Genital herpes is one of the most prevalent sexually transmitted infections (STIs) in the United States. Traditionally, genital herpes has been caused by herpes simplex virus type 2 (HSV-2). Recent studies, however, have found a rise in the proportion of genital herpes infections caused by herpes simplex virus type 1 (HSV-1), traditionally the cause of oral herpes or “cold sores”, particularly among young adults. This shift in genital herpes infections is significant not just in the numbers involved, but in the implications for those managing the infection.

For example, one recent study\(^1\) found a significant increase in HSV-1 type genital herpes among college students. The proportion of newly-diagnosed college students with genital herpes infections attributed to HSV-1 increased from 31% in 1993 to 78% in 2001. Although HSV-1 infections were seen in both males and females, they were more common in females. Age was also a factor, with more HSV-1 infections occurring in persons 16-21 years old than in persons 22 or older.

Most recently, a 2009 study published in the *Journal of Clinical Microbiology* noted women under the age of 24 tested positive for HSV-1 from genital lesions more often than older women. Overall, the study noted that 31% of the positive swabs taken from participants were HSV-1. For women under 24 with positive swabs, 47% were positive for HSV-1. As the study authors note, “As the groups increased with age, the HSV-1 positivity rate decreased from 47% to 29% to 22% to 19%. Thus, the most statistically significant difference in the genital HSV-1 positivity rate was between those women < 24 years of age and those >24 years of age.”\(^2\)

**Behind the shift**
Genital HSV-1 infection isn’t a new phenomenon, of course. Research from the 1970s and 1980s show that HSV-1 as not an uncommon cause of genital infection. For example, 37% of women in a 1977 university health clinic study were shown to have genital HSV-1 infection. In
Seattle in the mid to late 1980s, 32% of those with newly acquired genital herpes had genital HSV-1 infection.3

Yet recent research does indicate a real and significant shift among younger populations. The potential causes for this shift are numerous. Clinically speaking, there has been a decline in the number of HSV-1 infections during childhood in the U.S. This leaves adolescents and young adults without HSV-1 antibodies, and vulnerable to new genital infection when they become sexually active.

Another explanation for the increase in HSV-1 genital herpes infections may be changes in sexual practices. The 2000 National College Health Assessment found that 75% of U.S. college students have engaged in oral sex. In the same survey, 42% of sexually active college students reported having used a condom "mostly or always" for vaginal intercourse in the previous 30 days, while only 3% of respondents reported using condoms during oral sex.4

Though the majority of students in the study engaged in oral sex, the low number of students reporting condom use, which can reduce the risk of HSV-2 transmission, during oral sex may contribute to the increasing proportion of young adults with genital HSV-1 infection.

Type matters
But why would this shift matter? Genital herpes is genital herpes . . . right? Not quite. Just like there are two sites of infection, there are two different viruses, and type 1 does not “become” type 2 when it causes genital infection. HSV-1 almost always causes a true primary infection and true primary infections are likely to be more severe during the first episode.5 After the first episode, though, genital HSV-1 recurs and sheds less frequently than genital HSV-2—important facts for a patient to know and to understand.

. . . and it doesn’t.
Yet, while there may be an improved clinical picture over the long term for those with genital HSV-1, the potential burden associated with disclosing one’s status remains the same. And those with HSV-1 face a slightly different challenge in discussing, and managing, transmission risks with a new partner, given the nature of genital HSV-1 infection. Viral shedding (and transmission risk) is far less likely than with HSV-2 infection, and recurrences are less frequent. Thus for genital HSV-1 after the first year of infection, some question the need to disclose the infection to new partners.

The issue of discussing your genital herpes status with your partner has been covered many times in these pages, but the message that bears repeating is this: any discussion of genital herpes should come in the context of overall sexual health and protecting both partners.

Awareness and education
One aspect about the increase in genital HSV-1 infection that can be addressed is public awareness and education. For example, safer sex messages can include information on the risk of genital herpes resulting from oral-genital sex. While there continues to be some disconnect between “cold sores” and “oral herpes,” greater awareness about oral herpes infection and the risk of transmission through oral sex is needed.
But what about other forms of prevention? Should those who know they have an oral HSV-1 infection disclose this to their partners, just as those with genital infection are urged to do? Is promoting the use of condoms and dentals dams for oral sex practical? How can public awareness be raised? We’d like to hear your thoughts. Write to us at thehelper@ashastd.org and let us know what you think. We know from the e-mails that we receive at The Helper that many of our readers have questions (and stories) about genital HSV-1.

References