

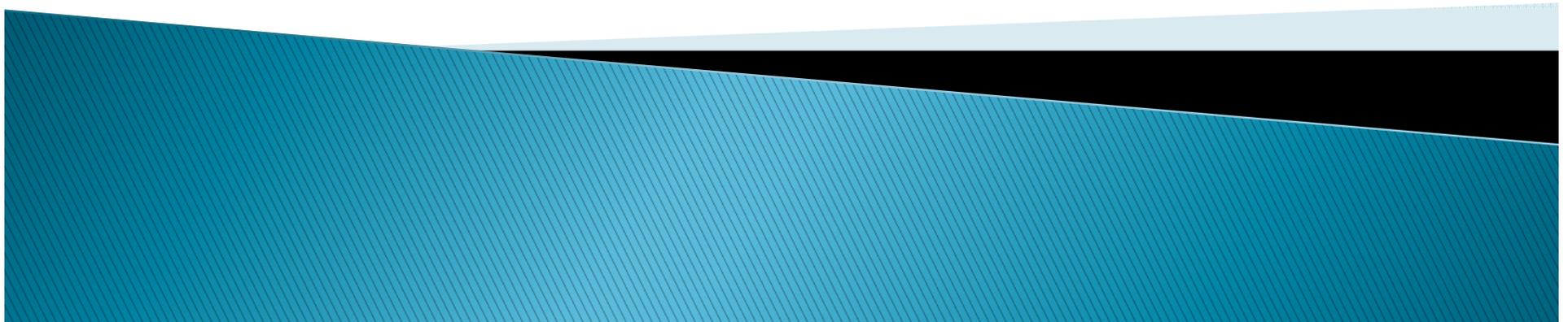


# HIV Prevention Project

Epidemiology Overview

Lindsey Sizemore, HIV/STD Epidemiologist

November 14, 2012



# What is a Rate?

- ▶ A quantity, amount, or degree of something measured per unit of something else
  - A percentage can also be written as a rate
    - A percent is the rate “per 100”
      - 70% is also 70 per 100
  - The number of HIV cases out of the population of Arkansas
    - In epidemiology, the most commonly used rate is “per 100,000”



# Why Use Rates?

- ▶ So the effects of a disease can be compared in a meaningful and useful way between different populations:
  - United States compared to the state of Arkansas
  - Mississippi compared to Arkansas
  - Males compared to Females
  - Whites compared to African Americans



# Incidence Rates and Prevalence Rates

## ▶ Incidence Rates:

- The number of new cases of a disease that occur during a specified period of time in a population
  - New HIV Diagnoses in 2011

## ▶ Prevalence Rates:

- The number of affected persons present in the population
  - Number of People Living with HIV as of December 31, 2011



# Incidence, 2011

In 2011, there were 280 new cases of HIV in the State of Arkansas.

Of these:

- 79% were male, 21% were female
- 48% were <30 years of age at diagnosis, 39% were aged between 30–49 years of age at diagnosis
- 29% were White, 54% were African American and 7% were Hispanic
- 23% of those who were newly diagnosed with HIV in 2011 were diagnosed with AIDS by December 31, 2011

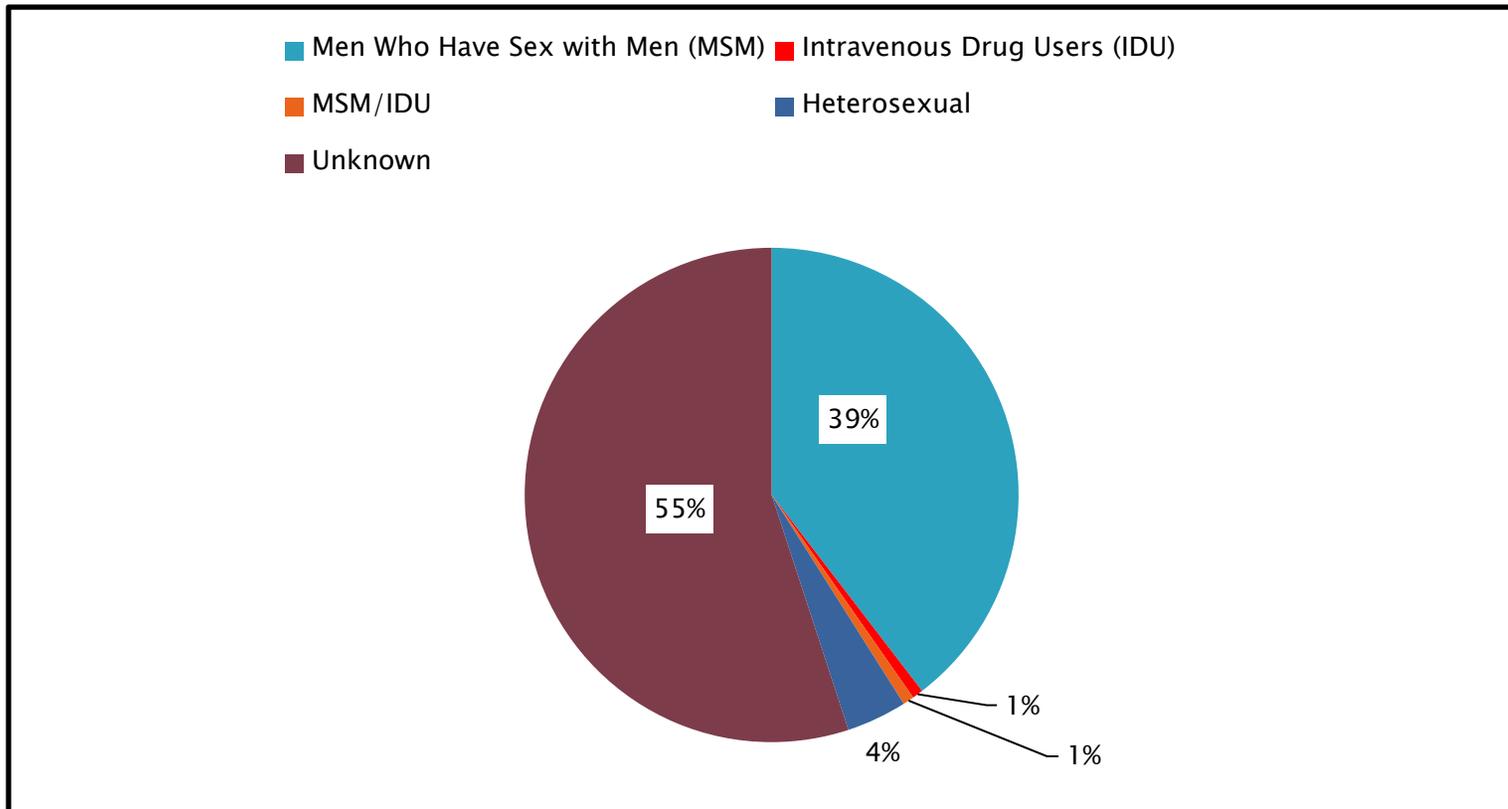


# Incidence, 2011

- ▶ Of the 280 new cases of HIV in 2011:
  - African American (N=150)
  - White (N=81)
  - Hispanic (N=20)
  - Other/Unknown (N=29)
  
- ▶ Incidence Rates by Race:
  - African American (33.3 per 100,000)
  - Hispanic (10.7 per 100,000)
  - White (3.6 per 100,000)



# Percentage of New Cases of HIV by Risk, 2011



# Incidence, 2011

Incidence is a good indicator of where to focus prevention efforts

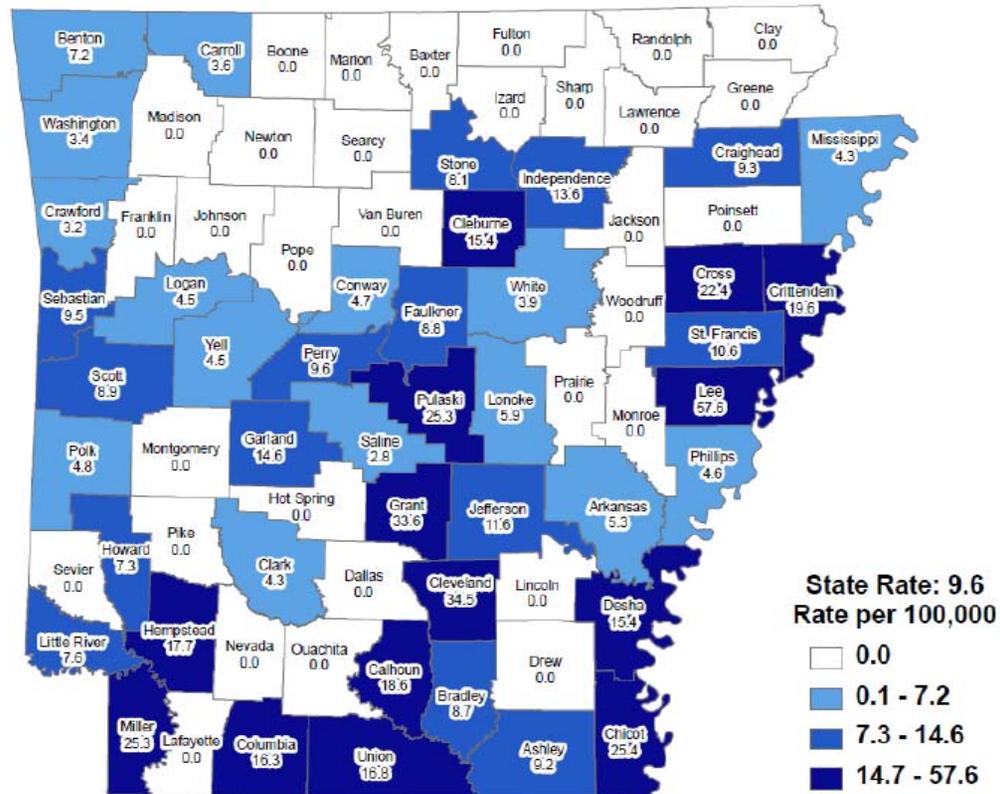
Counties with the highest incidence rates:

- Lee (Incidence Rate = 57.6 per 100,000)
- Cleveland (Incidence Rate = 34.5 per 100,000)
- Grant (Incidence Rate = 33.6 per 100,000)
- State (Incidence Rate = 9.6 per 100,000)



# Incidence, 2011

Incidence of HIV  
Arkansas 2011



Date: July 6, 2012  
Source: Arkansas Department of Health  
Map created by: Wanda Simon & Lindsey Sizemore, Epidemiologists

# Prevalence

As of December 31, 2011 there were 5,493 persons living with HIV in the State of Arkansas

- 77% were male and 23% were female
- 42% were African American and 49% were White
- 38% were <30 years of age at diagnosis, 54% were aged between 30–49 years of age at diagnosis

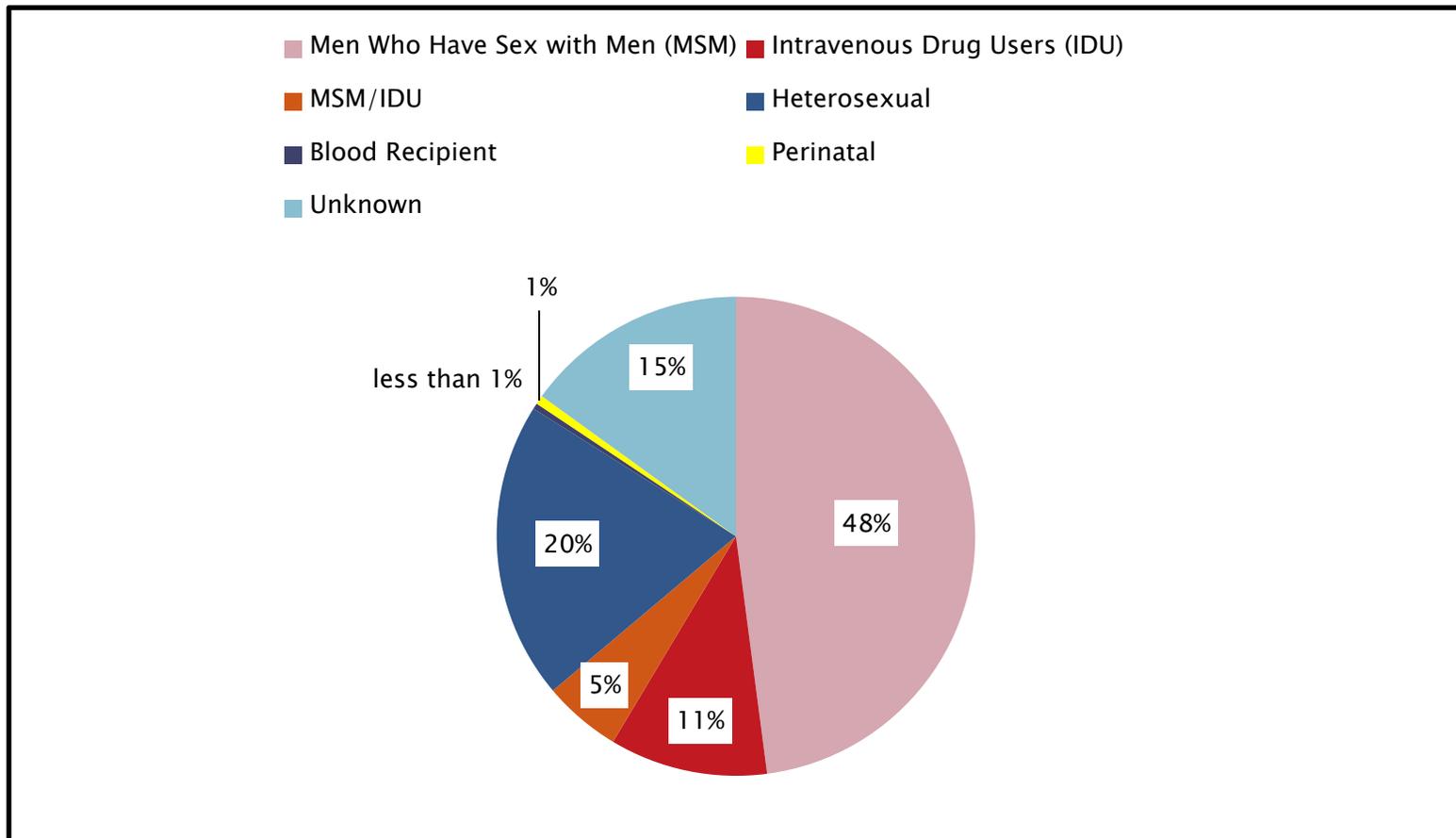


# Prevalence

- ▶ Of the 5,493 cases of HIV as of December 31, 2011:
  - African American (N=2,321)
  - White (N=2,710)
  - Hispanic (N=241)
  - Other/Unknown (N=221)
  
- ▶ Prevalence Rates by Race
  - African American (515.9 per 100,000)
  - Hispanic (129.5 per 100,000)
  - Whites (120.7 per 100,000)



# Percentage of People Living with HIV as of December 31, 2011 by Risk



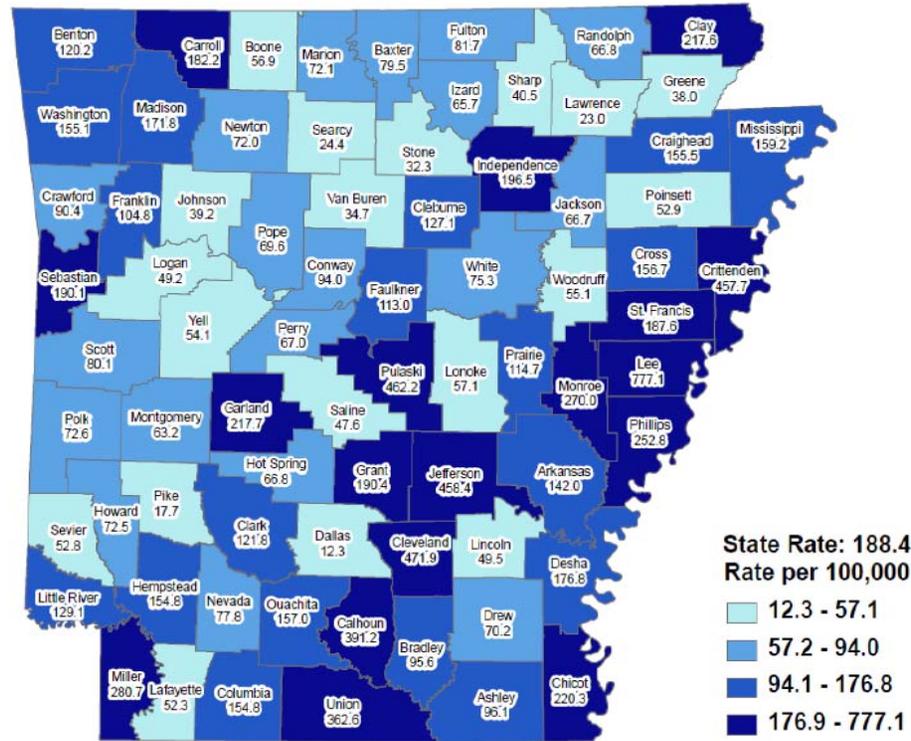
# Prevalence as of December 31, 2011

- ▶ Prevalence is a good indicator of where to focus care efforts
- ▶ Counties with highest prevalence rates:
  - Crittenden (Prevalence Rate = 457.7 per 100,000)
  - Jefferson (Prevalence Rate = 458.4 per 100,000)
  - Lee (Prevalence Rate = 777.1 per 100,000)
  - Pulaski (Prevalence Rate = 462.2 per 100,000)
  - Cleveland (Prevalence Rate = 471.9 per 100,000)
  - State (188.4 per 100,000)



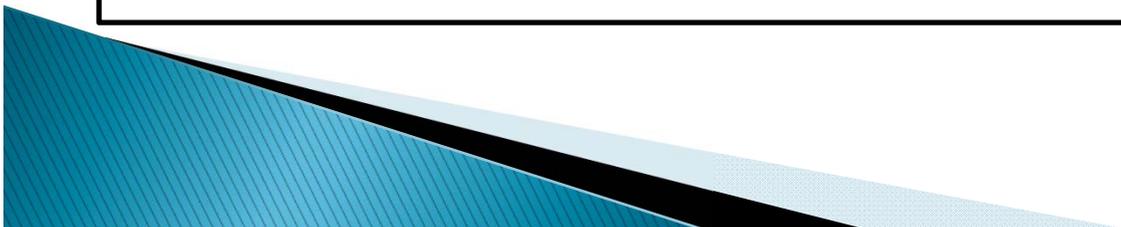
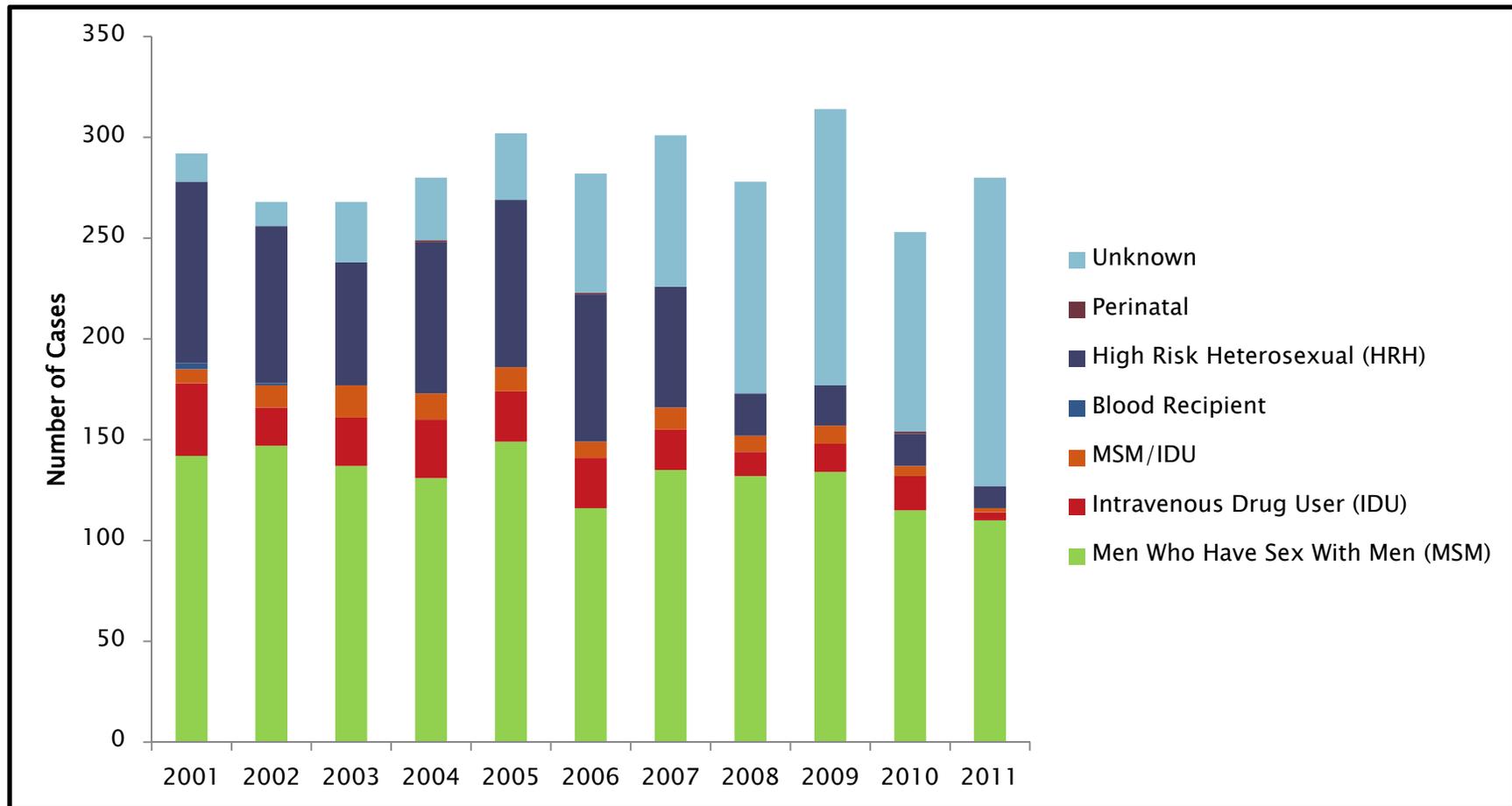
# Prevalence as of December 31, 2011

Prevalence of HIV as of December 31, 2011  
Arkansas



Date: July 6, 2012  
Source: Arkansas Department of Health  
Map created by: Wanda Simon & Lindsey Sizemore, Epidemiologists

# New Cases of HIV Infection Trend by Risk Arkansas, 2001–2011





# Questions / Comments

Lindsey.Sizemore@arkansas.gov

