportionately affected (80% vs. 29%), and the proportion was stable
- Persons 30-59 years old were disproportionately affected (80% vs. 42%), but the proportions were decreasing among 30-49 year olds while increasing among 20-29 and 50-59 year olds



# HIV/AIDS in the Central Region: Transmission Risk



- Sexual transmission predominates (>51%)
  - 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



# New Epidemiological Products Coming to the New IDEHA Website



- New Epi Profiles for State, Regions, Counties
- New Indicators
  - Linkage to care
  - Late HIV diagnosis
  - CD4 counts at HIV diagnosis
  - Disease state: CD4 and VL levels for living cases
  - Progression: HIV to AIDS, AIDS to death
  - Presumed female heterosexual exposure category
- New HIV Mapping Tool
- New Query-able Database



# Behavioral Surveillance

- National HIV Behavioral Surveillance (NHBS)
  - BESURE in the Baltimore metropolitan area
- One at-risk population per year:
  - MSM, IDU, HET
- Recruits a sample of ~500 participants each year for an in-depth interview on behaviors and an HIV test
- Provides data to help answer the question of what behaviors in the community contribute to HIV infection
- Presentation before the May 16<sup>th</sup> Central RAC



# Maryland Infectious Disease and Environmental Health Administration

**Coming soon:**

**<http://ideha.dhmfh.maryland.gov>**