

STD and HIV/AIDS

Sexually Transmitted Disease (STD): The National Challenge*

Sexually transmitted diseases (STDs) refer to the more than 25 infectious organisms transmitted primarily through sexual activity. They remain a significant public health problem. STDs cause many harmful, often irreversible, and costly clinical complications, such as reproductive health problems, fetal and perinatal health problems, and cancer. In addition, studies of the worldwide HIV/AIDS pandemic link other STDs to a causal chain of events in the sexual transmission of HIV infection.

STDs are common, costly, and preventable. Worldwide, an estimated 333 million cases of curable STDs occur annu-

ally. STDs are the most common reportable diseases in the United States. In 1995, they accounted for 87 percent of the top 10 infections most frequently reported to the CDC. Of the top 10 infections, 5 were STDs (chlamydia, gonorrhea, AIDS, syphilis, and hepatitis B). Each year an estimated 15 million new STD infections occur in the United States, and nearly 4 million teenagers are infected with an STD. The direct and indirect costs of the major STDs and their complications, including sexually transmitted HIV infection, are conservatively estimated at \$17 billion annually.

Gender disparities: Women are at higher risk than men for most STDs. Women suffer more frequent and more serious STD complications than men do. Among the most serious STD complications are pelvic inflammatory disease (PID), ectopic pregnancy, infertility, and chronic pelvic pain. Often, STDs are transmitted more easily from a man to a woman.

Age disparities: In 1997, ages 15 to 19 years had the highest reported rates of both chlamydia and gonorrhea among women. Ages 20 to 24 years had the highest reported rates of both chlamydia and gonorrhea among men. The herpes infection rate of white youth aged 12 to 19 years increased nearly fivefold from the period 1976–80 to the period 1988–94. Indeed, since not all teenagers are sexually active, the actual rate of STD

continued on page 7

Human Immune Virus (HIV): The National Challenge*

In 1981, a new infectious disease, AIDS, or acquired immunodeficiency syndrome, was identified in the United States. Several years later, the causative agent of AIDS—human immunodeficiency virus (HIV)—was discovered. Currently, HIV/AIDS has been reported in virtually every racial and ethnic population, every age group, and every socioeconomic group in every State and most large cities in the United States. HIV/AIDS is a significant cause of illness, disability, and death, despite declines in 1996 and 1997.

Current surveillance provides population-based HIV/AIDS data for tracking trends in the epidemic, targeting and allocating resources for prevention and treatment services, and planning and conducting program evaluation activities. Since the early 1980s, surveillance studies have identified four distinct populations and issues that have affected the epidemic in these populations: 1) Men who have sex with men, 2) Injection drug users, 3) Heterosexual persons, and 4) perinatal transmission among infants.

Trends: HIV infection rates appear to have stabilized in the U.S. since the early 1990s at about 40,000 new infections per year. The rate of increase is slower than growth rates experienced in the mid-1980s. However, the number of persons reported living with AIDS increased in

continued on page 7

This Issue:

STD: The National Challenge	1
HIV: The National Challenge	1
Jacksonville STD and HIV/AIDS Health Report Card	2
HIV Trends in Jacksonville	3
Accessing HIV/AIDS Services in Jacksonville	4
Aggressive Surveillance and Follow Up	6

* From Healthy People 2010, U.S. Department of Health and Human Services .

Jacksonville STD and HIV/AIDS Health Report Card

Table 1

Obj. #	Objective	Year	U.S.	FL	Duval	2010 Target
25-1	Reduce the rate of adolescents and young adults with Chlamydia trachomatis infections (new cases per 100,000 persons aged 15-24 years old)	2000	1387.6 ¹	1248.7 ⁴	2292.7 ⁴	NA [*]
		2001	–	1373.6 ⁴	2314.1 ⁴	
25-2	Reduce gonorrhea (new cases per 100,000 population)	2000	131.6 ²	141.7 ⁴	465.0 ⁴	19.0 ²
		2001	–	131.2 ⁴	342.6 ⁴	
25-2a	Females	2000	–	132.0 ⁴	396.7 ⁴	–
		2001	–	123.5 ⁴	292.3 ⁴	
25-2b	Males	2000	–	151.9 ⁴	537.5 ⁴	–
		2001	–	139.2 ⁴	396.1 ⁴	
25-3	Eliminate sustained domestic transmission of primary and secondary syphilis (cases per 100,000 population)	2000	2.2 ²	2.7 ³	3.0 ³	0.2 ²
		2001	–	3.0 ³	4.8 ³	
25-9	Reduce congenital syphilis (new cases per 100,000 live births)	2000	13.4 ²	19.3 ³	17.6 ^{**}	1 ²
		2001	–	23.1 ³	0 ³	
13-1	Reduce AIDS among adolescents and adults (new cases per 100,000 persons aged 13 years and older)	2000	18.0 ⁵	–	–	1 ²
		2001	–	39.3 ⁶	37.1 ^{6***}	
13-2	Reduce the number of new AIDS cases among adolescents and adult men who have sex with men (among males aged 13 years and older)	2000	1356 ⁵	–	–	13385 ²
		2001	–	1481 ⁶	57 ⁶	64 ^{7****}
13-3	Reduce the number of new AIDS cases among females and males who inject drugs (among people aged 13 years and older)	2000	8531 ⁵	–	–	9075 ²
		2001	–	487 ⁶	31 ⁶	20 ^{7****}
13-4	Reduce the number of new AIDS cases among adolescents and adult men who have sex with men and inject drugs (among males aged 13 years and older)	2000	1548 ⁵	–	–	1592 ²
		2001	–	108 ⁶	9 ⁶	10 ^{7****}
13-5	Reduce the number of new cases of HIV infection (developmental)	2000	21704 ⁵	5207 ⁶	291 ⁶	NA
		2001	–	5772 ⁶	358 ⁶	
13-14	Reduce deaths from HIV infection (cases per 100,000 population)	2000	3.1 ⁵	11.3 ⁶	11.9 ⁶	0.7 ²
		2001	–	10.7 ⁶	–	

¹Source: Center for Disease Control and Prevention (www.cdc.gov/nchstp/dstd/Stats_Trends/Stats_and_Trends.htm)

²Source: Healthy People 2010 (www.cdc.gov/std/stats/TOC2000.htm)

³Source: Florida Department of Health – Division of Diseases Control – Bureau of Sexually Transmitted Diseases Prevention

⁴Source: Florida Department of Health (www.doh.state.fl.us/disease_ctrl/std/trends/florida.html)

⁵Source: Center for Disease Control and Prevention (<http://www.cdc.gov/hiv/stats/>)

⁶Source: Florida Department of Health (<http://www9.myflorida.com/aids/trends/trends.html>)

⁷Source: Duval County Health Department HIV/AIDS Reporting System (HARS)

*The target is not set at this objective level by Healthy People 2010. It is set for clinic subgroups.

**The number of congenital syphilis cases for this cell was less than 6. The data are considered statistically unreliable.

***The denominator used represents the population 15 yrs and older, therefore the Duval rate is slightly higher.

****This represents the Duval Target. It was calculated using the National Target methodology, a 25% improvement from 1998.

HIV/AIDS Trends in Jacksonville by Paula P. Burns, MSH, Area 4 AIDS Program Office

Nationally the state of Florida ranks third for adult and adolescent cases and second in pediatric AIDS cases among states in the number of reported AIDS cases with a total 85,503 of AIDS cases as of December 2001 (Florida Department of Health, Bureau of HIV/AIDS). The AIDS epidemic in Florida is composed of six somewhat distinct epicenters from which HIV has spread in the past two decades. Duval County is one of these six epicenters. Jacksonville Florida is the Eligible Metropolitan Area in Duval County for Ryan White Title I. Through December 2001, 4,285 AIDS cases have been reported in Duval County, 67.4% of these AIDS cases are within ten zip codes located in the core city and surrounding areas of Jacksonville, Florida. Confidential HIV results have been reported in Florida since July of 1997. Since then, 1,134 HIV cases have been reported, 66% of these cases have been from these same 10 zip codes.

Duval County HIV and AIDS Cases by Zip Code: An analysis of HIV and AIDS cases by zip code in Duval County identifies that the majority of both HIV and AIDS cases in the area are originating from specific zip codes in Duval County. Most of these zip codes are in the core, inner city area that have a large concentration of African Americans and the highest poverty rate in the area. These zip codes are 32202, 32204, 32205, 32206, 32207, 32208, 32209, 32210, 32211, and 32218 as can be seen in Figure 1.

The distribution of HIV cases in the ten highly affected zip codes are predominately African American. The gender breakdown for these cases is approximately fifty-fifty for males and females.

HIV/AIDS Data: Since July 1997, positive results from confidential HIV testing have been reported to the Florida Department of Health.

Since July 1997 through December 2001 a total of 1,134 HIV cases have been reported in Duval County. Other than the first full year since confidential HIV reporting became mandatory in Florida, there has been an increase of twenty percent or higher in the reported HIV cases in Duval County each subsequent year.

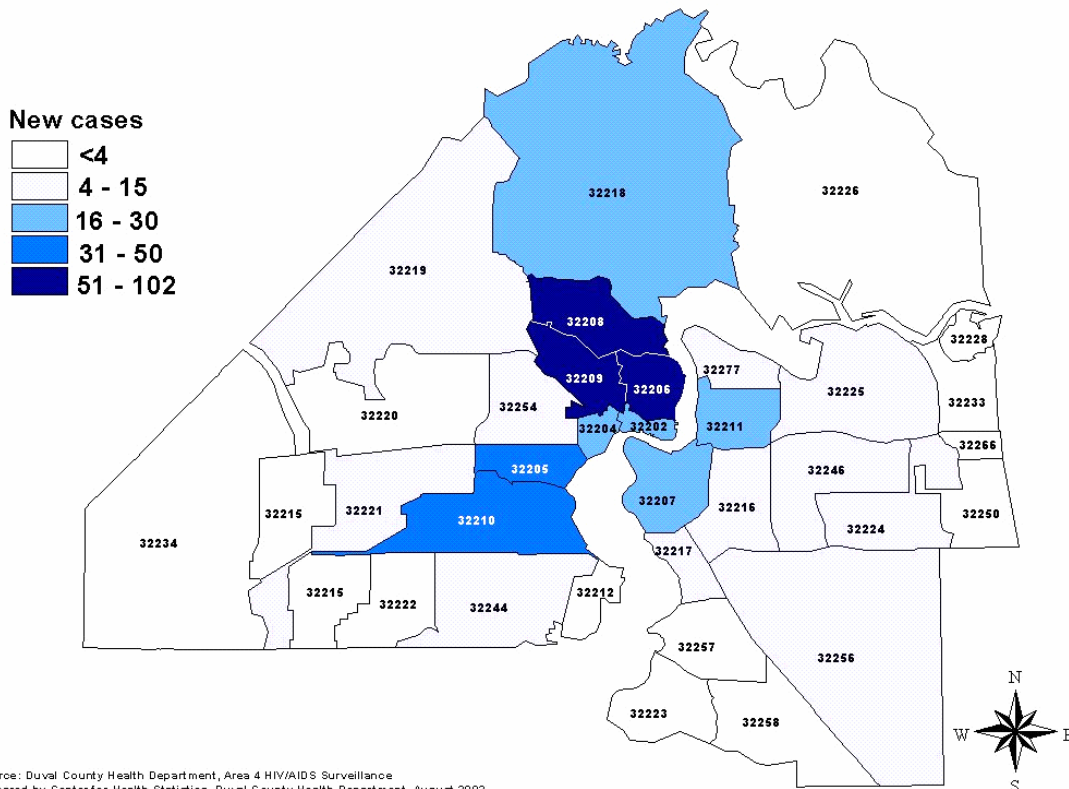
Through December 2001, a total of 4,281 AIDS cases have been reported in Duval County. Of these, there are 2,187 presumed living. Using the presumed living AIDS cases data provides a minimum number of known living AIDS cases and assists with planning for care services.

Current HIV/AIDS statistics provide a more current view of who is becoming infected and the way they are getting infected. In Duval County reported HIV cases through April 2002, by race/

continued on page 5

Figure 1

Reported HIV/AIDS Cases in Duval County, 2001



Source: Duval County Health Department, Area 4 HIV/AIDS Surveillance
Prepared by Center for Health Statistics, Duval County Health Department, August 2002

Accessing HIV/AIDS Services in Jacksonville by David Andress, HIV/STD Program Administrator

HIV and AIDS have been a national health problem since 1981. During the past 20 years, the number of people living with HIV and AIDS in the Florida has risen to 70,977 and it is estimated that 3,362 people in the Jacksonville area are living with this disease and that 2,893 are receiving publicly funded health care services. Because HIV disease is expensive to care for and many people cannot work after being diagnosed with AIDS, the federal and state governments have created a system of services to care for people's medical, housing, and social service needs. Since 1990, Congress has funded medical services and other essential health services through the Ryan White CARE Act. Working through the Department of

Health & Human Services, Ryan White CARE Act funding is administered by the Health Resources & Services Administration (HRSA). Funds are sent to states and local governments to deliver services to people living with HIV/AIDS.

HRSA has set a national goal of "100% Access, 0% Disparity" for Americans living with HIV disease. This goal means that every person who is infected with HIV should have access to medical care, medications, and other services needed to live with HIV disease. In Jacksonville, as in the rest of the nation, African Americans are disproportionately becoming infected with HIV compared to their share of the population.

Nationally, minorities and women have less access to medical care than whites. In Jacksonville, the HIV planning bodies (Ryan White Title I Planning Council and the First Coast CARES Consortium for Title II) have taken the national goal and developed specific services to ensure that every person newly diagnosed with HIV has access to care regardless of their race or sex.

This involves finding people at risk of HIV infection, getting them tested, and, for those who are infected with HIV, getting them into medical services as quickly as possible. The 5 groups in Jacksonville working on this are Touching Lives Health Care Ministry, the Duval County Health Department Boulevard Comprehensive Care Center, the Jacksonville Community Health Center, Shands Jacksonville Emergency Room and Infectious Disease Department, and the Department of Health and Duval County Health Department Jail LINC Demonstration Project.

Each of these programs has the task of finding people with HIV and linking them to care. In most of these programs, several approaches are used:

1. Screening for HIV and other sexually transmitted diseases
2. Counseling newly infected persons about living with HIV disease
3. Linking people with HIV who aren't yet connected to medical services to a doctor
4. Following up to make sure that these newly infected people continue to access service and helping them to overcome obstacles that prevent their accessing services

These outreach programs link newly infected or diagnosed persons with HIV to the Duval County Health Department, The Rainbow Center for Women, Infants & Children at the University of Florida Shands Jacksonville, the Jacksonville

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Figure 2

Chlamydia Duval County, 2001

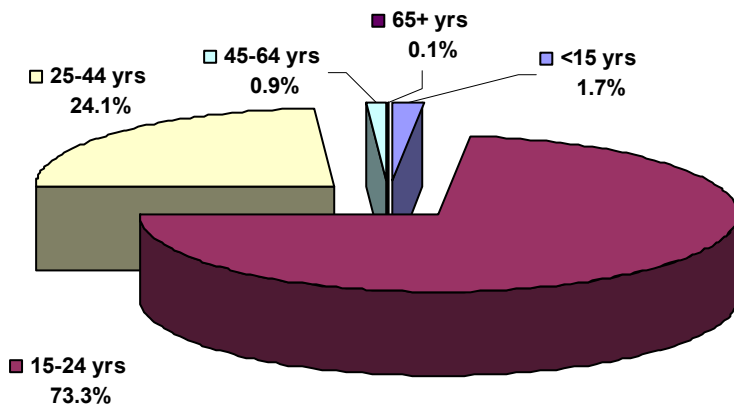
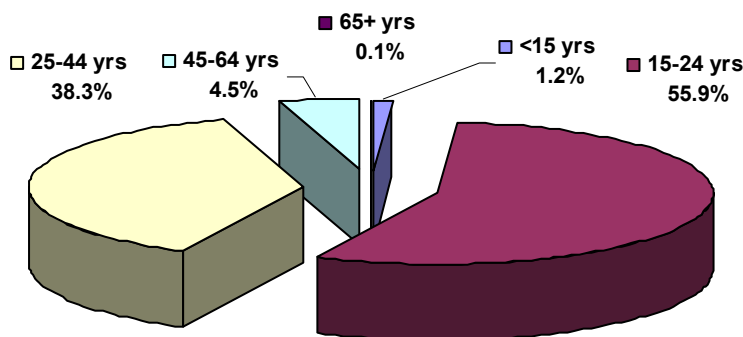


Figure 3

Gonorrhea Duval County, 2001



HIV/AIDS Trends in Jacksonville (continued from page 3)

ethnicity show that 76% are African Americans, 22% are white and 1% Hispanic. African Americans account for 63% of the presumed living AIDS cases. African American women account for 25% of the total presumed AIDS cases and 82% of the female presumed living AIDS cases in Duval County.

For males, as seen in Figure 4, of the reported 372 HIV/AIDS cases, the leading mode of transmission was males having sex with males (MSM) at 30.3%, followed by no identified risk reported (Other/Unk.) at 29.5%, then heterosexual contact at 21.4%, IV drug users (IDU) at 13.7%, and combined MSM/IDU at 5.1%. Figure 5 shows the mode of exposure of the 212 HIV/AIDS cases reported in 2001 in the female population of Duval County. For these, the leading mode of transmission was heterosexual contact at 55.7%, followed by no identified risk reported at 32.5%, and IV drug use at 11.8%.

HIV Prevalence Estimate: Duval County is part of a defined five county area by the Florida Department of Health. This area is called Area 4 and

includes Baker, Clay, Duval, Nassau, and St. Johns Counties. Duval County accounts for 91% of the total reported HIV cases and 89% of the AIDS cases in Area 4.

In March 2002 the Florida Department of Health revised the HIV prevalence estimates for Florida based on findings from the Centers for Disease Control and

Prevention. This report approximates that the *Estimated HIV Prevalence for Area 4* is 5,502. Knowing that Duval County accounts for 91% and 89% of the HIV and AIDS cases in Area 4, respectively, an estimated number for HIV prevalence in Duval County in 2002 could be 4,952 Persons Living With HIV/AIDS.

Figure 4

HIV/AIDS new cases among adult males by Mode of Exposure Duval County, 2001

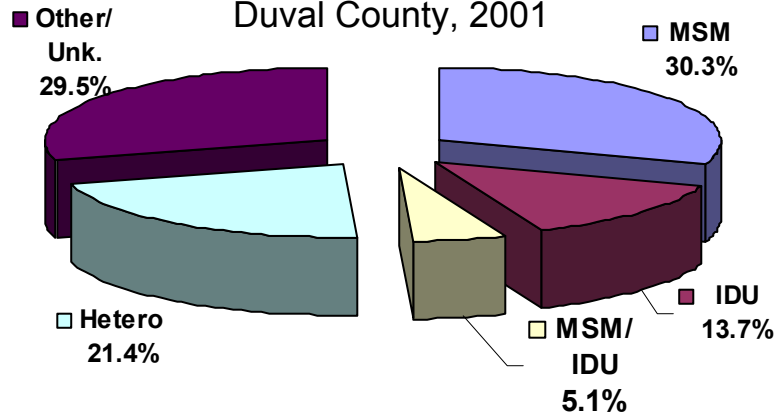
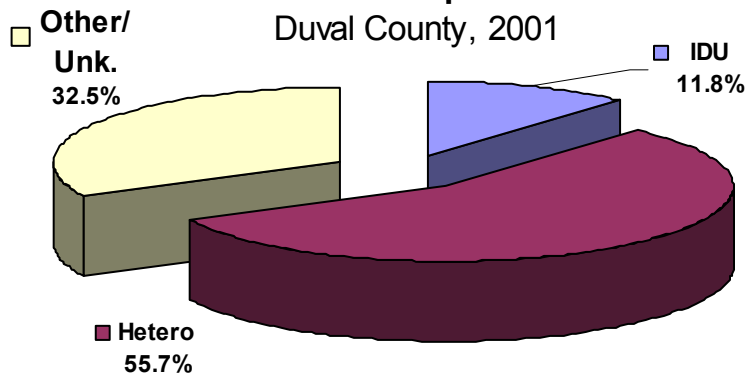


Figure 5

HIV/AIDS new cases among adult females by Mode of Exposure Duval County, 2001



Accessing Services

(continued from page 4)

Community Health Center, the AHF Magic Johnson Clinic in Riverside, and other medical providers.

In the last year of contract services these organizations served at least 734 people needing access to medical and HIV support services in the community. The programs are working well to make sure that there is "100% Access, 0% Disparity" in services to people with HIV in Jacksonville. These programs create an entry point into the comprehensive service network developed to meet the needs of those living with HIV in our city.

Aggressive Surveillance and Follow Up by Chip Sanders, DCHD STD Program

During the last full report year, 2001, Duval County reported 2906 cases of Gonorrhea and 3761 cases of Chlamydia. Sixty-four percent of combined cases were from the 15-24 year old age group. Seventy-six percent of total combined cases were African American. This represents a 6% decrease in the combined case rate for these diseases in Duval County when compared to the year 2000, but the sheer number of cases remains disturbingly high.

It is difficult to compare city case rates, because of differing socio-economic factors and differing STD programs. In some instances, high case numbers for Gonorrhea and Chlamydia are not necessarily a bad thing. The first step in getting control of the STD epidemic is identifying people with the disease. The Duval County Health Department has a number of aggressive programs to increase STD reporting:

1. The increased use of the Health Department's mobile health van to provide patient testing in the community has resulted in discovering more cases. For example, during the third quarter 2001, 41 females from a local college were screened at one particular outreach event for Chlamydia, and 8 were found to be positive (20%). We anticipate testing 500 patients through outreach in 2002. If we are able to find only a 10% yield of positive cases, that would mean an additional 50 Gonorrhea and Chlamydia cases discovered annually from outreach alone. Successful intervention means discovering more of the cases, but it makes us look like we have a bigger problem than communities that are not aggressive.
2. Duval County has a unique program that screens jail inmates for STD's and HIV and links those inmates to services in the community. The program is called Jail LINC. Typically, about 700 STD/HIV cases will be

discovered by screening approximately 12000 inmates per year. By providing this service, we are discovering more cases that will be identified and reported. Most other cities used for comparisons do not offer this expanded screening. Screening inmates and finding hundreds of new cases to treat is good, but it makes us look like we have higher rates compared to other areas.

3. The Duval County Health Department's STD Surveillance Unit staff performed numerous visits to physicians, health care providers and hospitals to provide education and ensure prompt reporting. The result has been a measurable increase in rapid reporting time frames. For example, during the fourth quarter of 2001, our 0-3 day reporting of positives by doctors improved from 54% to 71%. During the second quarter of 2002, we received 2912 reports, and 2194 were received within three days (75%). Rapid reporting results in bringing patients to treatment and case management more

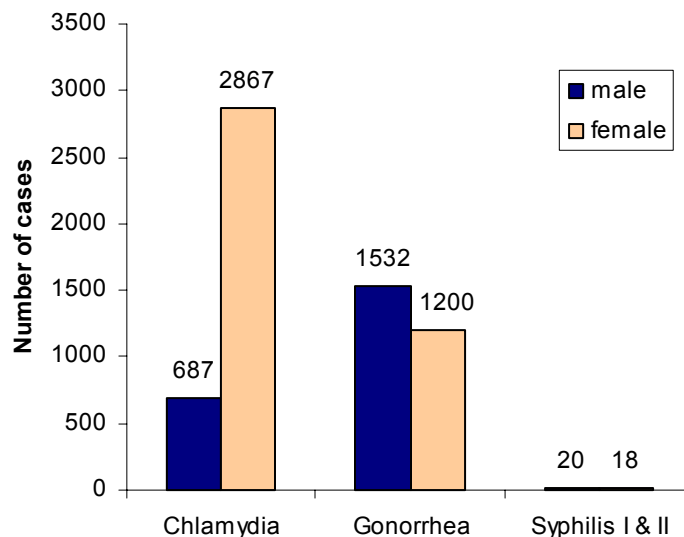
rapidly and effectively.

4. We are continuing to target those areas in the community that have been identified as having high rates of STD. Plans are to expand services in the community by partnering with community agencies to provide testing and treatment in strategic areas throughout the city. STD diagnosis and treatment will also be provided by the medical staff at more Health Department clinics. This will help to increase partner notification, another important component of effective STD surveillance and control.

In the most recent year, we actually started to see decreases in total STDs (a 6% decline in total Chlamydia and Gonorrhea). These decreases can be attributed to increased vigilance. However, we must guard against complacency. When we decrease our vigilance for STDs, past history has shown reductions in reported cases. But these reductions in vigilance and reported cases have simply been a prelude to another epidemic.

Figure 6

Gender Disparities on STD's (Duval County, 2001)



STDs: The National Challenge (continued from cover)

HIV: National Challenge (continued from cover)

all groups between 1992 and 1997. These increases were due to the 1993 expanded AIDS case definition and, more recently, improved survival rates due to new highly active anti-retroviral therapy (HAART) treatment.

Some efforts to control the spread of HIV have been successful. The development and use of guidelines to prevent HIV infection among health care workers and to test donated blood for HIV have resulted in a reduction in HIV transmission. Declines in new cases of AIDS among children have resulted from the use of guidelines for HIV counseling and voluntary testing as a part of routine prenatal care for all pregnant women.

Principal health determinants: Behaviors (sexual practices, substance abuse, and accessing prenatal care) and biomedical status (having other STDs) are major determinants of HIV transmission. Unprotected sexual contact, whether homosexual or heterosexual, with a person infected with HIV and sharing drug-injection equipment with an HIV-infected individual account for most HIV transmission in the United States. High risk behavior also increase exposure to opportunistic infections for those with HIV/Aids.

Interventions: Interventions for combating HIV are behavioral as well as biomedical. Effective community-level prevention strategies in the United States have included social marketing interventions to increase condom use and messages about the risk of sexual activity and needle-sharing. Detection and treatment of HIV and other STDs are also an important biomedical component of an HIV prevention program. Most experts agree that prevention programs should include both behavioral and bio-medical interventions.

Disparities: In the United States, African Americans and Hispanics have been affected disproportionately by HIV and

AIDS, as compared to other racial and ethnic groups. While African Americans and Hispanics represent an estimated 13 percent and 12 percent, respectively, of the total U.S. population, they account for 55 percent of the reported AIDS cases. In 1997, AIDS remained the leading cause of death for all African Americans aged 25 to 44 years—the second leading cause among African American females and the leading cause among African American males. In 1996, for the first time, African Americans accounted for a larger proportion of AIDS cases than whites, and this trend has continued. Among women with AIDS, African Americans and Hispanics have been especially affected, accounting for nearly 77 percent of cumulative cases reported among women by 1998. Of the 109,311 AIDS cases in women reported through December 1998, 61,874 cases occurred in African American women and 21,937 occurred in Hispanic women.

The disproportionate impact of HIV/AIDS on African Americans and Hispanics underscores the importance of implementing and sustaining effective prevention efforts for these racial and ethnic populations. HIV prevention efforts must take into account not only racial and cultural factors, but also other social and economic factors—such as poverty, underemployment, and poor access to the health care system.

infection in sexually active teens is higher than the reported rates.

Racial and ethnic disparities: STDs occur more frequently in certain racial and cultural groups. Although widely distributed in all population groups, African Americans accounted for about 77 percent of the total number of reported cases of gonorrhea—31 times the rate in whites. African Americans accounted for about 82 percent of all reported cases of primary and secondary syphilis. The most recent syphilis epidemic occurred largely in heterosexual minority populations. Since 1990, rates of primary and secondary syphilis have declined in all racial and ethnic groups except American Indians or Alaska Natives.

The hidden epidemics: The majority of STDs either do not produce any symptoms or signs, or they produce symptoms so mild that they often are disregarded. The result is many infected persons do not seek medical care. For example, as many as 85 percent of women and up to 50 percent of men with chlamydia have no symptoms. A person infected with HIV may be asymptomatic and may transmit the disease to another person. That person may, in turn, be infected for years but remain unaware until symptoms manifest themselves.

Table 2

Top 10 Infections, Duval County 1999			
Rank	Disease	Cases	FL Rank
1	Gonorrhea-All*	2945	1
2	Chlamydia*	2664	2
3	GI illness	610	3
4	AIDS*	272	4
5	Salmonellosis	248	5
6	Shigellosis	166	6
7	Giardiasis	112	7
8	Streptococcus pneumoniae, drug resistant	56	10
9	Campylobacteriosis	53	8
10	Hepatitis B	49	11
Total		7175	

*STDs represent 82% of the top 10 infections.

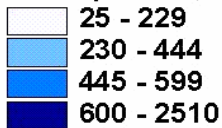
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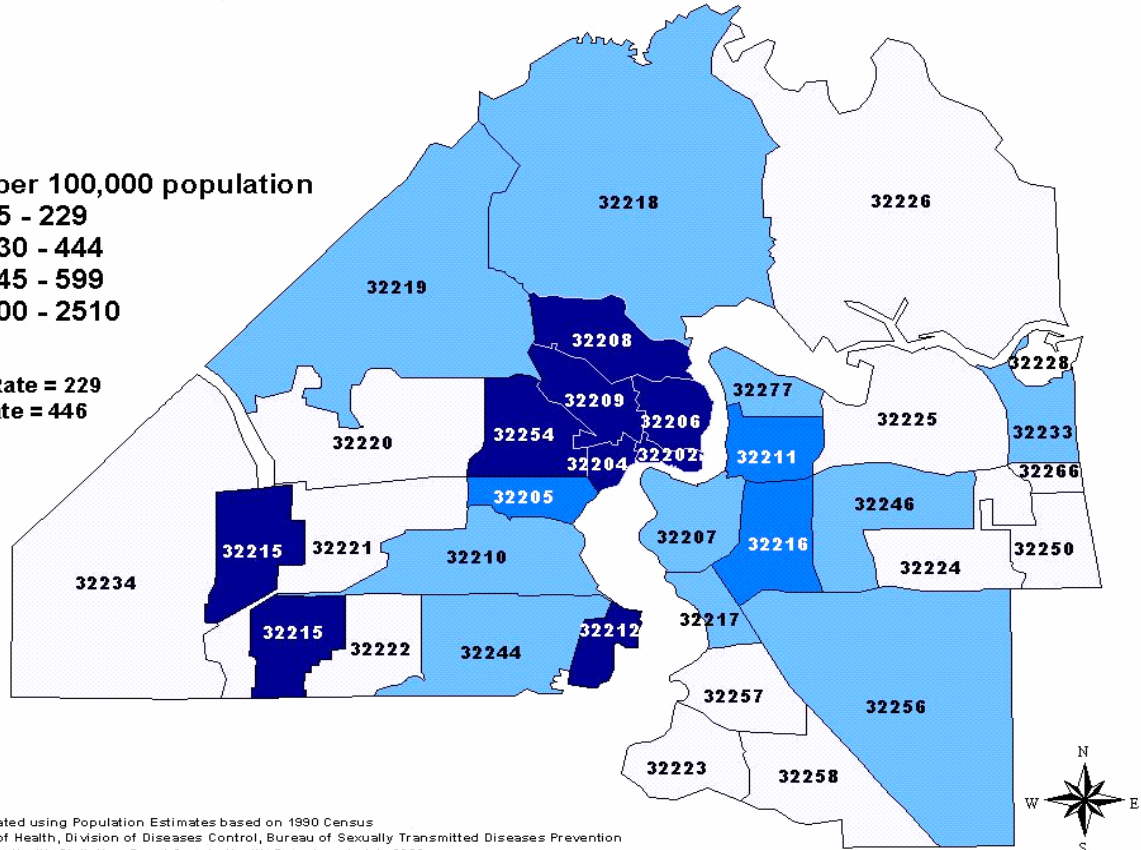
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Chlamydia - Duval County, 2001

Rates per 100,000 population



Florida Rate = 229
Duval Rate = 446



Note: Rates are calculated using Population Estimates based on 1990 Census
Source: Florida Dept. of Health, Division of Diseases Control, Bureau of Sexually Transmitted Diseases Prevention
Prepared by: Center for Health Statistics, Duval County Health Department, July 2002