

# HIV in the Metro Detroit Area with a focus on Women and Adolescents

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The term 'AIDS' is being phased out. Instead you will see HIV stage 1, 2 and 3 where stage 3 is equivalent to AIDS.

# Outline

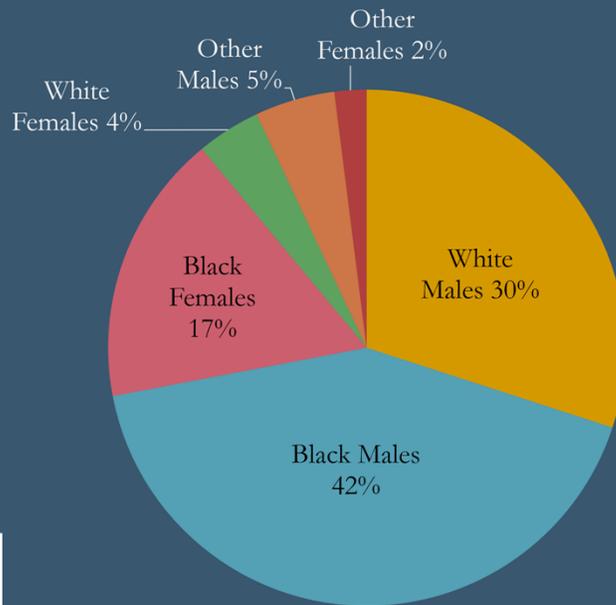
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- Overview of HIV infection in Michigan
- HIV infection in the Detroit Metro Area (DMA\*)
- Trends in the Detroit Metro Area (DMA)
- Focus on Women and 13 to 24 year-olds (DMA)

\*DMA: Wayne, Macomb, Oakland, Monroe, St. Clair, and Lapeer counties

Because DMA accounted for 68% of the new diagnoses between 2005-2009, the state level stats are very similar to DMA.

# Persons living with HIV by Race and Sex, MI, July 2011 (n=14,805)



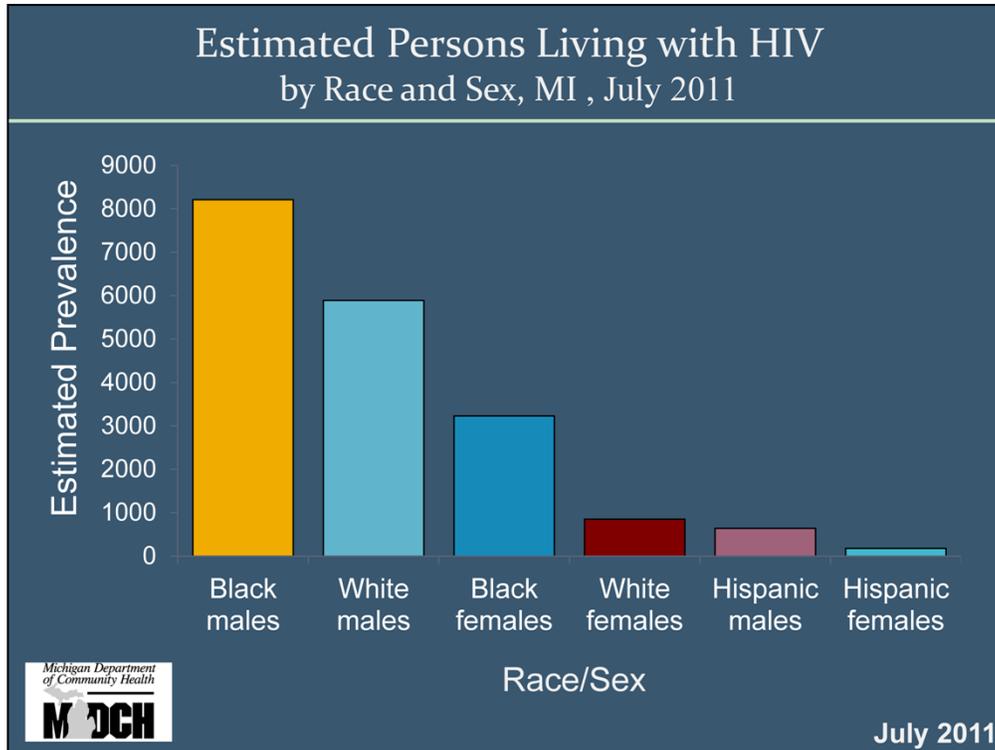
July 2011

## HIV in Michigan: Disproportionate impact on blacks

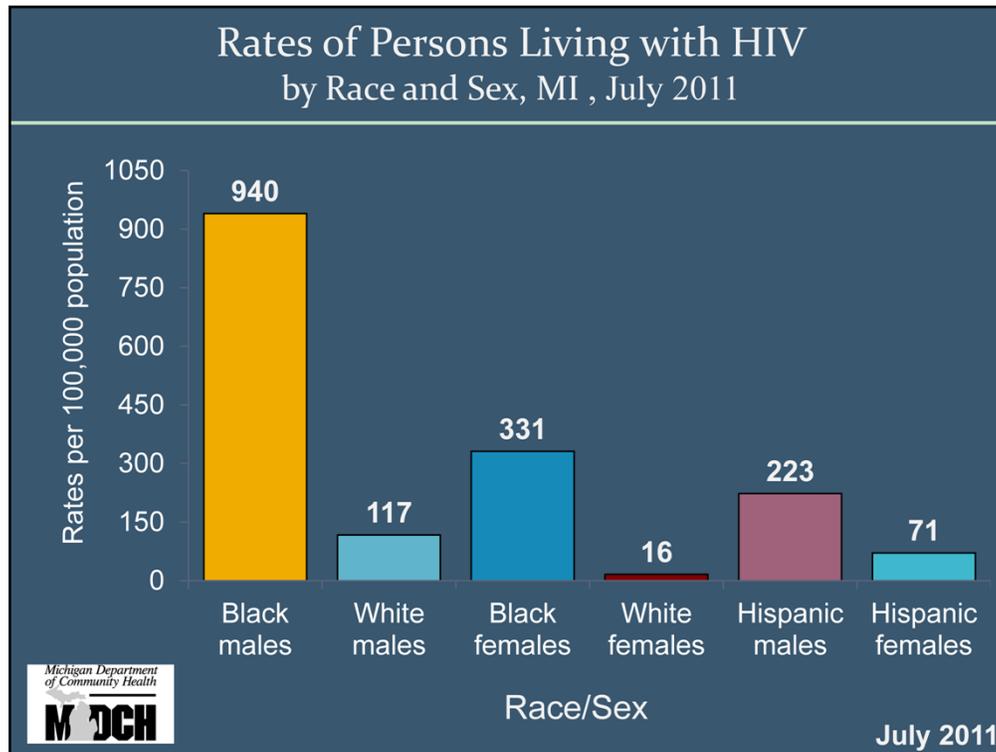
- The population of Michigan is 14% black but blacks make up 59% of all persons currently living with HIV in the state.
- In 2010, 71% of infants exposed perinatally in Michigan were black.



July 2011



This and next slide are intended to visually demonstrate disproportionate impact on blacks



White males have a relatively high prevalence (previous slide), but a relatively low rate due to the large number of white males in the state. If we used prevalence estimates to compare groups, the number of white male cases would be deceptive. Always try to use rates when comparing groups within a population. Rates allow you to compare cases with a constant denominator across all groups.

Compared to white males, black males and black females have rates that are 8 and 2.8 times higher respectively.

--Ratio of black males to white is alarming because of the sheer numbers.

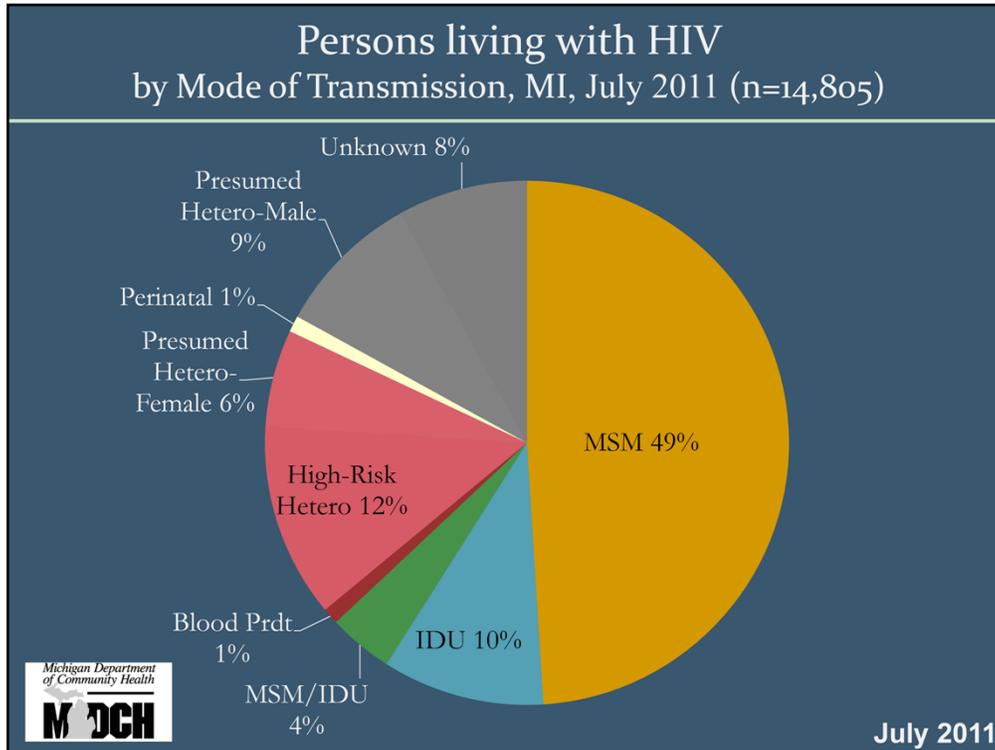
--Ratio of black females to white males is alarming because HIV is primarily a male epidemic, so the fact that a subgroup of females has a higher rate than a subgroup of males is cause for concern.

Another point of interest is the Male to Female ratios within each race category.

In whites, males have a rate 7.3 times higher than females.

In blacks, males have a rate 2.8 times higher than females.

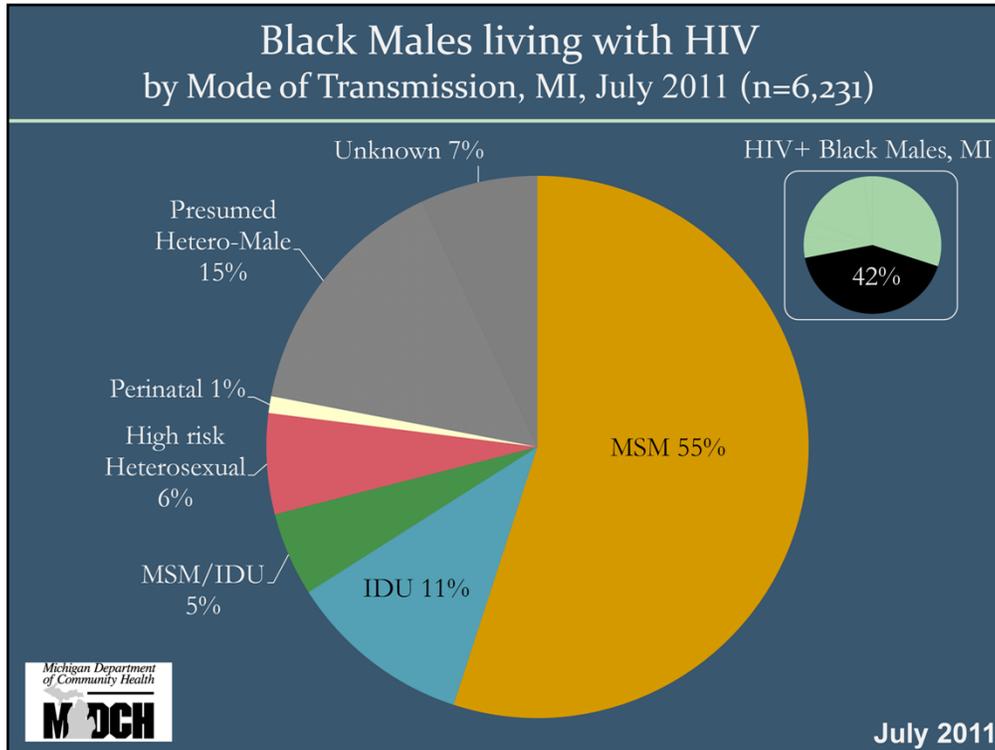
In Hispanics, males have a rate 3.1 times higher than females.



PH-Female and High-Risk Heterosexuals are sub categories of ‘Heterosexual mode of transmission’.

Unknown and PH-male are sub categories of ‘Undetermined mode of transmission’.

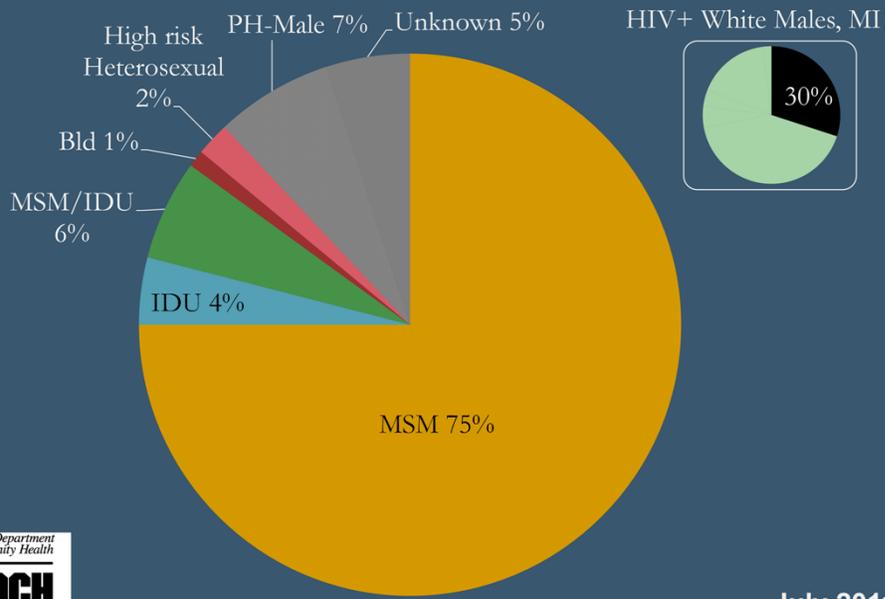
These categories no longer reflect the risk groups used. The new risk groups (not listed here) were implemented late January 2012.



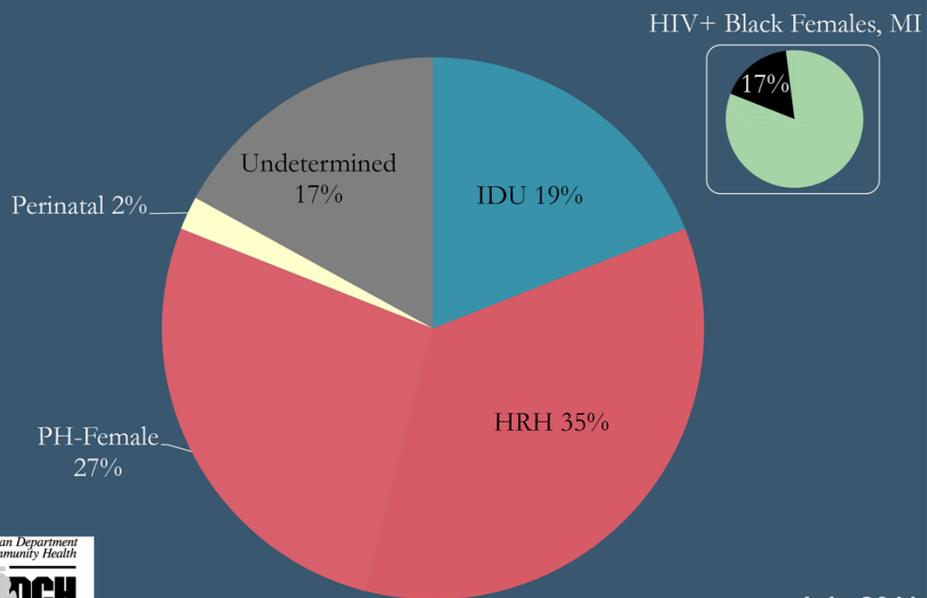
The chart in the upper right corner puts the main chart in context of the whole HIV epidemic in the state of Michigan.

This slide should be read as, “In Michigan, 42% of people living with HIV infection as of July 2011 were black. Of those 42%, 55% acquired the virus via MSM, 11% via IDU, etc”.

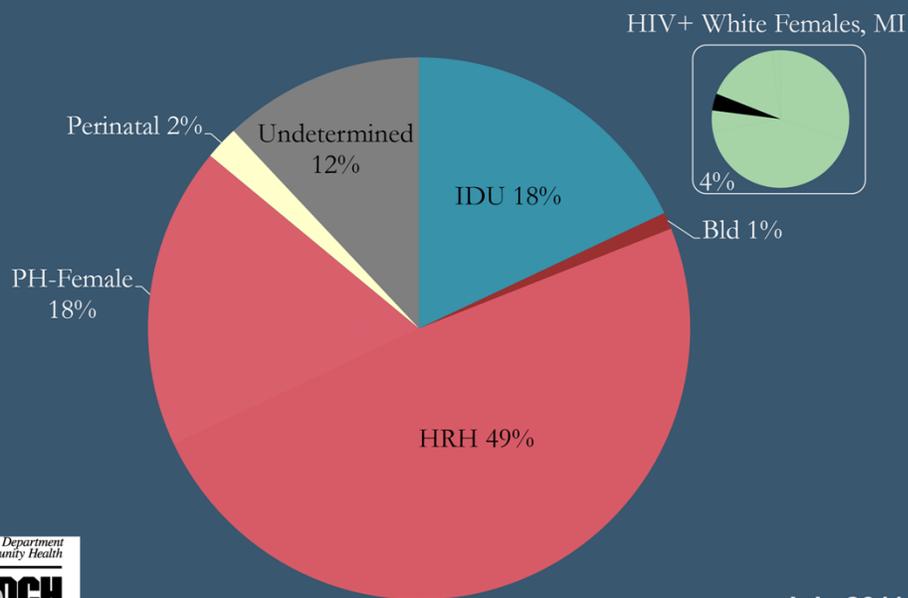
# White Males living with HIV by Mode of Transmission, MI, July 2011 (n=4,470)



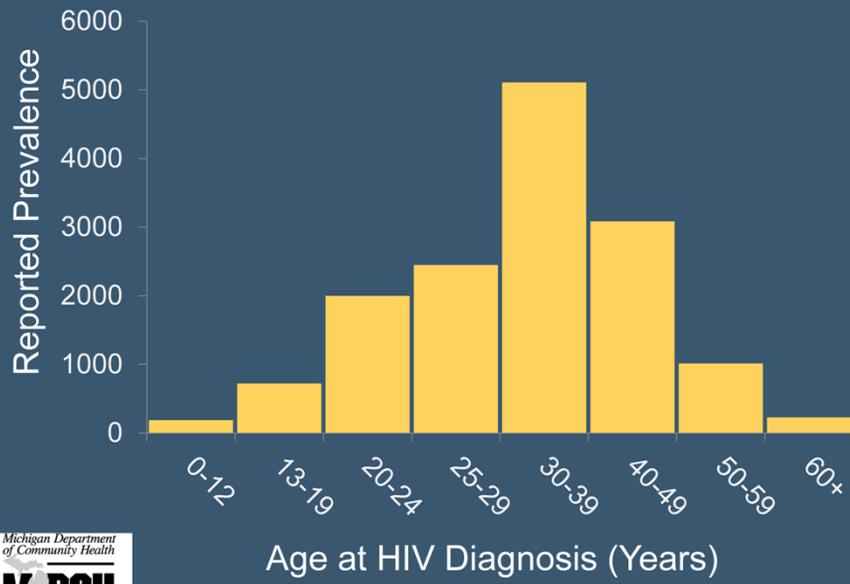
# Black Females living with HIV by Mode of Transmission, MI, July 2011 (n=2,452)



# White Females living with HIV by Mode of Transmission, MI, July 2011 (n=647)



## Persons living with HIV by Age, MI, July 2011 (n=14,805)



July 2011

# HIV in Detroit and the Detroit Metro Area (DMA)

## HIV in the City of Detroit

- **9%** of Michigan's population lives in the City of Detroit, while **37.5%** of the people living with HIV in the state live in Detroit



July 2011

## Rates of HIV Infection by Race in the Detroit Metro Area\*

- The prevalence rate of reported cases of HIV infection among blacks is **646 per 100,000 population**
- 7.6 times higher than the rate among whites (**85 per 100,000** population)



\*DMA: Wayne, Macomb, Oakland, Monroe, St. Clair, and Lapeer counties

July 2011

## Rates of HIV Infection by Race in the Detroit Metro Area, cntd.

- MDCH estimates:
  - as many as **one out of 100** black males and **one out of 292** black females may be HIV-infected;
  - as many as **one out of 660** white males and **one out of 5,223** white females may be HIV infected;
  - as many as one **out of 386** Hispanic males and **one out of 1,217** Hispanic females may be HIV infected.



July 2011

# Trends in HIV: Detroit Metro Area, 2005-2009

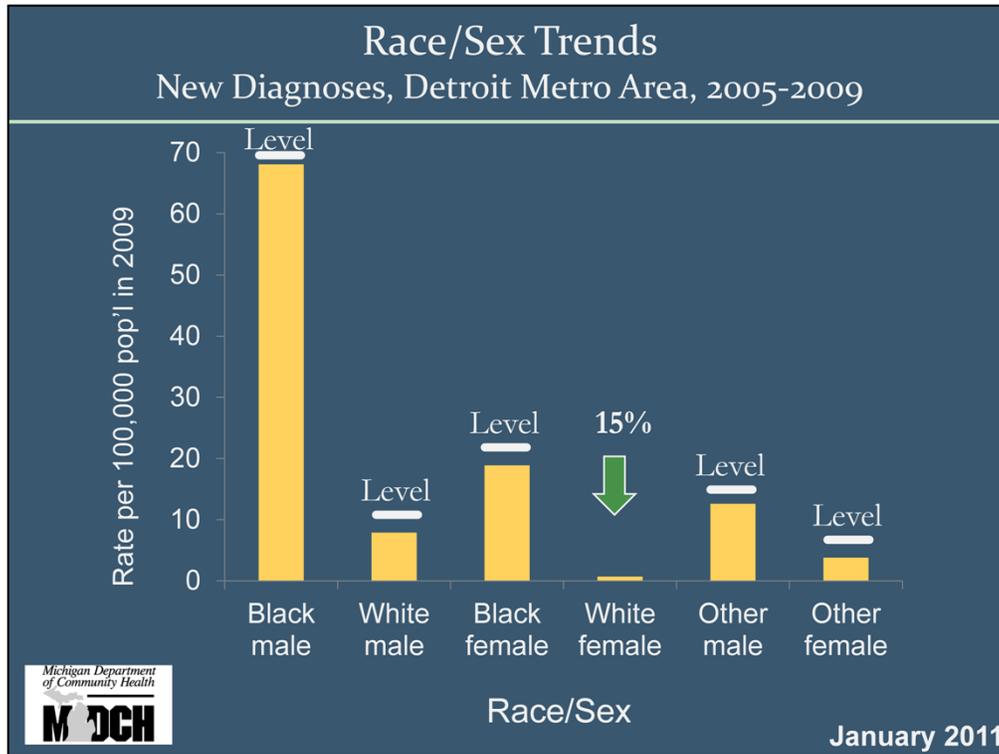
## Methodology and Overview

- CDC program used to adjust data to account for reporting delay
- Statistical tests for trends
- New diagnoses 2005 through 2009
- 565 new diagnoses in Michigan annually



January 2011

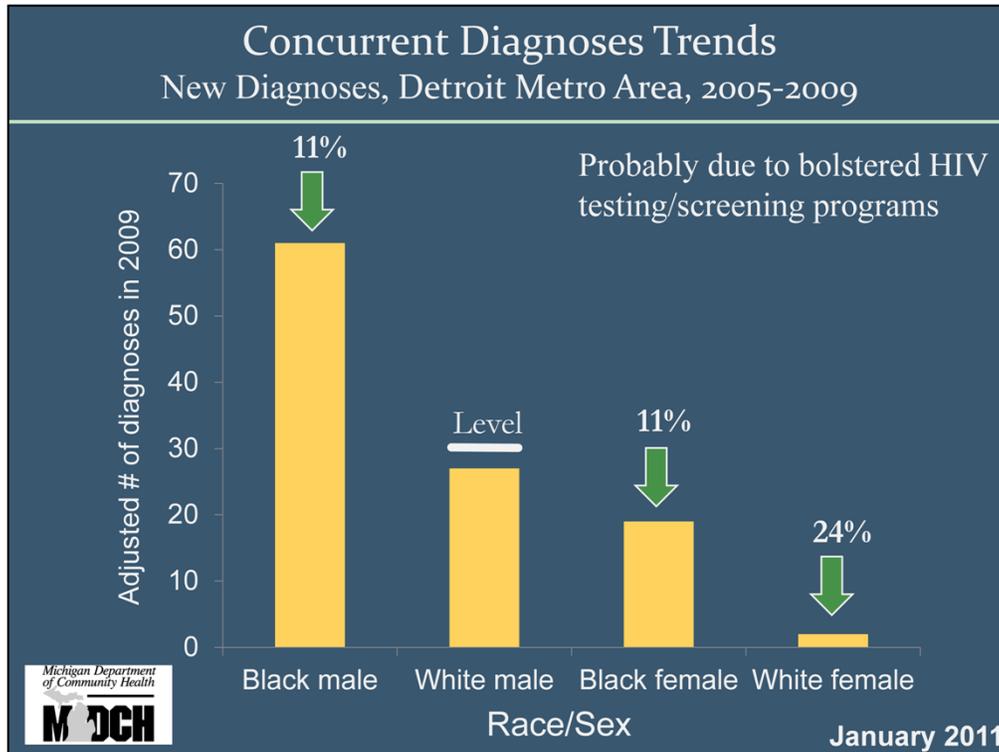
Stats test: negative binomial regression



This is the first time White Females have shown a decreasing trend (going back to the '00- '04 report)

None of the other categories demonstrated a significant change.

At the state level, both white and black females had decreasing rates of new diagnoses.

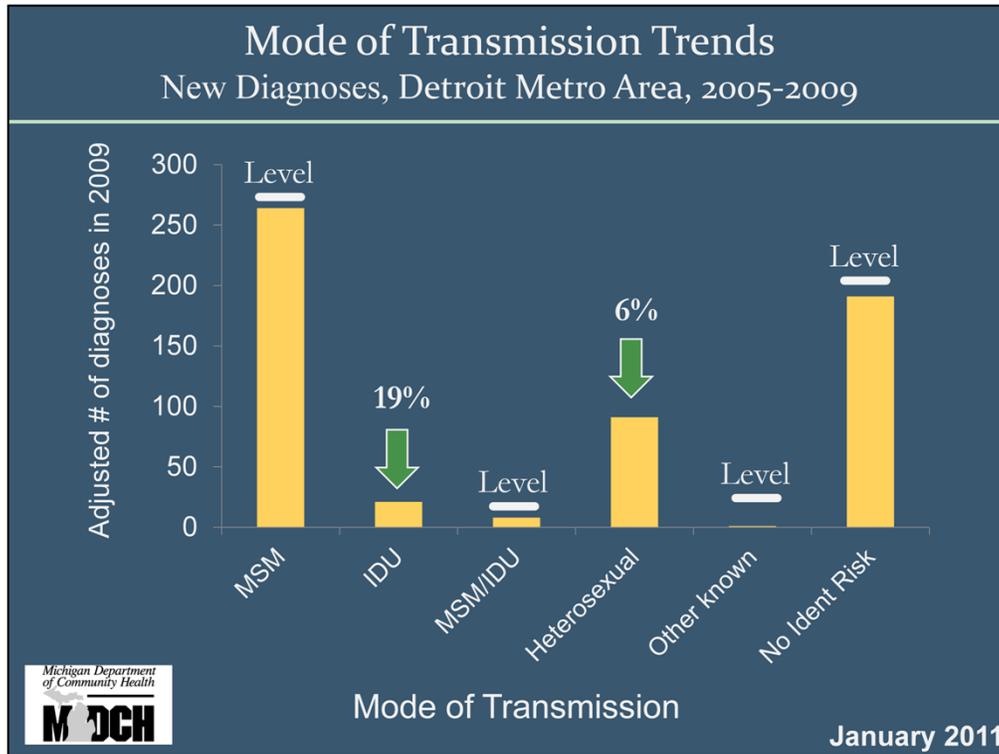


A concurrent diagnosis means an individual was diagnosed as HIV stage 3 (AIDS) within a month following his/her initial HIV diagnosis. Concurrent diagnoses (late diagnoses) are problematic because the patients have lost valuable time to enter ARTs. A late diagnosis results in a poorer prognosis. It also means the individual has been infected without knowing his/her status and may have unknowingly infected others. Because the individual was not on ART's, it is likely he/she has a high viral load (which multiplies the likelihood of infecting others).

These decreasing trends are probably due to bolstering HIV testing/screening programs. Continuing to expand routine testing for HIV can improve outcomes for those who are infected as well as prevent secondary infections.

This is the first time we've seen a decreasing trend in females (going back to the '00- '04 report)

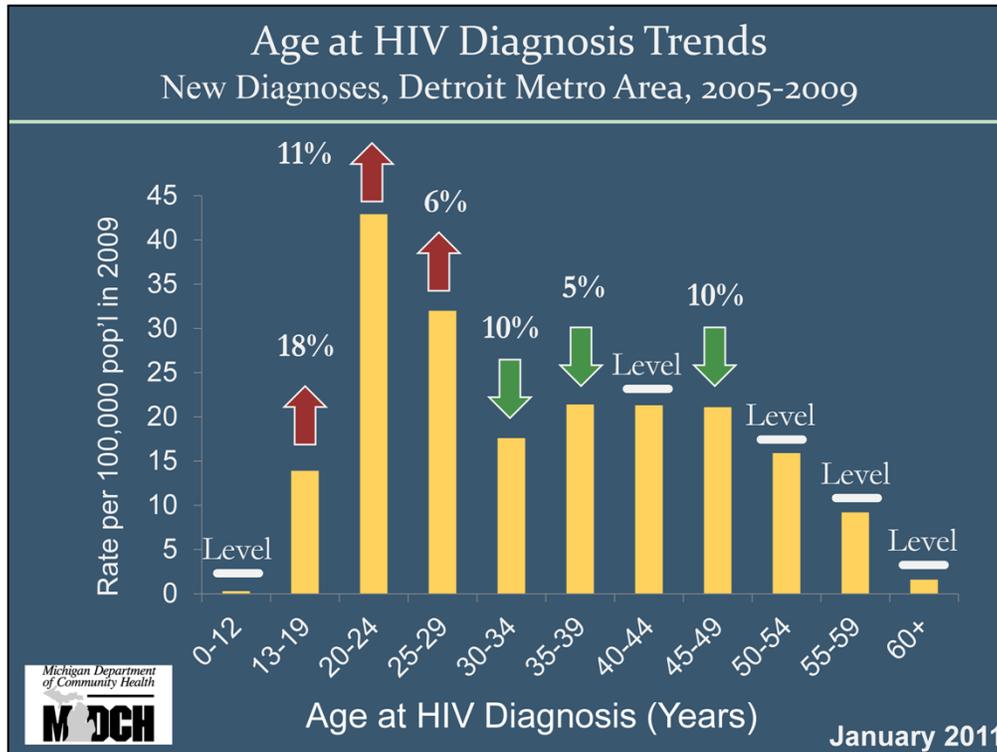
At state level, concurrent diagnoses in black males, black females and white males were decreasing, and white females remained level.



**IDU** has had a decreasing trend since the '01 – '05 report (except in '06 it remained level)

**Heterosexual** transmission has had a decreasing trend for the past 2 years.

At state level, IDU and heterosexual transmission were decreasing as was MSM/IDU transmission.



The rate of new diagnoses in **13-19** yr olds have been increasing for 6 consecutive years.

The rate of new diagnoses in **20-24** yr olds have been increasing for 4 of the past 6 years.

This is the first trend report where **25-29** yr olds have shown an increasing trend, and where **30-34** and **45-49** yr olds had a decreasing trend.

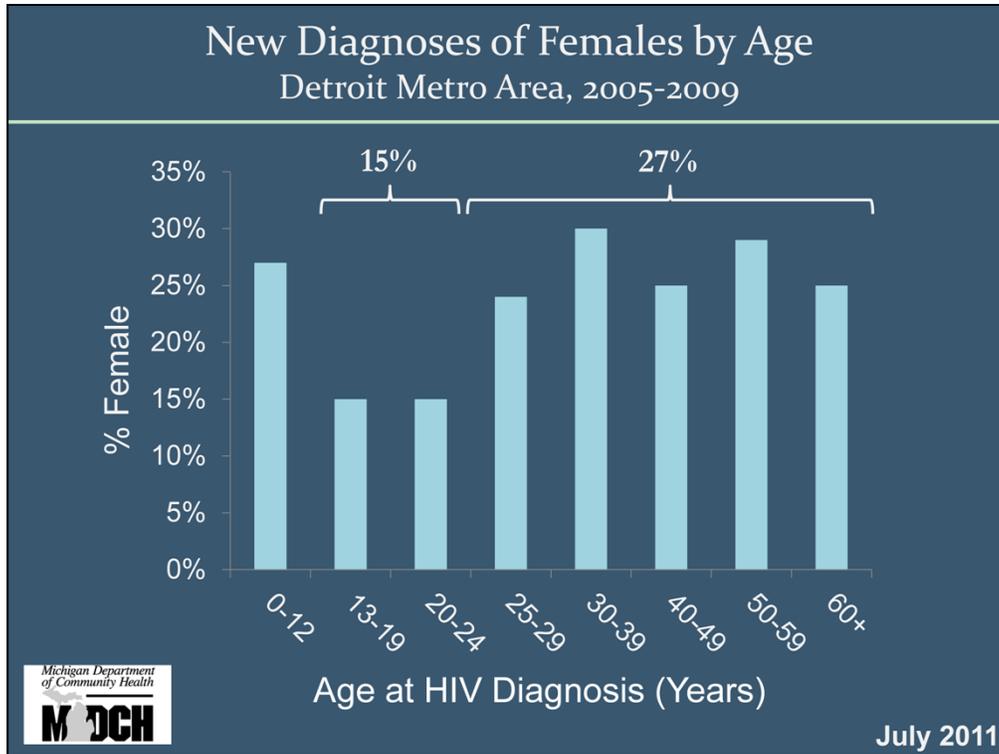
While the increasing trends in youth may partially be attributed to heightened HIV testing efforts aimed at young persons,

public testing data suggest that additional testing is not the sole explanation for the increases seen among teens and young adults. Therefore, there appears to be a true increase in this group.

The same trends were observed at the state level, except 25-29 yr olds showed a decreasing trend.

## Focus on Women and Youth In the Detroit Metro Area

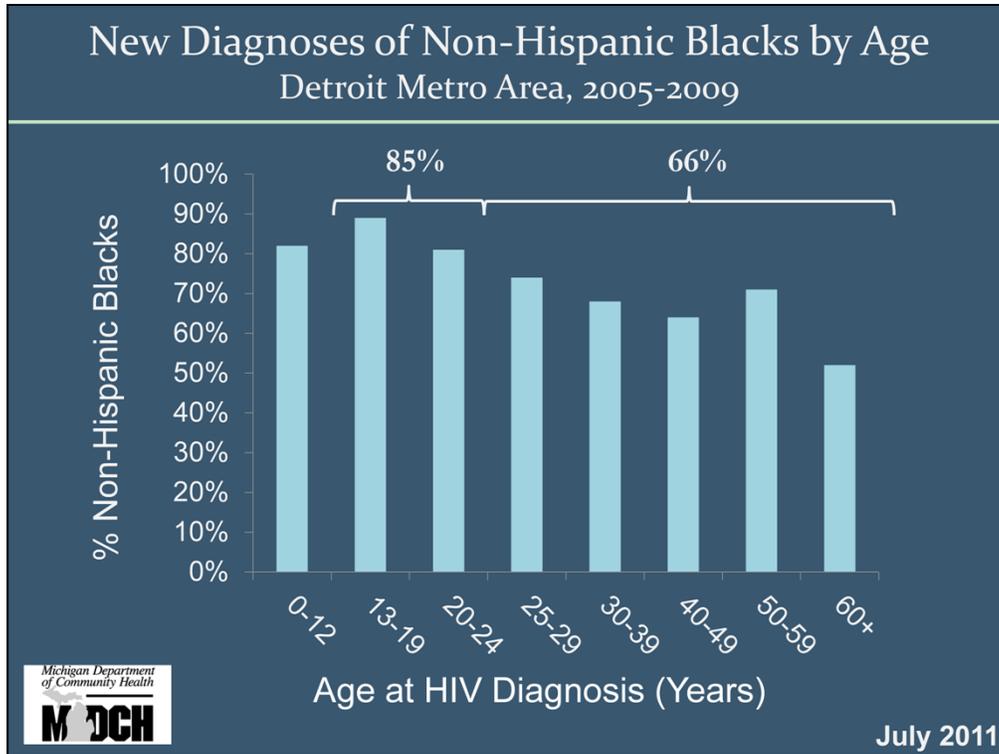
Because DMA accounted for 68% of the new diagnoses in the state from '05- '09, the values/figures are very similar at the state level.



Young females (13-24) make up a smaller proportion of the new HIV cases compared to the adults (25+yrs).

The lower proportion of cases in young females is due to MSM driving the youth epidemic in Detroit.

The state proportions are very similar for the same reasons.

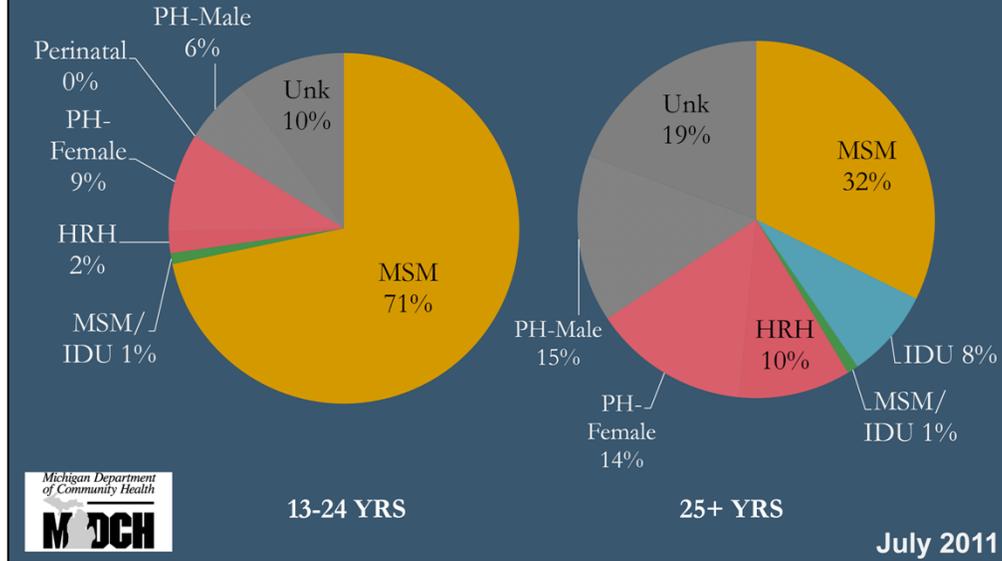


Alarming, of all teens and young adults diagnosed in the last five years, 85% are black compared to 66% of persons diagnosed at older ages. When looking at this graph, it is important to keep in mind that blacks only make up 23% of the DMA.

Again, the state proportions are very similar.

## New Diagnoses of Non-Hispanic Blacks: Risk by Age, Detroit Metro Area, 2005-2009

Need prevention campaigns tailored to these groups



Young black adults are much more likely to acquire the HIV virus via MSM compared to black adults 25 years and older (70% vs. 32%). This chart demonstrates the need for prevention campaigns tailored to specific age groups.

## Unique adolescent issues in-school youth

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- Most at risk youth are not in school
- Michigan high school students:
  - 46% have had sex
  - 5% had sex <13 years
  - 39% of sexually active students did not use a condom during last sexual intercourse
  - 54% taught about condom use in required class

MI Youth Risk Behavior Survey (YRBS) 9-12 graders, 2009; Excludes out-of-school youth

## CDC Recommendations

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- 2006: recommendations that all persons 13-64 be routinely screened unless decline
- Recognize adolescents as a “cohort of persons at risk”
- Pediatricians advised to obtain sexual history
  - Fewer than 50% do so

Centers for Disease Control and Prevention. Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings. MMWR September 22, 2006; 2006;55 (No. RR-14)

To obtain Michigan HIV statistics  
via email sign up at:

[www.michigan.gov/hivstd](http://www.michigan.gov/hivstd)

Go to HIV/AIDS → Statistics and Reports → HIV/AIDS Statewide Quarterly Analyses



# Questions?

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