



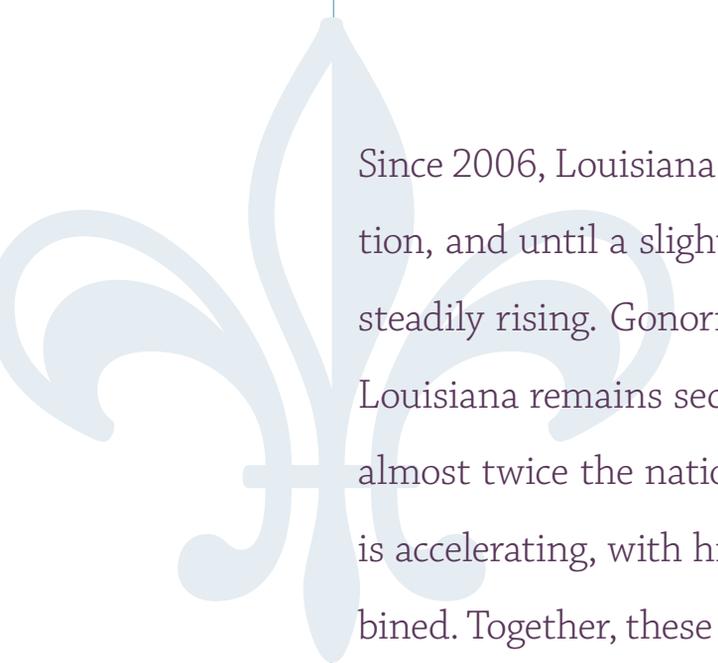
SEX in the City is Risky Business

..... BY **CLAUDIA S. COPELAND, PhD**

NEW ORLEANS is well-known as a sexy city. From the multifaceted and traditional Mardi Gras to more targeted festivals like Southern Decadence, our lively culture does little to discourage promiscuous sexual behavior. On the contrary, alongside the kid-friendly fun of barbecues and parades, a palpable undercurrent encouraging lustful abandon swirls around

the music, dancing, and creativity permeating the streets. Of course, flirtation and sexy costumes are harmless, colorful aspects of our festivals and nightlife. The problem, as with alcohol use, is when behavior pushes beyond exciting-but-responsible moderation into the realm of true danger. Judging from the rates of STDs here, this excess occurs all too often. >>

SEXUALLY TRANSMITTED DISEASES RAMPANT IN NEW ORLEANS



Since 2006, Louisiana has had the highest rate of syphilis in the nation, and until a slight decrease in 2010, infection rates have been steadily rising. Gonorrhea infection rates have been declining, but Louisiana remains second-highest in the nation for this disease, at almost twice the national average. Chlamydia infection, moreover, is accelerating, with higher rates than syphilis and gonorrhea combined. Together, these three “classic” STDs sicken almost 8,000 New Orleans residents annually. Compared with other regions in Louisiana, New Orleans has the highest rate of chlamydia infection, third highest rate of gonorrhea infection, and fifth highest rate of syphilis infection. Young adults make up the bulk of these cases, with females between the ages of 15 and 24 forming the highest risk group for chlamydia and gonorrhea and males between 20 and 24 years of age forming the most prevalent group for syphilis.

While syphilis, gonorrhea, and chlamydia pose significant health threats, HIV is the most important STD in terms of popular concern. More people than ever know their HIV status, and fewer are transmitting the virus, but the rate of new infection nevertheless remains steady in the United States. According to the CDC, Baton Rouge and New Orleans, along with Miami, Jackson, and Baltimore, make up the five hardest hit areas (by ranking of AIDS cases per 100,000 people). In 2011, according to the Louisiana Department of Health and Hospitals, new cases of HIV in Louisiana totaled 1,320, with 34% of these in New Orleans. While men who have sex with men are still the dominant group for HIV infections, women make up almost 30% of new HIV cases.

In Louisiana, over 18,000 persons are currently living with HIV/AIDS, with almost 5,000 in Orleans Parish. While increasingly effective treatments are being developed, patients are still dying, especially among those not diagnosed until later stages of infection. As treatment is most effective when started soon after infection, encouragement of regular testing for high-risk individuals is vital. Significantly, most of the other STDs described in this article facilitate infection with HIV. The high prevalence of infection with other STDs in New Orleans is therefore likely to increase the probability of HIV transmission.

Hepatitis B, an unknown disease to much of the population, can be even more deadly than HIV. While its case fatality rate is lower than that of HIV, its higher infectiousness results in a high total prevalence. (In contrast, hepatitis C, while a serious and deadly body-fluid transmitted disease, is difficult enough to transmit sexually that it is not considered a true STD.) According to the World Health Organization, the hepatitis B virus is 50 to 100 times more infectious than HIV. It can survive for several days in dried blood, whereas HIV can only be transmitted from fluid to fluid. Hepatitis B is the most serious type of viral hepatitis worldwide, with about 600,000 deaths per year. Fortunately, however, there is a vaccine for hepatitis B, and infection rates are therefore declining in the United States. In 2010, there were only nine new cases of hepatitis B in Orleans Parish. The number of carriers remains high, however, with approximately 21,000 people infected in Louisiana.

Also potentially deadly is human papillomavirus (HPV). HPV causes genital warts and can lead to cervical cancer and other anogenital cancers. It is extremely common, reaching rates as high as 40% or more in populations of women under the age of 25. HPV is not reportable in Louisiana, but infection rates are almost certainly high, based on rates

throughout the United States: an estimated 75% of reproductive-age adults have been infected at some point in their lives, according to the CDC. A vaccine is now available for the four HPV variants most likely to lead to cancer, and is approved for use by both men and women. It is hoped that increasing rates of vaccination will help to stem the spread of this STD.

Four additional diseases, herpes, chancroid, bacterial vaginosis, and trichomoniasis, while not deadly, can nevertheless cause pain, irritation, and distress. Herpes is a very common, incurable, and permanent viral disease. With an estimated one in five Americans harboring this virus, it can be assumed that it is being transmitted in New Orleans. Chancroid, on the other hand, which like herpes causes sores or ulcers, is rare and declining. Only 24 cases were reported in the United States in 2010, and none of these were in Louisiana. These data should be interpreted with caution, however, because *Haemophilus ducreyi*, the causative organism of chancroid, is difficult to culture, and this condition may therefore be underdiagnosed. Bacterial vaginosis is extremely common, with approximately three million new diagnoses annually. Trichomoniasis, caused by a protozoan parasite rather than a bacterium or virus, is another very common, curable STD. As many as five million Americans are infected, according to the CDC. Up to 70% of those infected experience no symptoms, and this undoubtedly contributes to increased transmission.

In addition to the well-known STDs, a new, emerging STD is now spreading. *Mycoplasma genitalium* is an intracellular, parasitic bacterium that causes urethritis, discharge, burning while urinating, reactive arthritis, and, in women, vaginal itching, pain during intercourse, cervicitis, endometritis, pelvic inflammatory disease, preterm birth, and infertility. The development of specific PCR tests has enabled epidemiological studies of *M. genitalium*, which could not be reliably studied before due to the difficulty of

culturing the organism. Using PCR, LSU researchers Mena et al. found that, of 97 men attending New Orleans STD clinics with complaints of urethritis, 24% were infected with *M. genitalium*. Importantly, *M. genitalium* was found not only in the symptomatic study subjects, but also in 7% of the asymptomatic controls, who had visited the clinic for screening or because a partner was infected with another STD. In a meta-analysis of *M. genitalium* in women, LSU and Tulane researchers McGowin and Anderson-Smits analyzed data for over 27,000 women from 40 independent studies. Among high-risk women, infection rates varied considerably with factors such as type of high-risk patient (e.g., patients presenting at STD clinics, vs. commercial sex workers), ranging from 0-42% and averaging 7.3%. Among low-risk women, infection rates averaged 2%.

Curtailing STD transmission requires population-level behavior modification, which is not easy to accomplish.

How can the very high prevalence of STDs in New Orleans be reduced? The only effective methods of prevention are condoms, either male or female, and partner reduction (including abstinence). Substantial efforts have been made to facilitate condom use here, from yearly “condom patrols” by Tulane Public Health students during Mardi Gras, in which tens of thousands of condoms are distributed by student volunteers, to the regular provision of bowls of condoms in bars and other key locations by organizations such as NO/AIDS. The HIV/AIDS Program of the Office of Public Health, through a grant from the CDC, funds the provision of free condoms to such organizations, which then distribute them throughout the city. Universities have also tried to

encourage condom use among their students; for example, Tulane’s Center for Wellness and Health Promotion offers free condoms and related supplies.

While these efforts undoubtedly save lives, the continuing high rate of STDs in New Orleans is painful proof that such efforts are only partially effective. A study by Bedima et al. of the Delta AIDS Education and Training Center in New Orleans exposed the complexity of this issue. This group interviewed a cohort of HIV-infected African-American women in New Orleans. Surprisingly, most of these women did not use condoms regularly. The reasons for this were unrelated to availability. Reasons for nonuse included lack of trust in the reliability of condoms for protection and the male partner’s refusal to use condoms. Clearly, public education and information campaigns are needed to augment the provision of free condoms.

Curtailing STD transmission requires population-level behavior modification, which is not easy to accomplish. However, substantial success has been achieved elsewhere, such as in Zimbabwe, where HIV positivity declined from an estimated 29% in 1997 to 16% in 2007, through programs focusing on partner reduction and increased condom use. Similar success stories in Uganda and Thailand emphasize the importance of both condom promotion and partner reduction. Underlying such success stories are fundamental changes in culture. To reach more New Orleanians, careful planning, based on community data including feedback and measurements of success levels of attempted strategies, will be required to change the prevalent culture from one of high-risk behavior to one of responsible moderation. ■ NO

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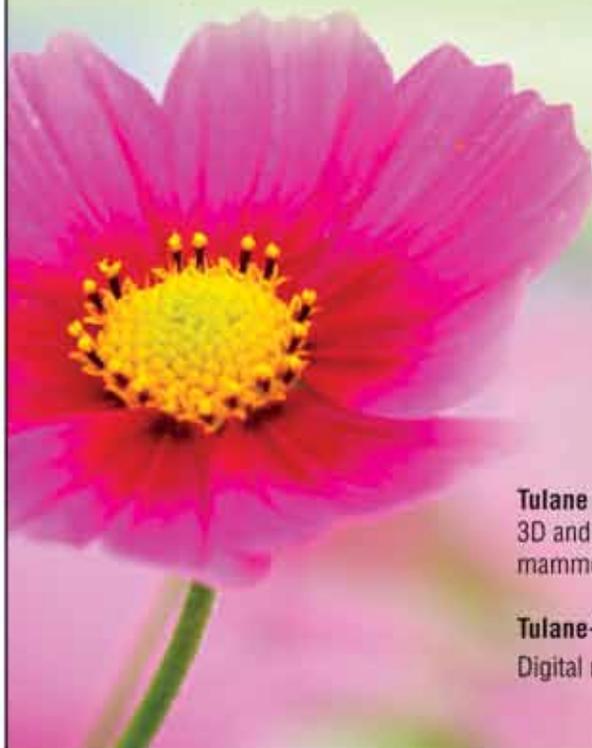
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