

REPORTED SYPHILIS CASES WITH AND WITHOUT HIV CO-INFECTION,* WISCONSIN 2017

Created by the State of Wisconsin STD Control Section



WISCONSIN DEPARTMENT OF HEALTH SERVICES
Division of Public Health
Bureau of Communicable Diseases
STD Control Section
P-01097(4/2018)

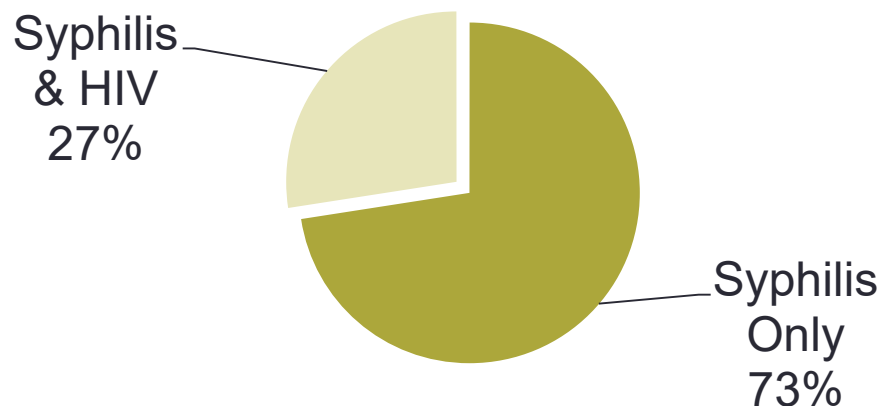
*All syphilis cases are diagnosed for the current year of the report; however, the co-infected cases are those with a new or pre-existing HIV diagnosis.

Reported syphilis cases with and without HIV co-infection, Wisconsin 2017

Syphilis cases with and without HIV co-infection

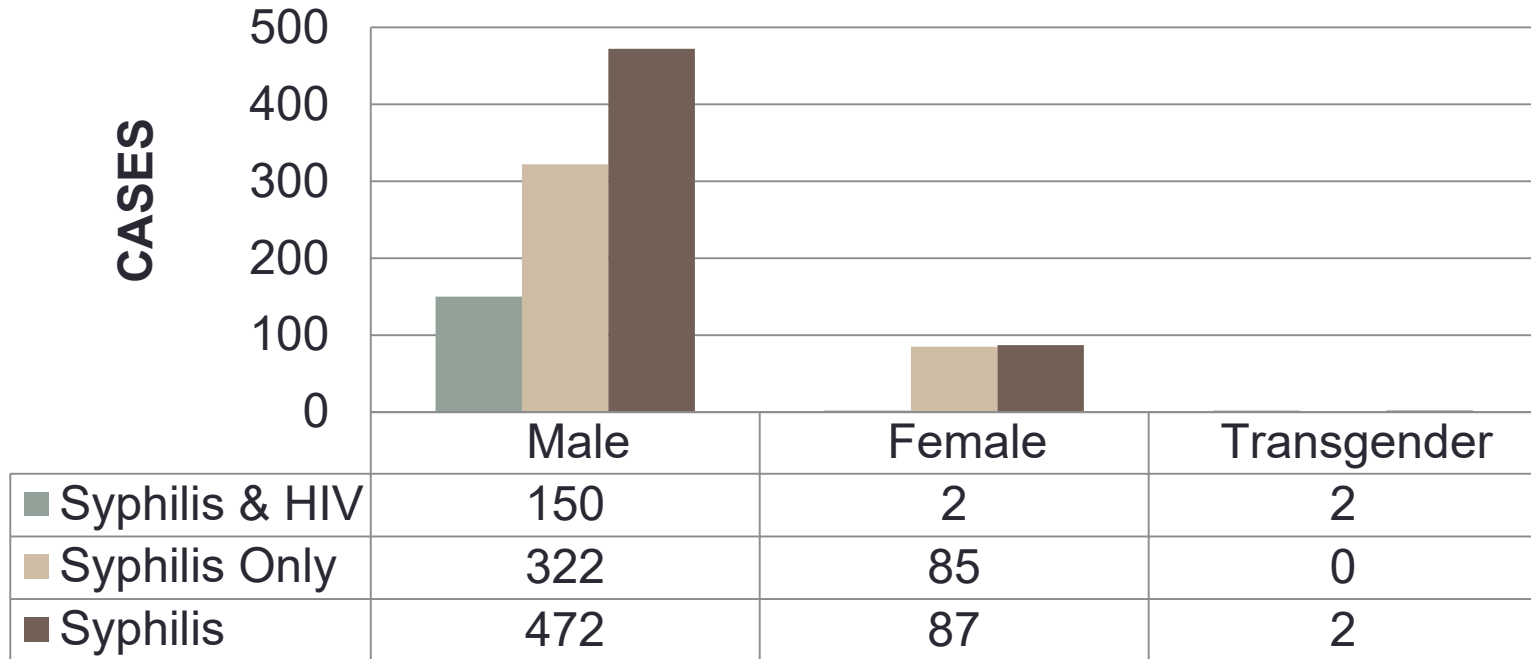
Syphilis Only	407
Syphilis & HIV	154
TOTAL Cases	561

Proportion of syphilis vs. syphilis-HIV co-infected cases



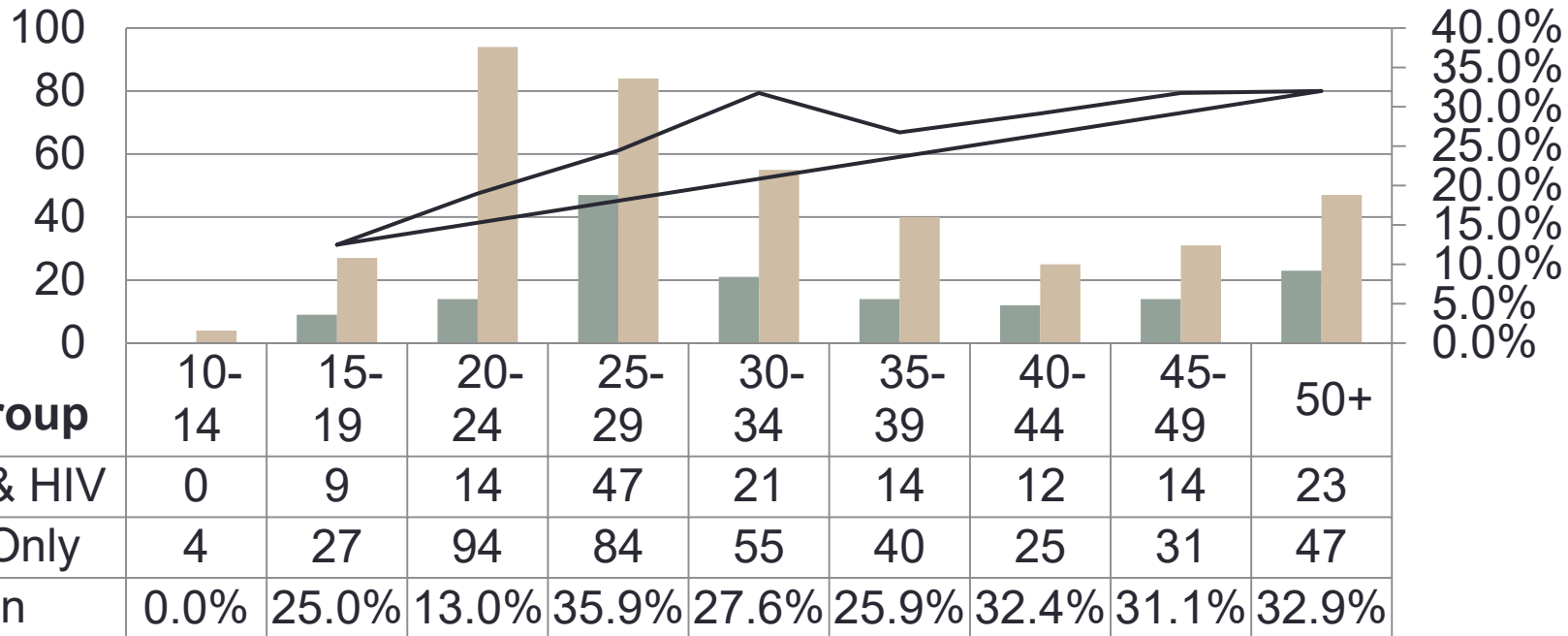
Syphilis in Wisconsin has a high proportion of co-infection with HIV. The number of cases has slightly increased from last year (144 co-infected cases in 2016 vs. 154 in 2017). However, the percentage of co-infected cases to cases not co-infected has dropped from last year (34/66% for 2016 vs. 27/73% in 2017). The cases in this report that are co-infected with HIV may or may not have contracted HIV in 2017. Some people who were co-infected may have found out about their HIV diagnosis at the same time as their syphilis diagnosis, while others had a pre-existing HIV diagnosis for years and became recently infected with syphilis.

Reported syphilis cases by sex in Wisconsin, 2017



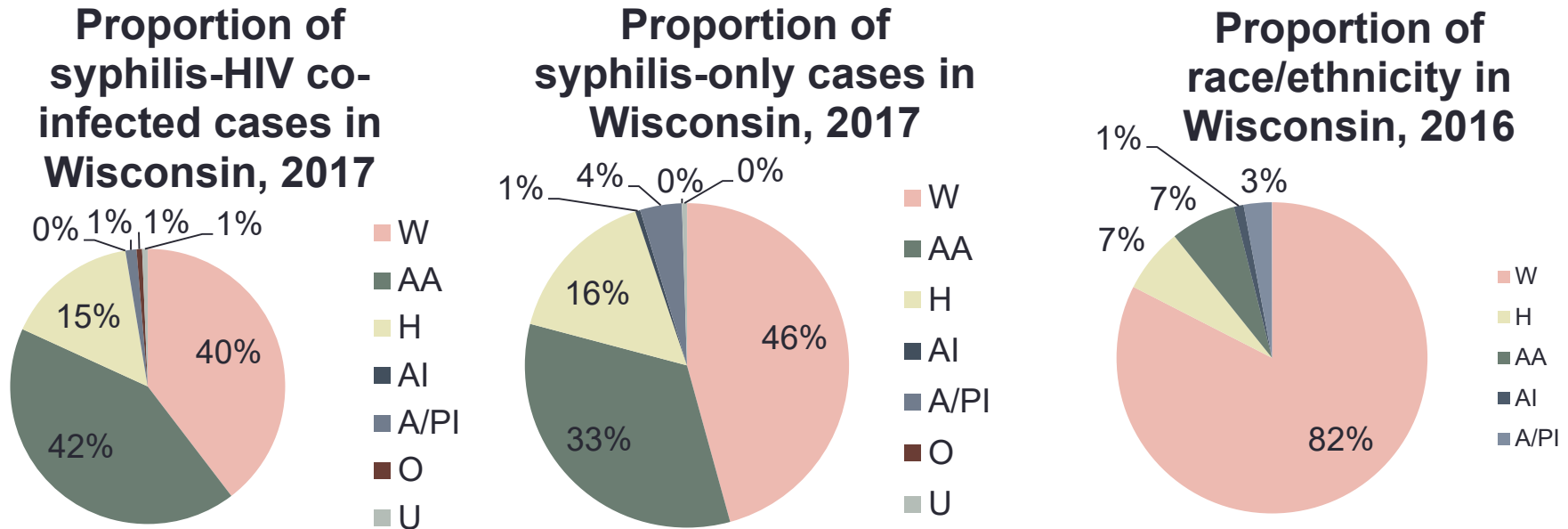
Most syphilis cases in Wisconsin occur among men. Out of the 561 total syphilis cases, 472 of them occurred among men, 87 occurred among women, and two cases were among transgender. Of the syphilis-only cases, 322 occurred among men, 85 occurred among women and 0 cases were transgender. However, the cases of syphilis-HIV co-infection show an even greater proportion of men being infected (150 men, two women and two transgender). This unusually high proportion of men being infected is an indication of a high number cases that are men having sex with men (MSM).

Proportion of syphilis cases that are HIV co-infected to syphilis-only cases within each age group



The proportion of syphilis only cases compared with the number of syphilis & HIV co-infected cases varies across age groups. The age groups on the bottom row of the chart are Centers for Disease Control and Prevention (CDC) recommended age group distributions. This year, for the first time, two age groups went above the 100 mark for total cases of syphilis—the 20-24 year olds and the 25-29 year olds.

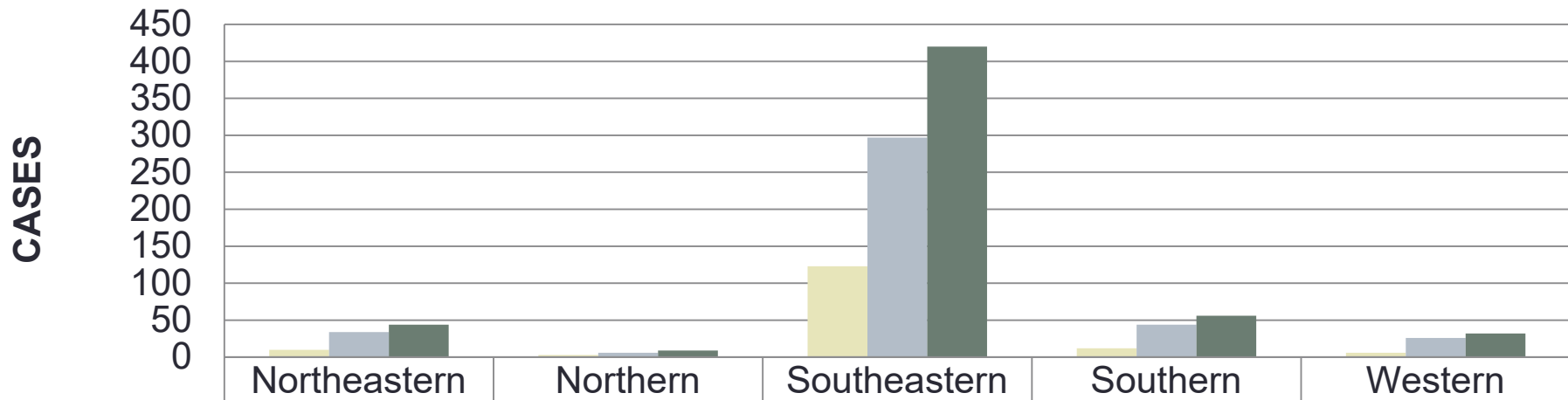
Reported syphilis-only and syphilis-HIV co-infections by race/ethnicity in Wisconsin



Key: W=White, AA=African American, H=Hispanic, AI= American Indian, A/PI=Asian/Pacific Islander, O=Other, U=Unknown

In 2017, white non-Hispanics made up the majority of all syphilis cases in Wisconsin. However, African Americans made up the majority of the syphilis-HIV co-infected cases. This is especially high considering African Americans only make up 7% of the population in Wisconsin compared to 82% White. This racial disparity primarily occurs in the southeastern part of Wisconsin, specifically in Milwaukee. The 2016 census data was the most recent data available.

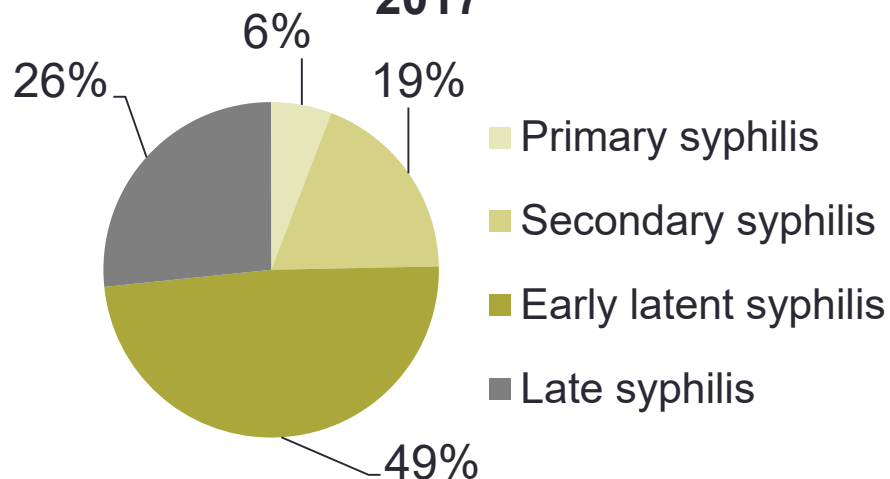
Reported cases of syphilis-only, syphilis-HIV co-infections, and total syphilis cases for the five regions of Wisconsin, 2017



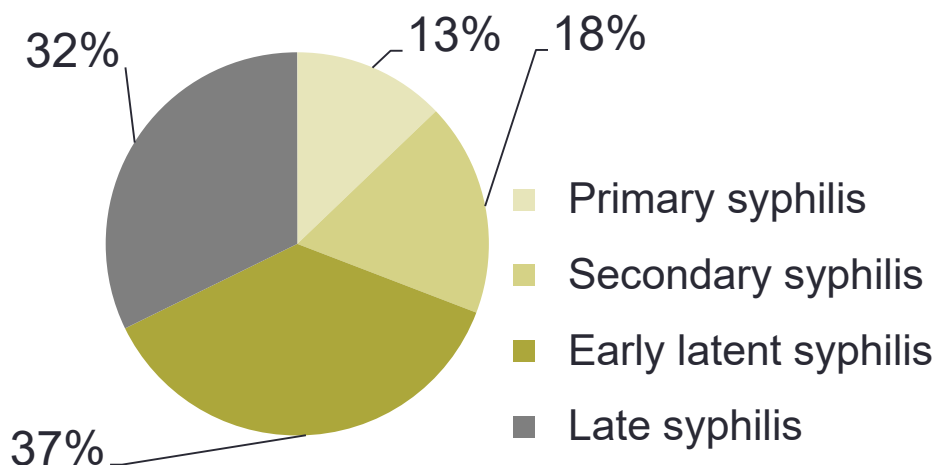
	Northeastern	Northern	Southeastern	Southern	Western
■ Syphilis/HIV	10	3	123	12	6
■ Syphilis Only	34	6	297	44	26
■ Total Syphilis	44	9	420	56	32

The largest number of cases in Wisconsin among the five regions occurred in the southeastern region. The southeastern region had 420 total cases of syphilis, which was 74.9% of all the syphilis cases in Wisconsin. This region also had 123 cases of syphilis & HIV co-infections, which was 79.9% of all the syphilis-HIV co-infections in the state. This is a significant increase from the 253 total syphilis cases and 100 co-infected cases the southeastern region had in 2016. The southeastern region makes up just 36.8% of the population in Wisconsin.

Syphilis stages among syphilis-HIV co-infections, Wisconsin, 2017



Syphilis stages among syphilis cases, Wisconsin 2017,

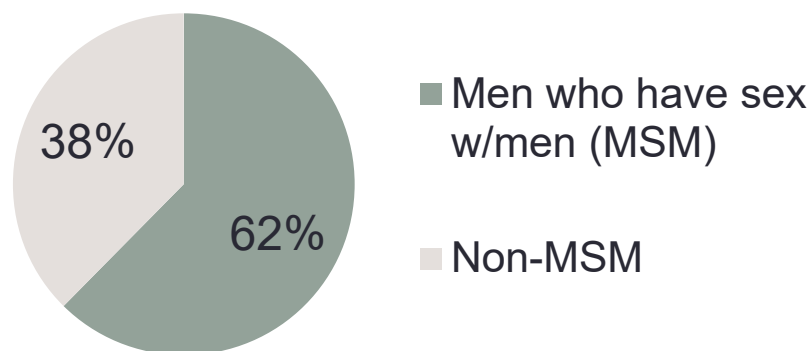


Early syphilis (infected with syphilis less than one year) includes the primary stage, the secondary stage and the early latent stage. Late syphilis occurs after one year of being infected. For people who are HIV positive, it is better to be diagnosed with early syphilis rather than late syphilis, because people who are HIV positive and have late syphilis are usually required to have a central spinal fluid test to rule out neurosyphilis. In 2016, 21% (30/144) of the syphilis-HIV co-infections were diagnosed with late syphilis. In 2017, 27% (41/154) of the syphilis-HIV co-infections were diagnosed with late syphilis, which means we must continue to make sure HIV care providers are testing their patients on an annual basis.

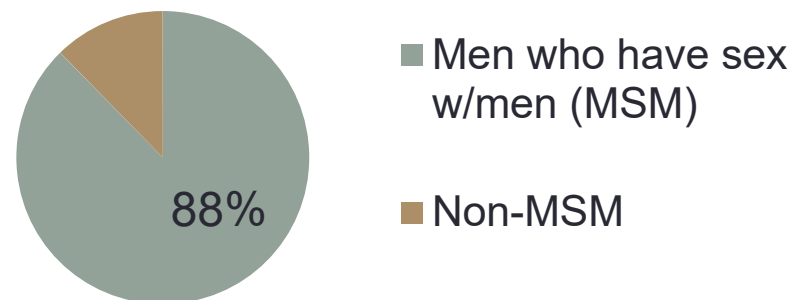
Unfortunately, people who are co-infected with syphilis-HIV who are not in care or find out about their co-infections at the same time are more likely to be in the late stage of syphilis. The Wisconsin STD Section, per the CDC, recommends that all HIV positive patients and all men who have sex with men receive an annual syphilis test to prevent late latent syphilis.

Syphilis and syphilis-HIV co-infections among men who have sex with men in Wisconsin, 2016

Reported Syphilis Cases in Wisconsin, 2017 (n=561)

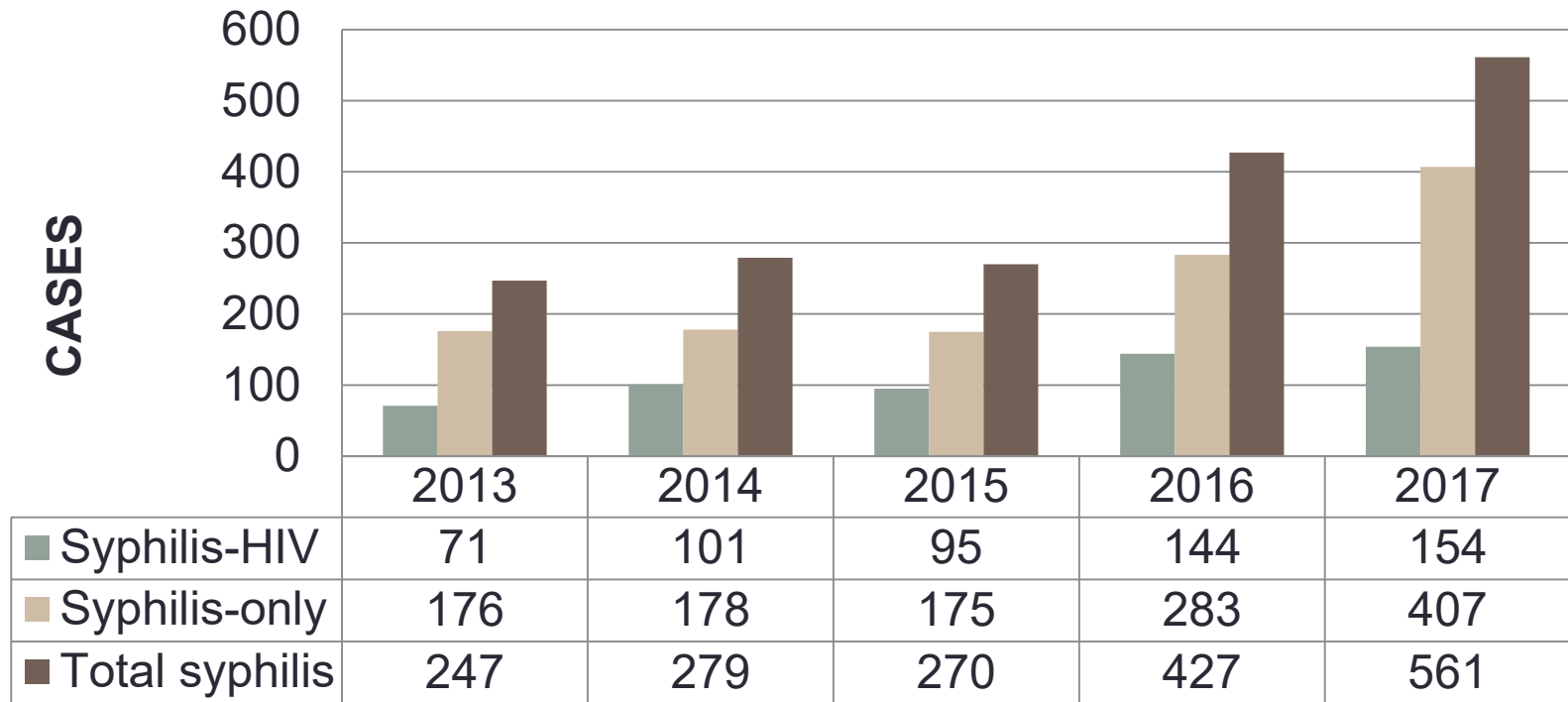


Reported syphilis-HIV co-infected cases in Wisconsin, 2017 (n=154)



One of the groups at highest risk for syphilis and syphilis-HIV co-infections is men who have sex with men, (MSM). This includes not only people that identify as gay, but also others that identify as bi-sexual, or straight, as well as some transgender. This is a self-reported risk factor, which means that these individuals were interviewed and reported themselves as MSM either to a provider or to a disease intervention specialist (DIS). In 2017, among all the syphilis cases, 350 of the 561 cases reported that they were MSM, which made up 62.4% of the syphilis cases in Wisconsin. However, 135 out of 154 co-infected cases reported being MSM, which is 87.7% of cases.

Reported syphilis-HIV co-infection, syphilis-only and total syphilis cases in Wisconsin, 2013–2017



Over the years, there has been a steady increase in the number of syphilis-only, syphilis-HIV co-infected, and total syphilis cases. In 2013–2015, the total number of syphilis cases was between 247–279 and the number of syphilis-HIV cases was 71–101. However, in 2016 the number dramatically jumped to 427 total syphilis and 144 co-infected cases. Again in 2017, the number jumped higher to 561 total syphilis and 154 co-infected cases.

Proportion of previous and newly diagnosed HIV cases among 2017 syphilis and HIV co-infections, n=154



The number of syphilis and HIV co-infections was 154. The number of these cases that were diagnosed with HIV previous to their syphilis infection was 127. The number of cases that were diagnosed with syphilis at or around the same time as they were diagnosed with HIV was 27.

Of the cases that were newly diagnosed with HIV and syphilis at the same time, 14 were considered late syphilis (a total of 41 late syphilis and HIV co-infections). This means that 27 cases were already known to be infected with HIV and late syphilis (they did not receive a syphilis test in the year previous to their diagnosis). The Division of Public Health will continue to remind HIV care providers about the need to ensure all HIV positive individuals receive a yearly syphilis test.

Questions?

Brandon Kufalk, Public Health Educator
State of Wisconsin STD Control Section

Division of Public Health

Department of Health Services

608-261-6390

brandon.kufalk@wisconsin.gov

Note: All population data was queried using Wisconsin Interactive Statistics on Health (WISH), which can be found at: www.dhs.wisconsin.gov/wish/index.htm.