

Syphilis

For more information on infectious syphilis, please see the [STI Annual Report](#).

Syphilis is a sexually transmitted infection (STI) caused by the spirochete bacterium *Treponema pallidum*. Its natural history is well-described and consists of multiple infectious stages, followed by a latent period during which the bacterium is present but there are little to no symptoms. The primary stage of syphilis typically presents as a painless ulcer, known as a chancre. The secondary stage of syphilis presents with systemic symptoms, such as a rash over the trunk. The asymptomatic latent stage of syphilis is separated into early latent (about one year after infection) and late latent (one year or more after infection). Only the primary, secondary, and early latent stages of syphilis are considered infectious and are reported here.

Untreated, up to one third of individuals will go on to develop late complications, which may lead to end-organ disease in the brain, peripheral nerves, eyes and cardiovascular system. If the infectious stages of syphilis are concurrent with pregnancy, the child is at risk of developing congenital syphilis, a serious and potentially fatal condition. In those co-infected with HIV, the clinical manifestations of syphilis may be unusual and difficult to diagnose. In addition, syphilis infection itself not only enhances the transmission of HIV but also one's susceptibility to HIV infection.

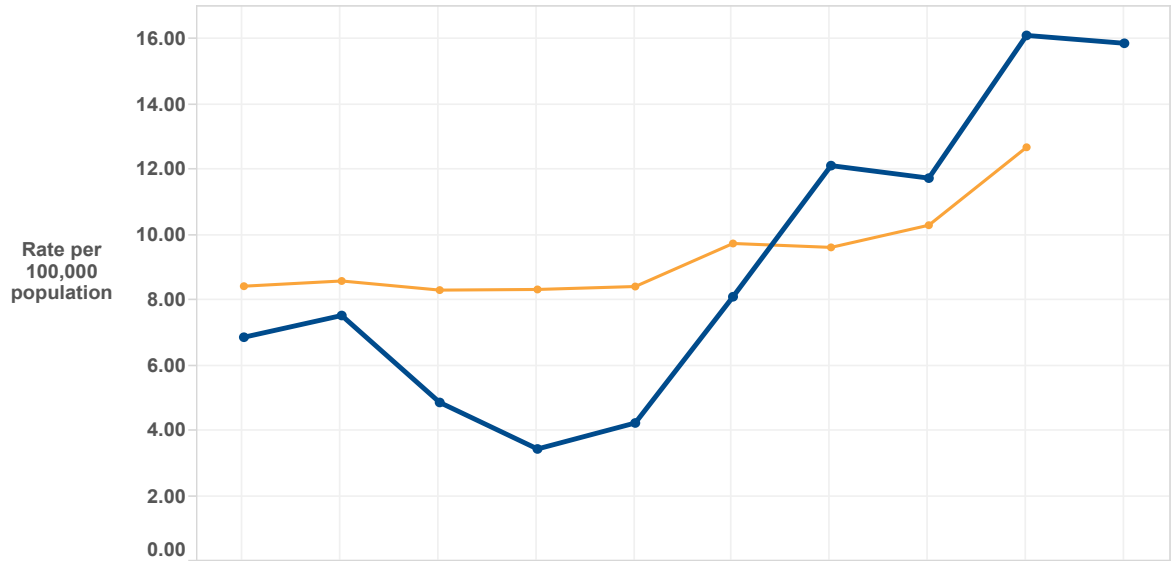
Following a decline in rates in BC in the early 1990s, infectious syphilis began to re-emerge in BC starting in 1997. Rates of syphilis increased dramatically between 2010 and 2015 and remained high in 2016. Over 90% of infectious syphilis cases are in males, primarily driven by cases who self-identify as gay, bisexual, or other men who have sex with men.

From 2010 to 2016, the highest rates of infectious syphilis were in the Vancouver Coastal Health Authority. The majority of cases were among men 40-59 years old. However, since 2014, the greatest rate of increase appears to be in men 20-29 years old. There has also been a steady increase in the proportion of cases diagnosed in the early latent stage (i.e. the stage without symptoms) from about 50% in 2005 to almost 65% in 2016, suggesting that an increasing proportion of cases are being detected by screening.

The recent changes in syphilis epidemiology prompted the BC Centre for Disease Control (BCCDC) to develop a multi-pronged strategy with the regional health authorities, First Nations Health Authority, the BCCDC Public Health Laboratory, Perinatal Services BC, and the Office of the Provincial Health Officer to address this increase. Goals of this strategy include increasing awareness of syphilis among key populations and health care providers, enhancing surveillance of syphilis, maintaining high treatment completion rates, and optimizing the care of partners in order to prevent re-infection and onward transmission.



23.1 Syphilis Rates by Year, 2007-2016



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Reports	295	328	215	154	191	369	557	546	757	755
BC Rate	6.87	7.54	4.87	3.45	4.25	8.12	12.14	11.75	16.13	15.89
Canada Rate	8.44	8.60	8.32	8.34	8.43	9.75	9.63	10.31	12.70	