In 2013, syphilis was the third most frequently reported sexually transmitted infection (STI) in Boston. It is most commonly reported among men who have sex with men (MSM) in the United States. In this report, newly acquired syphilis infections, categorized as either primary or secondary (P&S) syphilis, are used to describe the epidemiology of syphilis in Boston. The data in this report focus on P&S syphilis cases, as these are the communicable stages of the disease.

Boston Epidemiology*: In 2013, there were 327 total cases of syphilis reported in Boston (52.9 cases per 100,000), up 35% since 2012. Of these, 12% of the cases reported were primary syphilis, 25% were secondary syphilis, 62% were latent syphilis, and less than 1% were neurosyphilis. There were no congenital cases reported in 2013.

There were 121 cases of P&S syphilis in Boston in 2013, or 19.9 cases per 100,000. This is 43% more than in 2012 and nearly four times the national incidence rate for P&S syphilis, according to the Centers for Disease Control & Prevention’s (CDC) most recent data (2012).

High Risk Groups: Rates were particularly high in MSM between the ages of 30 and 49. White men had the highest rates, and most cases lived in the South End, North Dorchester, South Dorchester, Jamaica Plain, and Roslindale.

Men accounted for 97% of the total P&S syphilis cases in 2013. The incidence rate in men was 40.2 cases per 100,000, up 42% since 2012. Because women comprised such a small proportion of cases in 2013, this report will focus primarily on men.

For this analysis, Latino ethnicity is considered alongside Asian, Black, and White racial groups. White men accounted for the majority (55%) of P&S syphilis cases in 2013 and also had the highest incidence rate with 41.6 cases per

*Data for 2008-2012 are available on the BPHC website at http://bphc.org/healthdata/other-reports/Pages/Other-Reports.aspx
100,000. Latino men previously had the highest rate in 2011 and 2012, but had the second highest rate in 2013 (36.3 cases per 100,000).

In men, the highest rate was in 30-39 year olds (73.5 cases per 100,000), whereas 40-49 year olds had the highest rates from 2008 to 2012. Trends seen by age varied depending on race/ethnicity in 2013. Men of color were diagnosed with P&S syphilis at a younger age than White men. White men had a median age of 42 in 2013, which was 11 years older than the median age for Black men (31) and five years older than the median age for Latino men (37).

In 2013, the neighborhood with the highest incidence rate of P&S syphilis in men was the South End, with 94.5 cases per 100,000. This marks a 14% increase since 2012. North Dorchester experienced the second highest rate in men (79.1 per 100,000). South Dorchester, Jamaica Plain, and Roslindale also had elevated rates above 50 cases per 100,000, whereas in 2012, only the South End exceeded this amount (See Map).

In Boston, risk information was available for 90% of cases in men in 2013. The majority of P&S syphilis cases in Boston (87%) were among MSMs (data not shown). Of the P&S syphilis cases who self-described as MSM, White men comprised the largest proportion compared to any other race (61% of the total MSM cases), and 77% of the MSM cases were 30 or more years old.

Future Directions:
While the incidence of P&S syphilis is the lowest of the reportable STIs in Boston, syphilis remains a major concern among high risk groups such as MSM. The risk of acquiring HIV and other STIs is higher in those with syphilis. This places added emphasis on early detection and treatment of syphilis cases and their partners. Continued support of initiatives to promote safer sex will be imperative to decrease the number of syphilis cases in Boston in 2014. The use of the internet and mobile apps to identify potential sex partners presents added challenges.
Data:
Data for this report were collected by the Massachusetts Department of Public Health, and were cleaned and analyzed by BPHC. Regulations passed in spring of 2013 require that chlamydia, gonorrhea, and syphilis are reported directly to BPHC.

Additional information about syphilis in Boston can be obtained by emailing infectiousdisease@bphc.org or by calling the BPHC Infectious Disease Bureau at (617) 534-5611. Please note that data limitations and confidentiality issues may preclude BPHC from fulfilling certain requests.