

Overview of Sexual Health Statistics: Mississippi vs U.S.

Prepared By

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Acknowledgements

- Dr. Connie Bish – Maternal and Child Health Epidemiologist (MSDH/CDC)
- Ms. Peggy Oakes – Nurse Practitioner, Communicable Diseases (MSDH)
- Mr. David Peyton – Branch Director, STD/HIV Surveillance (MSDH)

Discussion Topics

- **Reproductive (Sexual) Health**
 - Pregnancy
 - Sexually Transmitted Diseases
 - To what extent are Mississippi's teens affected?
 - What are public health agencies doing?

Core Functions of Public Health

- **Assessment**

- Who is affected and to what extent?
 - Surveys
 - Test results



- **Assurance**

- Necessary activities, actions and services to achieve goals



- **Policy Development**

- Standards, rules, laws, and legal decisions



Assessment

Youth Risk Behavior Survey

- **2011** survey results for grades 9 to 12:
 - Ever had sexual intercourse **58%**
 - Had sexual intercourse with at least one person during the three months before the survey **42%**
 - Had sexual intercourse with four or more persons **22%**
 - Had sex for the first time before age 13 **12%**
 - Did not use a condom during last sexual intercourse **35%**
 - Did not use birth control pills or Depo before last sex **85%**
 - No HIV/AIDS education received in school **23%**

2010 Mississippi pregnancy rate, 10-19 years old

YEAR	Total (n)	Total (rate/1000)	White (n)	White (rate/1000)	Black (n)	Black (rate/1000)
2010	7095	33.4	2820	26.1	4171	43.8

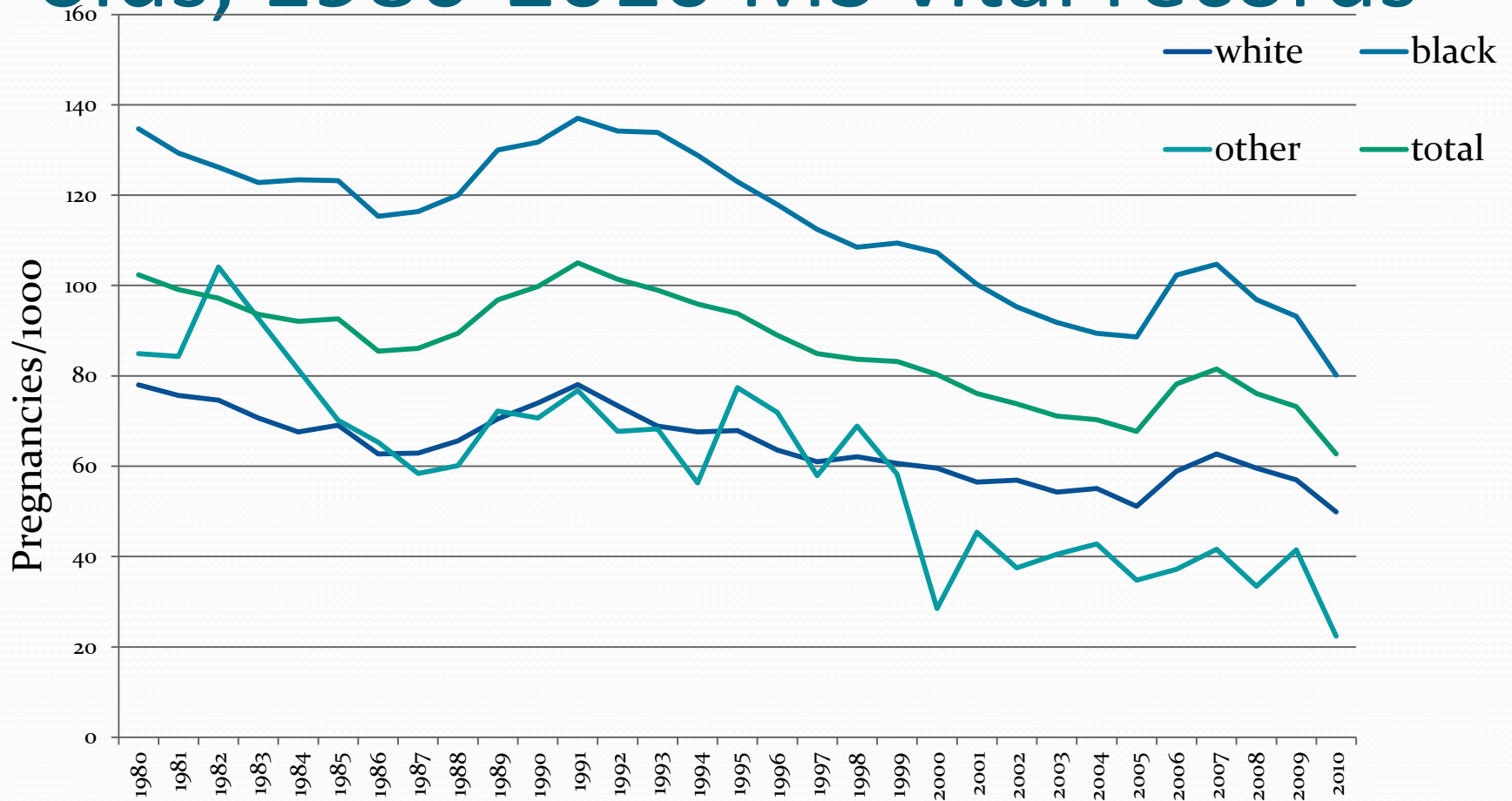
2010 Mississippi pregnancy rate, 10-14 years old

YEAR	Total (n)	Total (rate/1000)	White (n)	White (rate/1000)	Black (n)	Black (rate/1000)
2010	167	0.5	44	0.3	120	0.9

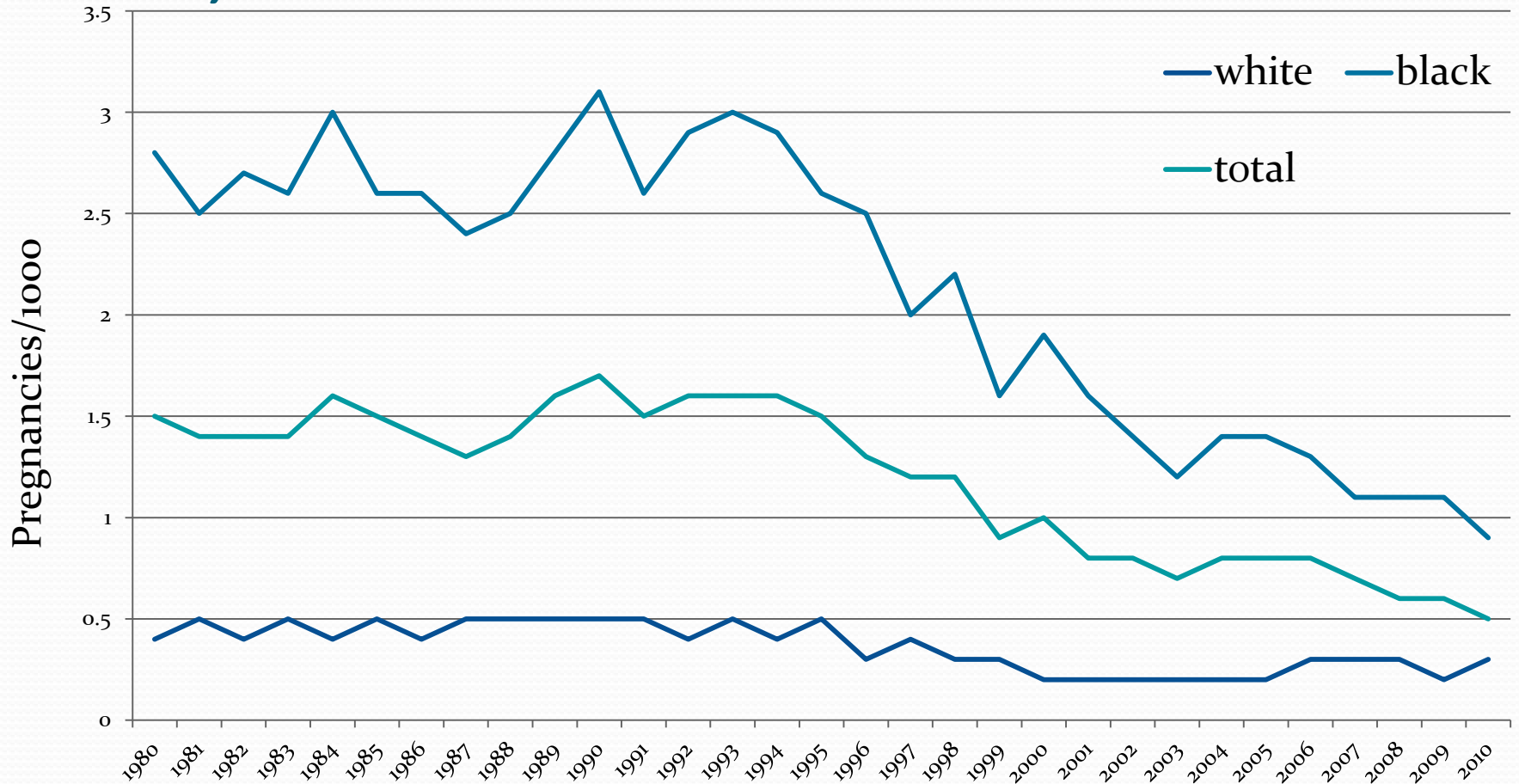
2010 Mississippi pregnancy rate, 15-19 years old

YEAR	Total (n)	Total (rate/1000)	White (n)	White (rate/1000)	Black (n)	Black (rate/1000)
2010	6928	62.7	2776	49.9	4051	80.2

MS pregnancies among 15-19 year olds, 1980-2010 MS vital records



MS pregnancies among 10-14 year olds, 1980-2010 MS vital records



Assessment - Surveillance

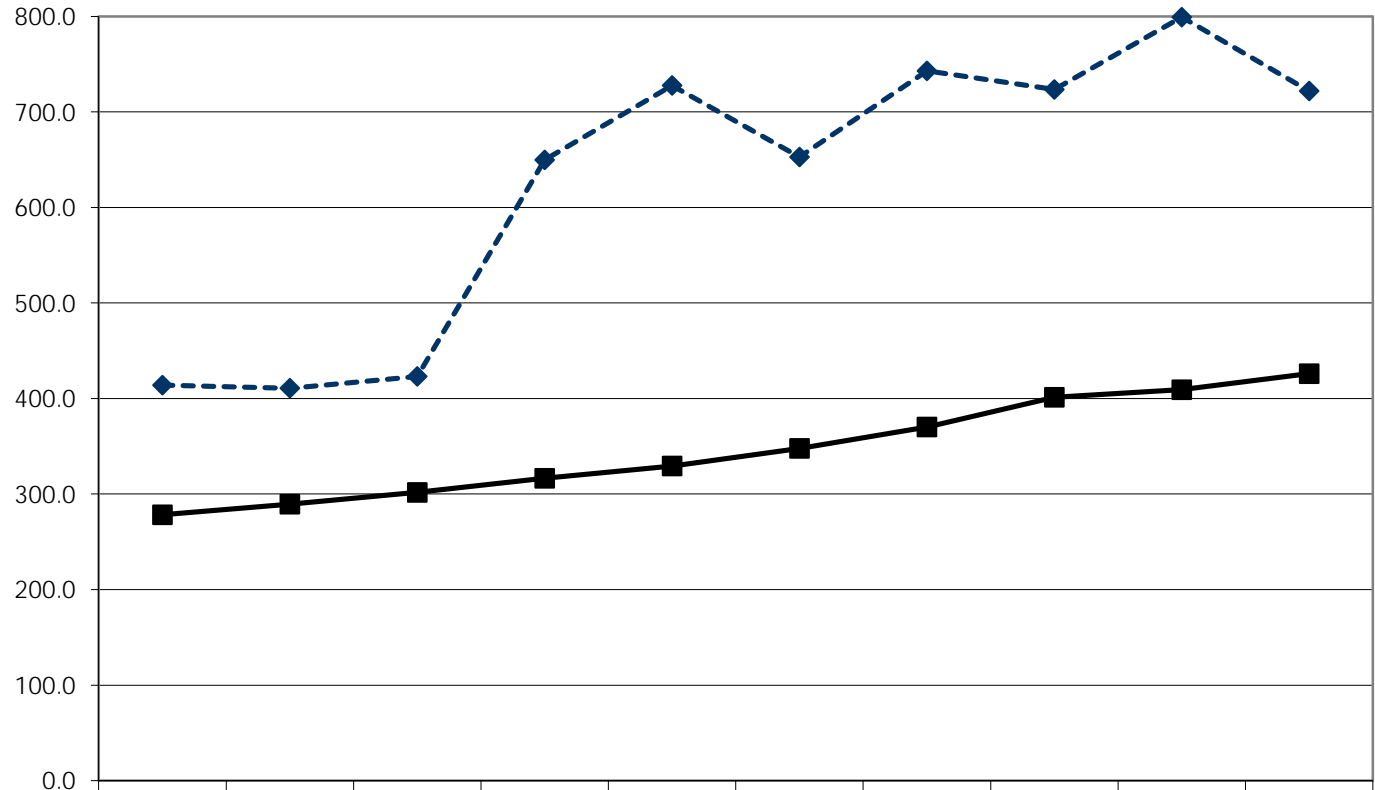
- **Disease reporting requirements** are determined by the Board of Health and published in the Rules and Regulations Governing Reportable Diseases and Conditions
 - **Class 1 diseases** are reportable by telephone within 24 hours of first knowledge or suspicion
 - **Class 2 diseases** are reportable by mail, phone, fax, or electronically within 7 days of diagnosis

Chlamydia (Class 2)

- Caused by the bacterium *Chlamydia trachomatis*
- Transmitted during vaginal, anal, or oral sex
- Can be passed from an infected mother to the newborn during delivery
- Incubation period = 1 to 3 weeks after exposure
- Easily detected by a **urine test or a swab**
- **Treatment:**
 - Azithromycin 1 g one dose OR
 - Doxycycline 100 mg bid x 7 days

Chlamydia Rates by Year, United States and Mississippi, 2001-2010

Incidence per 100,000 population

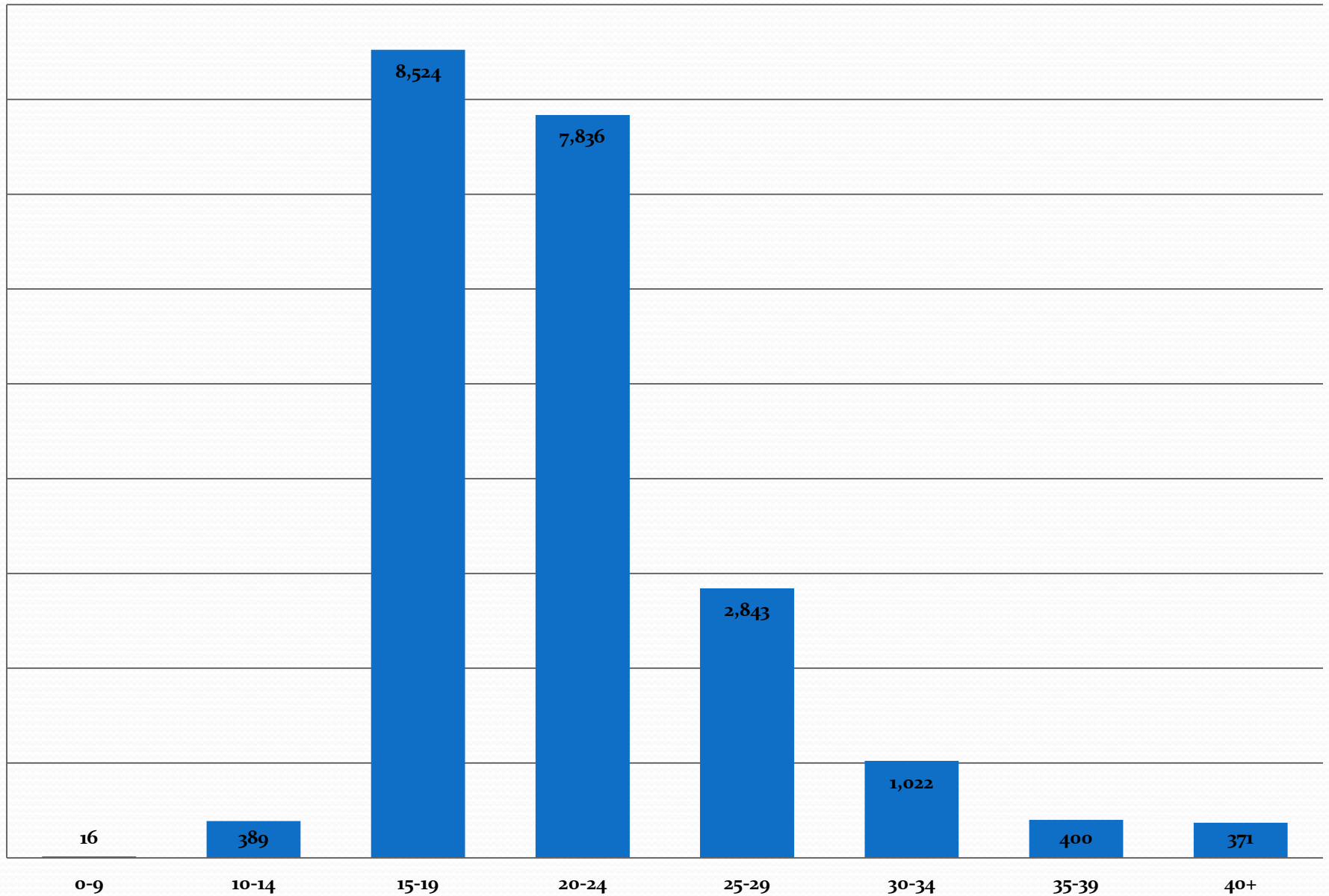


■ Chlamydia Rate (U.S.)	278.3	289.4	301.7	316.5	329.4	347.8	370.2	401.3	409.2	426
◆ Chlamydia Rate (MS)	414.0	410.9	423.2	649.8	727.7	652.8	743.0	723.5	799.2	721.9
Chlamydia Cases (MS)	11,777	11,799	12,193	18,863	21,258	19,001	21,686	21,261	23,592	21,422

Chlamydia Cases Ranked by Rates, 2010

Rank*	State	Cases	Rate per 100,000 Population
1	Alaska	6,019	861.7
2	Mississippi	21,417	725.5
3	Louisiana	29,151	648.9
4	New Mexico	11,706	582.5
5	South Carolina	26,525	581.5
6	Alabama	27,041	574.3
7	Arkansas	15,424	533.8
8	New York	99,920	511.3
9	Delaware	4,464	504.3
10	Michigan	49,478	496.3

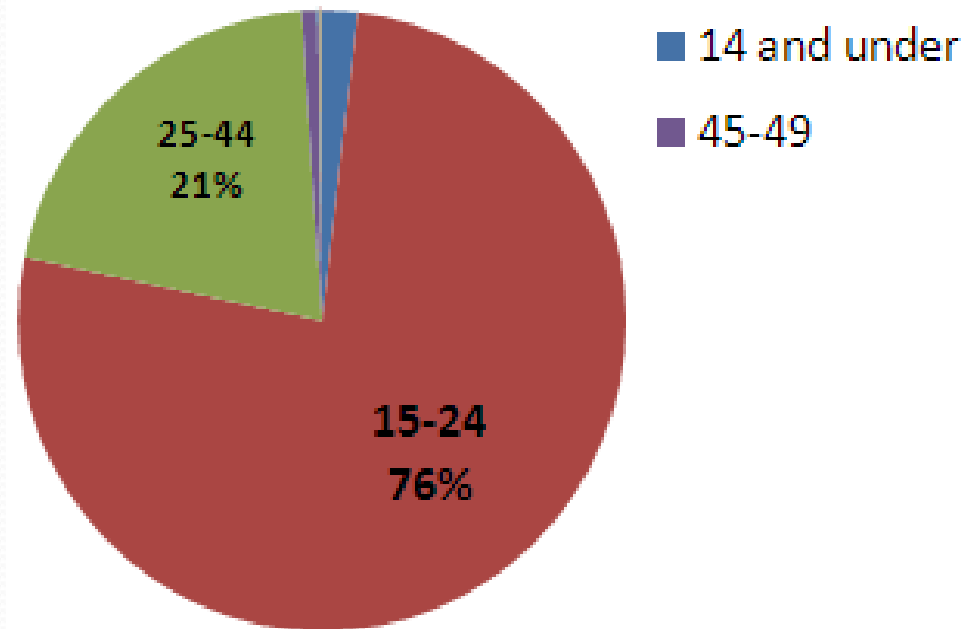
Chlamydia Cases Reported in Mississippi by Age Group, 2010



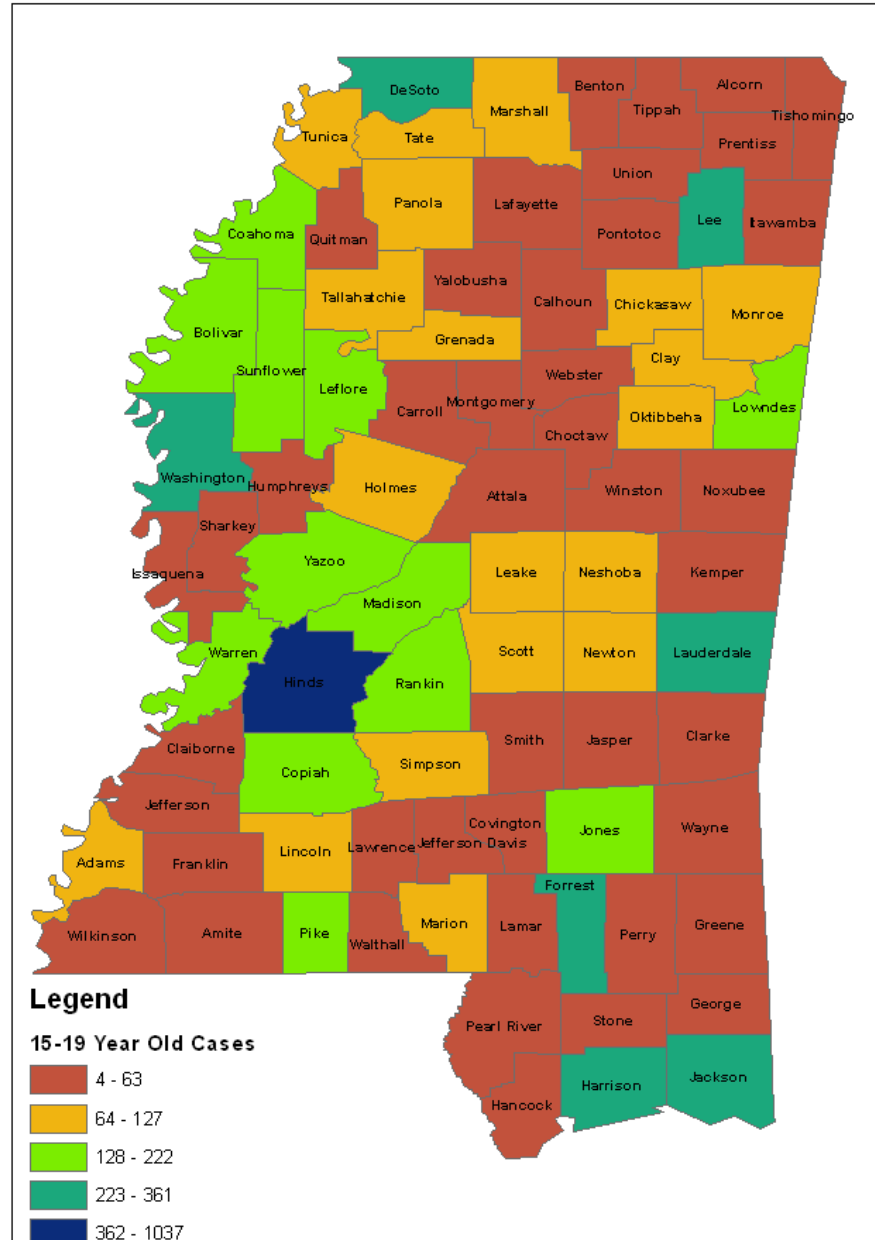
Chlamydia by Age, 2010

- In 2010, 21,422 cases of chlamydia reported:
 - 74% of cases were female
 - 66% were African American
- **Although 15-24 year olds make up just 15% of population, they represent 76% of chlamydia cases**

Chlamydia by Age Group, 2010



Mississippi Counties with Chlamydia Cases Among 15-19 Year Olds, 2010

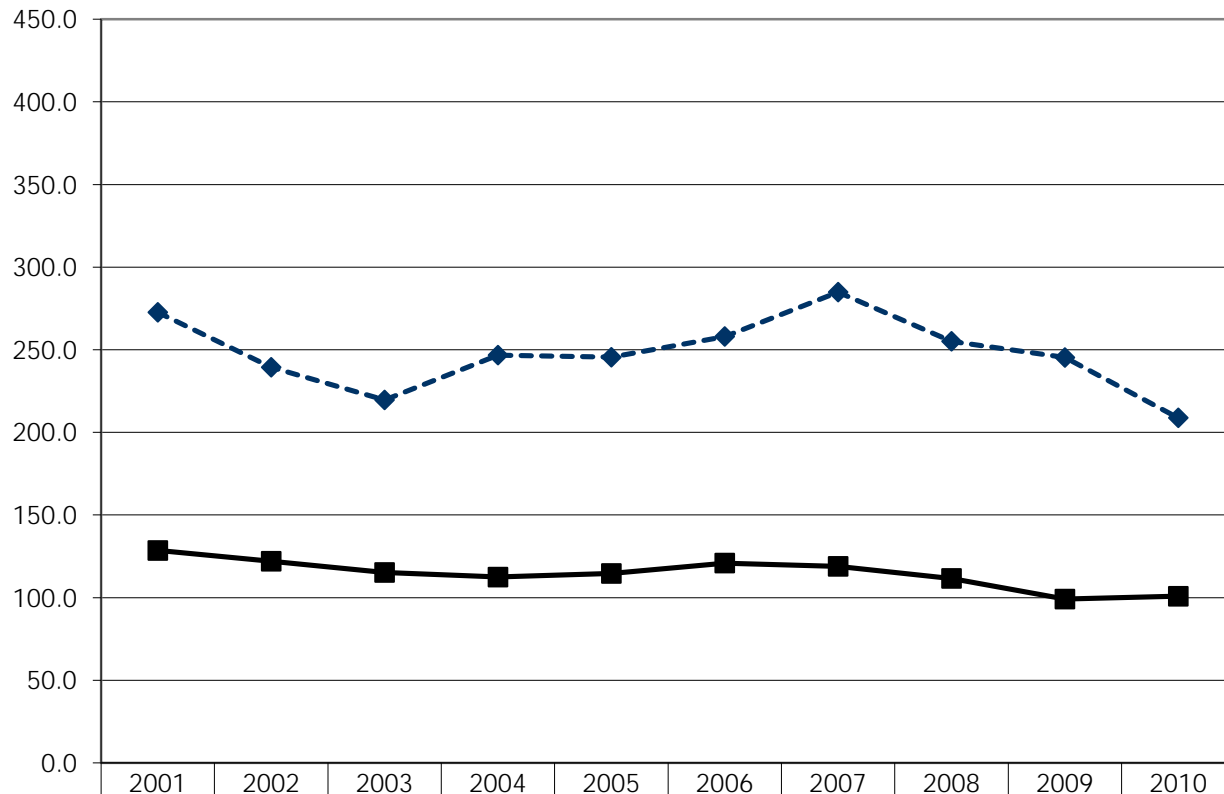


Gonorrhea (Class 2)

- Caused by the bacterium *Neisseria gonorrhoeae*.
- Transmitted during vaginal, anal, or oral sex.
- Can be passed from an infected mother to the newborn during delivery.
- Incubation period = 1-14 days
- Easily detected by **urine test or swab**
- **Treatment:**
 - Ceftriaxone 250 mg IM, or
 - Cefixime 400 mg (will not treat pharyngeal), or
 - Azithromycin 2 gm

Gonorrhea Rates by Year, United States and Mississippi, 2001-2010

Incidence per 100,000 population

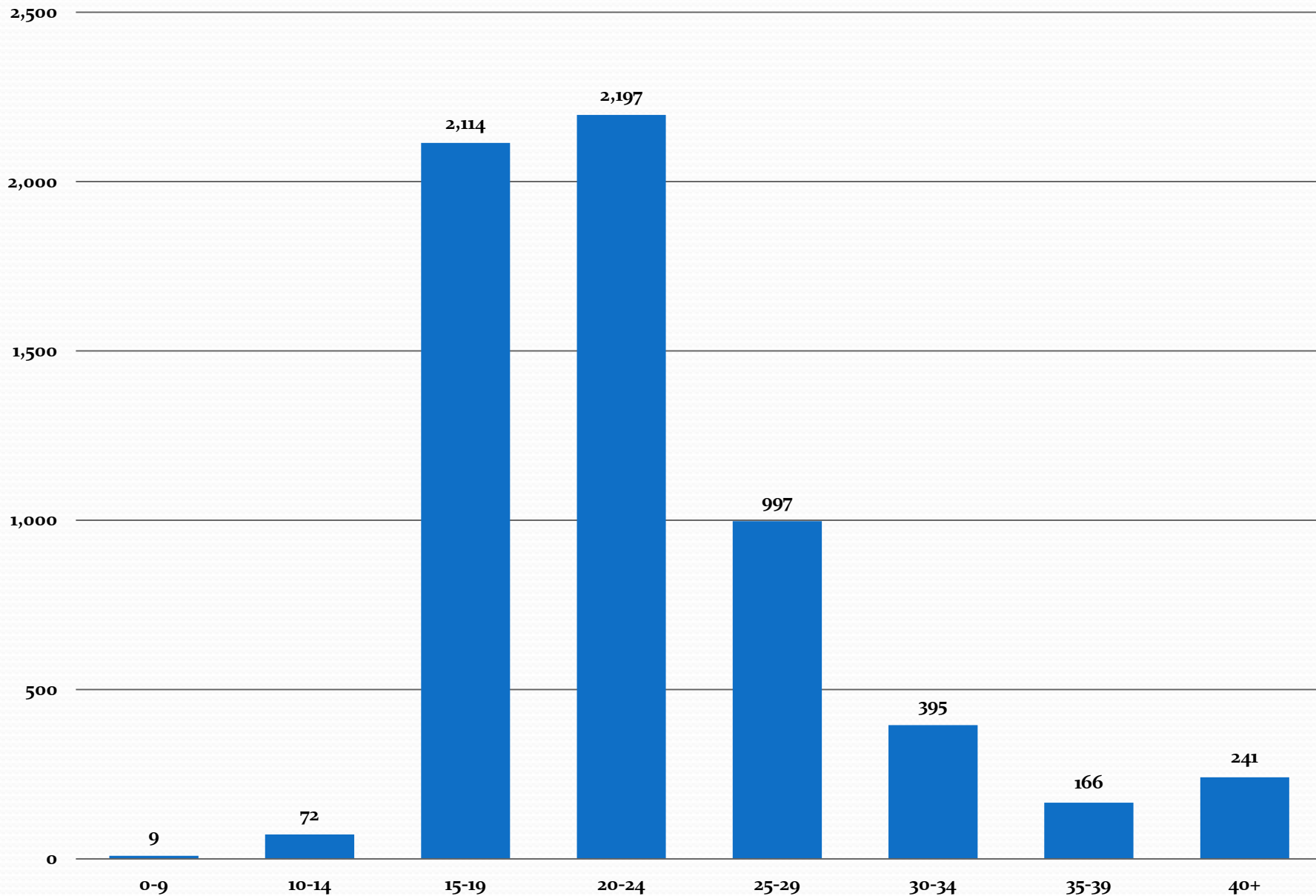


■	Gonorrhea Rate (U.S.)	128.5	122.0	115.2	112.4	114.6	120.9	118.9	111.6	99.1	100.8
◆	Gonorrhea Rate (MS)	272.7	239.4	219.6	246.7	245.5	258.0	284.9	255.1	245.3	208.8
	Gonorrhea Cases (MS)	7,756	6,875	6,328	7,163	7,170	7,510	8,315	7,497	7,241	6196

Gonorrhea Cases Ranked by Rates, 2010

Rank*	State	Cases	Rate per 100,000 Population
1	Mississippi	6,195	209.9
2	Louisiana	8,912	198.4
3	Alaska	1,273	182.3
4	South Carolina	7,970	174.7
5	Alabama	7,933	168.5
6	Arkansas	4,769	165.0
7	Georgia	15,852	161.3
8	North Carolina	14,111	150.4
9	Ohio	16,496	142.9
10	Michigan	13,627	136.7

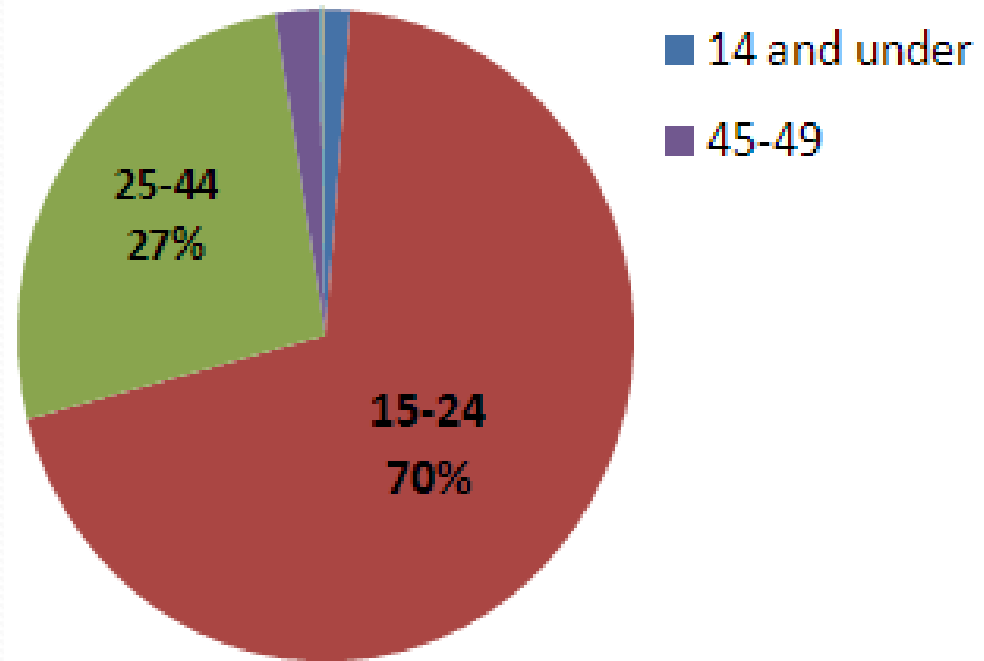
Gonorrhea Cases Reported in Mississippi by Age Group, 2010



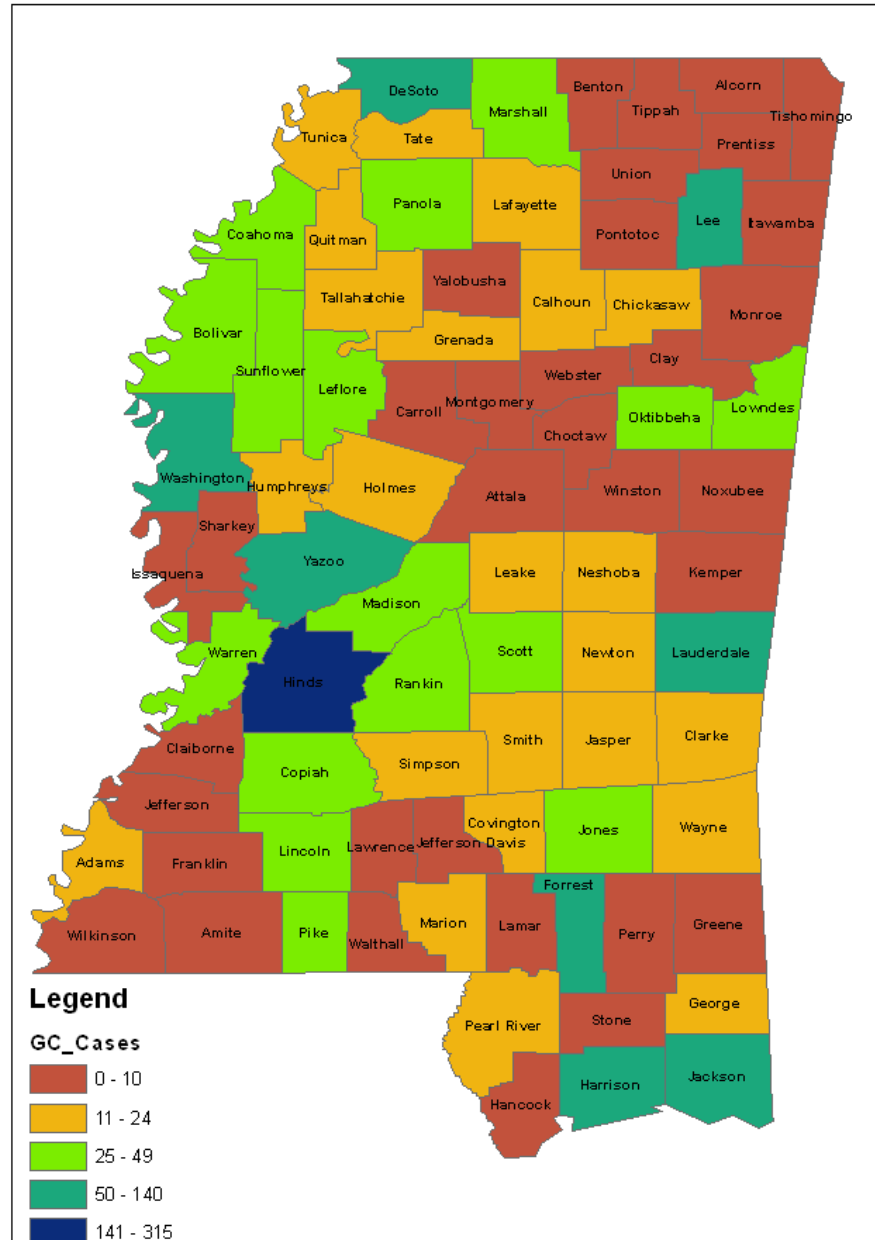
Gonorrhea in 2010

- In 2010, 6,196 cases of gonorrhea reported in Mississippi:
 - 58% of cases in 2010 were female.
 - 75% were African-American.
- **Although 15-24 year olds make up just 15% of Mississippi's population, they represent 70% of gonorrhea cases.**

Gonorrhea by Age Group, 2010

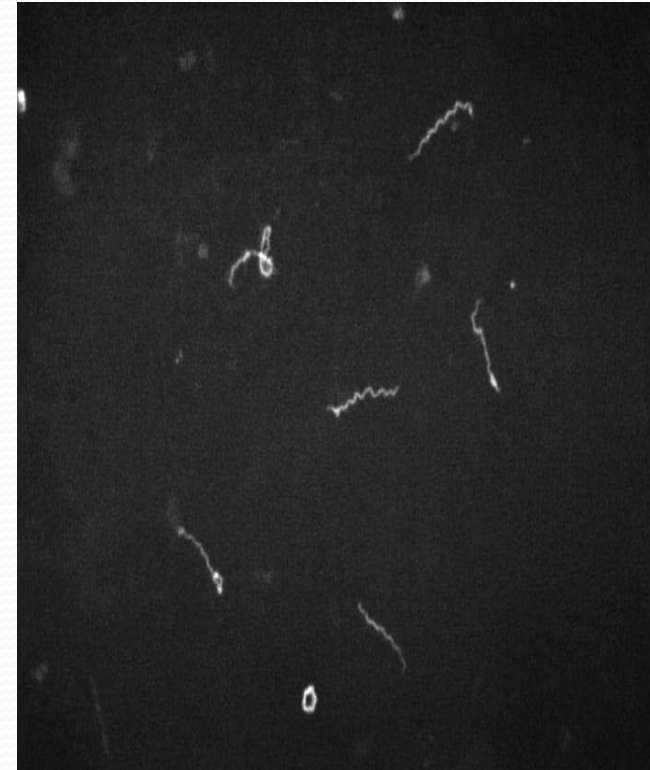


Mississippi Counties with Gonorrhea Cases Among 15-19 Year Olds, 2010



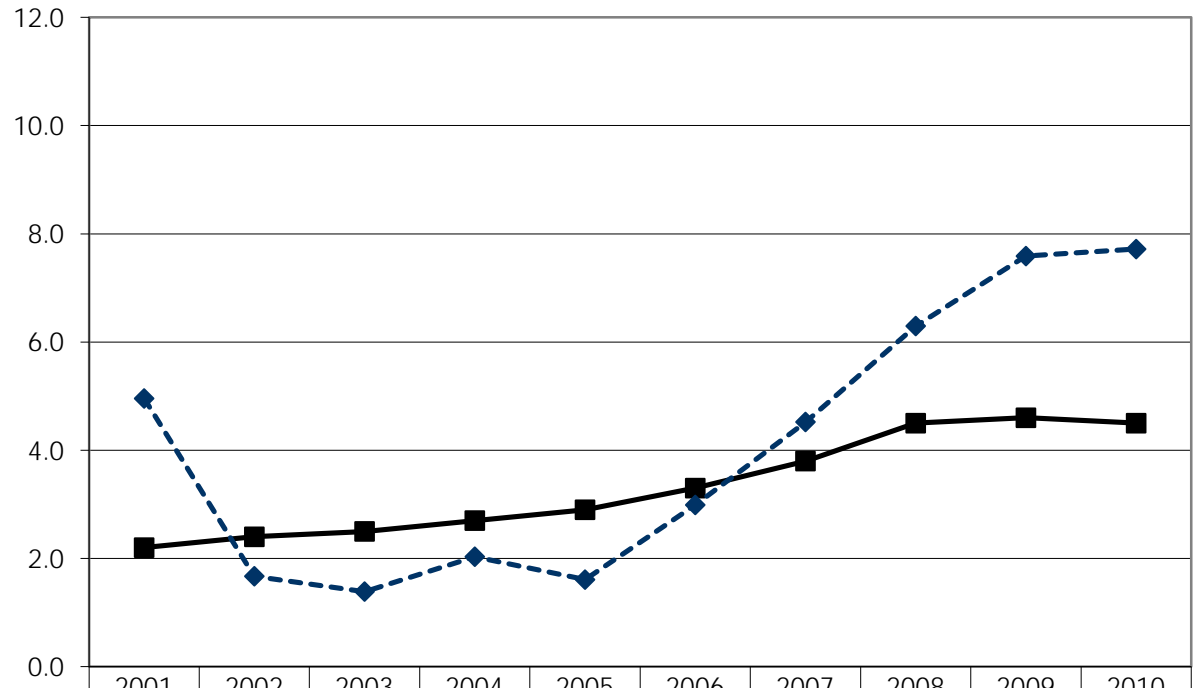
Syphilis (Class 1)

- Caused by the bacterium *Treponema pallidum*
- Transmitted during vaginal, anal, or oral sex **OR** through contact with an existing sore or lesion.
- Can be passed from an infected mother to the baby in utero.
- Incubation period: 10-90 days for first signs to appear (avg. 21 days)
- Detected by **blood test**
- **Treatment:**
 - Benzathine Penicillin G 2.4 mu IM (weekly x 3 if > 1 yr or unknown duration)



Primary and Secondary Syphilis Rates by Year, United States and Mississippi, 2001-2010

Incidence per 100,000 population

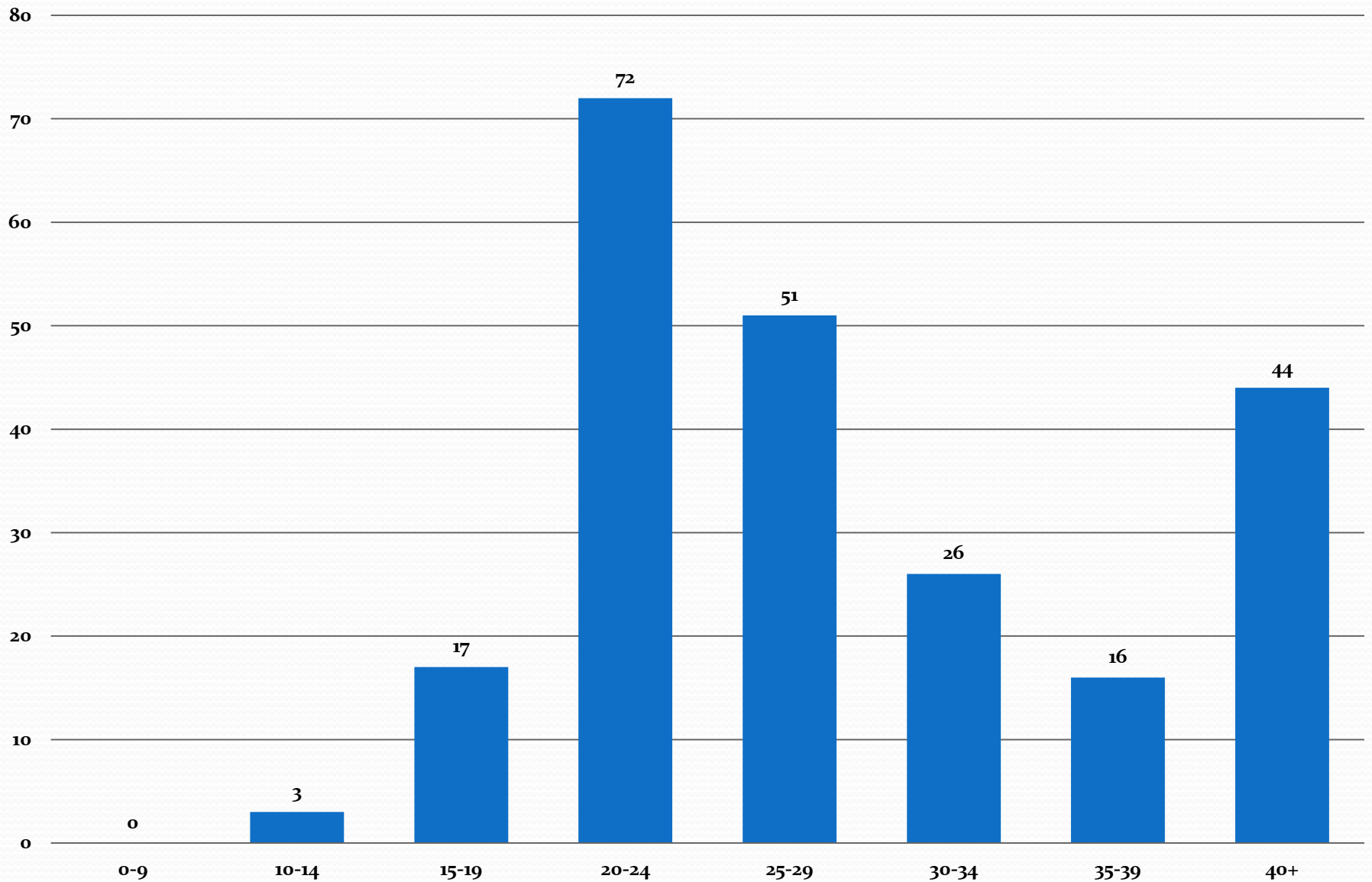


—■— P&S Syphilis Rate (U.S.)	2.2	2.4	2.5	2.7	2.9	3.3	3.8	4.5	4.6	4.5
-◆- P&S Syphilis Rate (MS)	5.0	1.7	1.4	2.0	1.6	3.0	4.5	6.3	7.6	7.7
P&S Syphilis Cases (MS)	141	48	40	59	47	87	132	185	224	229

P&S Syphilis Cases Ranked by Rates, 2010

Rank*	State	Cases	Rate per 100,000 Population
1	Louisiana	546	12.2
2	Georgia	795	8.1
3	Mississippi	228	7.7
4	Arkansas	205	7.1
5	Illinois	908	7.0
6	Florida	1,184	6.4
7	Maryland	328	5.8
8	New York	1,098	5.6
9	California	2,065	5.6
10	Alabama	260	5.5

Primary and Secondary Syphilis Cases Reported in Mississippi by Age Group, 2010



Congenital Syphilis

- A mother can pass syphilis to her unborn child.
- In 2009, MS ranked **# 6** for case rate of congenital syphilis
 - 8 cases seen (case rate of 17.4/100,000 births)



HIV Infection (Class 1)

- Human Immunodeficiency Virus (HIV) infection may be transmitted three ways:
 - Vaginal, anal or oral sex
 - Direct contact with infected blood (i.e. shared injecting drug needles)
 - From infected mother to unborn child
- STDs that cause genital sores, breaks in the skin, or inflammation may make it easier for HIV to enter the body through vaginal, anal, or oral sex.

HIV infection, by area of residence, 2009-United States (includes areas with confidential named based reporting since 2006)

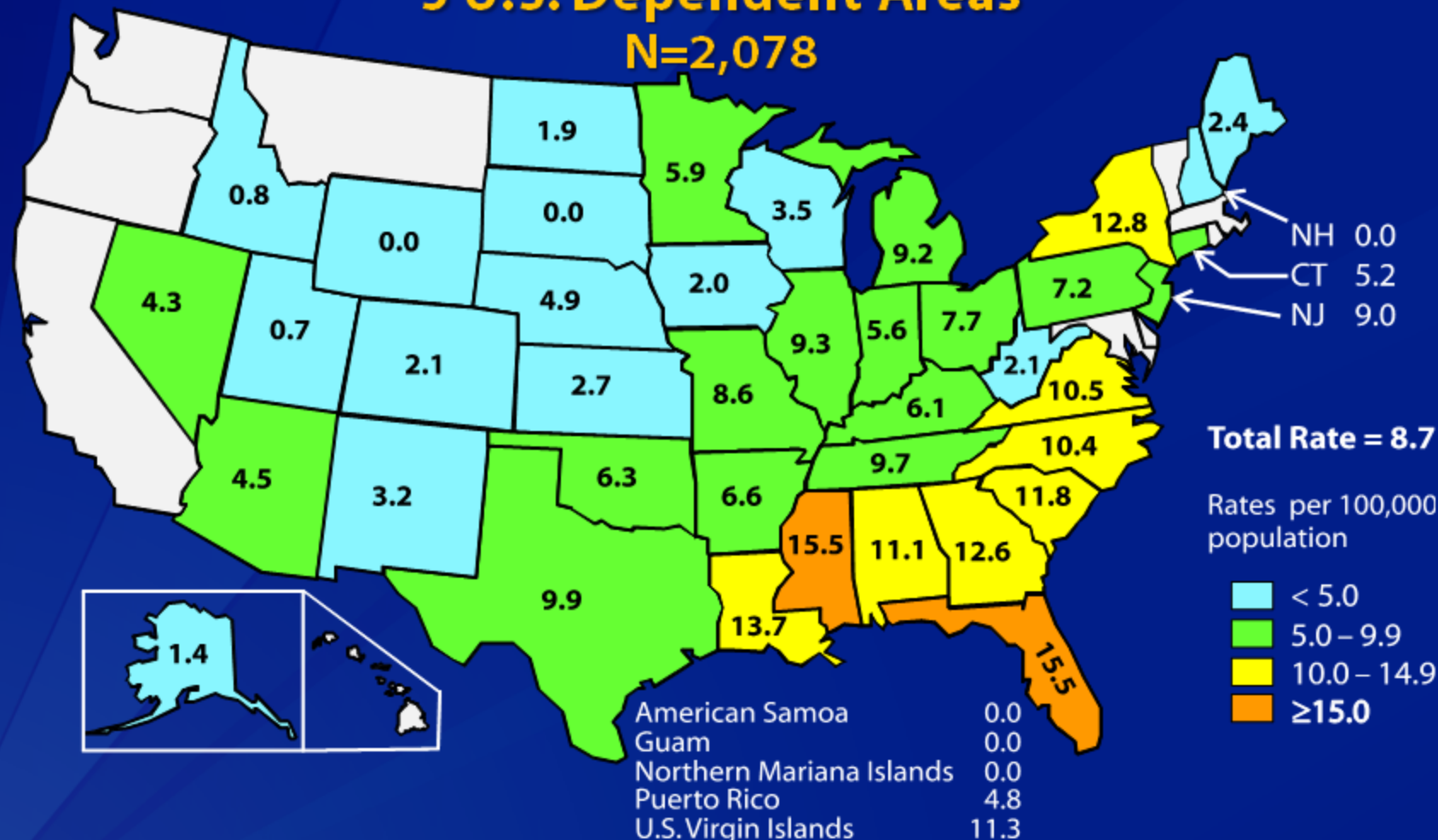
Area of residence	No.	Estimated No.	Rate	Rank
Florida	5,775	6,120	33.0	1
Georgia	2,073	3,229	32.9	2
New York	4,649	5,765	29.5	3
Louisiana	1,247	1,295	28.8	4
New Jersey	1,252	1,986	22.8	5
Mississippi	559	630	21.3	6
South Carolina	789	906	19.9	7
North Carolina	1,719	1,844	19.7	8
Texas	4,291	4,563	18.4	9
Tennessee	999	1,080	17.2	10 (t)
Virginia	997	1,359	17.2	10 (t)

Source:

Centers for Disease Control and Prevention. *HIV Surveillance Report, 2009*; vol. 21. Published Feb 2011.
 Accessed Apr 2011.

Rates of Diagnoses of HIV Infection among Adolescents Aged 13–19 Years, 2009—40 States and 5 U.S. Dependent Areas

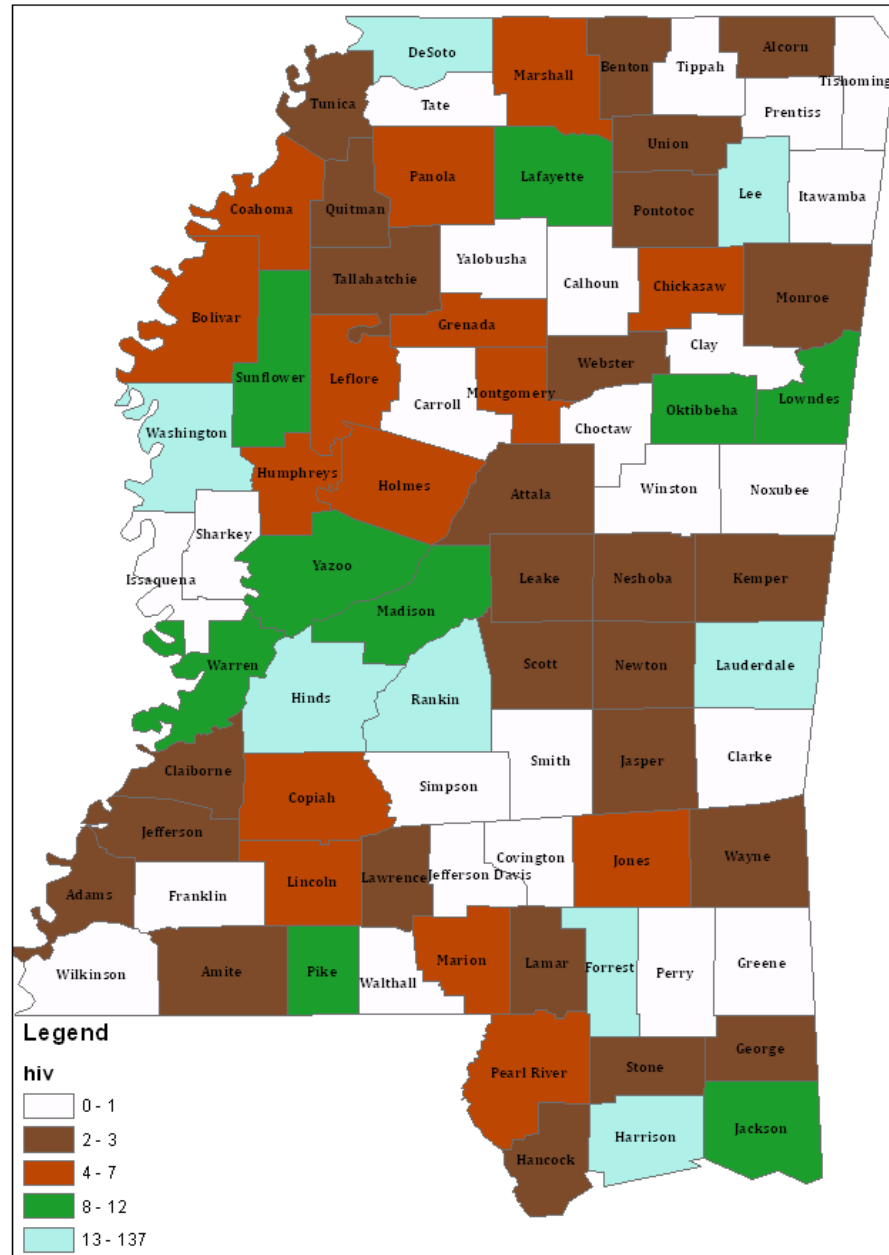
N=2,078



Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting. Rates are per 100,000 population.



HIV Cases Reported in Mississippi, 2010



Policy Development



- What we **know** sets the foundation for what we **do**

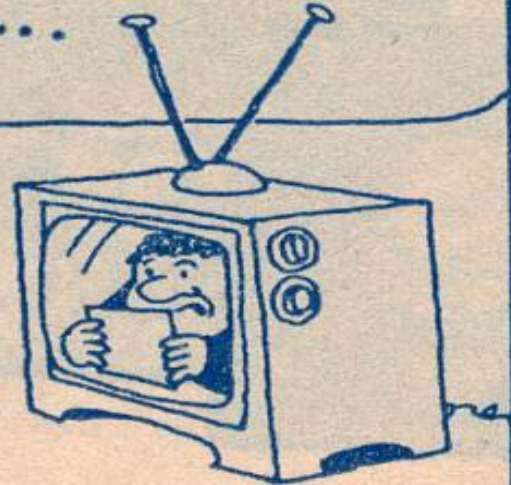
Assurance



- *Assure* free and confidential STD/HIV **testing** at all county health department clinics.
- *Assure* **treatment** for STDs
- *Assure* **access** to health care for HIV Infection

ZIGGY

I DON'T KNOW ABOUT YOU, BUT
I'M NOT SO SURE I LIKE BEING
WELL-INFORMED, ...



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4-b

Tom Wilson

Drawing the Line (Policy Development)

Engage decision makers, consider factual evidence, and negotiate

“Righteous”



“Deviants”

RESOURCES

- **District and County Health Departments**

Addresses and phone numbers are located on the MSDH Website at www.HealthyMS.com (click on Information Desk)

- **District, County, and State STD/HIV** statistics are located on the website at www.HealthyMS.com (Services and Programs then STD/HIV/AIDS)

- **Central Office**

STD/HIV Program—601-576-7723

Epidemiology—601-576-7725

- **CDC** at www.cdc.gov