Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

# Other Sources of Surveillance Data

## STD Surveillance Network

In 2005, CDC established the STD Surveillance Network (SSuN) as a collaborative network of state, county and/or city health departments following common protocols to conduct sentinel and enhanced STD surveillance activities. The purpose of SSuN is to improve the capacity of national, state and local STD programs to detect, monitor, and respond to trends in STDs through enhanced data collection, reporting, analysis, visualization, and interpretation of disease information. More details about SSuN are available here: https://www.cdc.gov/std/ssun/default.htm

Cycle 4 (2019–2024) of SSuN provides funding to 11 jurisdictions to conduct two core sentinel and enhanced STD surveillance activities. SSuN Cycle 4 sentinel surveillance activities include abstraction of clinical and demographic information on a full census of patients attending participating STD clinics. SSuN Cycle 4 enhanced surveillance activities include conducting health department registry matching, as well as provider and patient investigations on a probability sample of all persons diagnosed and reported with gonorrhea. Funded jurisdictions for core activities in SSuN Cycle 4 include Baltimore City (Maryland), California (excluding San Francisco County), City of Columbus, Florida, Indiana, Multnomah County (Oregon), Philadelphia City (Pennsylvania), New York City (New York), San Francisco County (California), and Washington State. Data presented in this report also includes information from SSuN Cycle 3 collaborators Massachusetts and Minnesota for cases reported Jan 2020 through Sep 2020.

In both components of SSuN, unique persons (diagnosed and reported with gonorrhea or seeking care in participating clinical facilities) are longitudinally followed using unique, coded IDs to provide information on repeat infections and/or care seeking behaviors. The primary unit of analysis for sentinel surveillance activities in clinical facilities is unique persons. These data are merged with multiple clinic visit, laboratory, diagnostic, and treatment observations to provide a comprehensive picture of services and diagnoses received for each individual patient. For enhanced, case-based surveillance activities in SSuN, the primary unit of analysis is a diagnosed and reported episode (case) of gonorrhea from any provider type or setting within the funded jurisdiction. Case data also included a unique person identifier, which allowed merging with multiple laboratory observations, matching with other health department disease registries, querying provider-based clinical information, and unique patient demographic and behavioral data obtained through direct patient interviews. For analysis in the population component, cases in the probability sample were weighted to reflect study design and to adjust for non-response by demographic category of the patient. Weighted analysis provides estimates of case-level and person-level characteristics representative of all reported cases in the funded jurisdictions.

MSM are defined in all SSuN data collection activities as men who: a) reported having sex with another man in the preceding 2–3 months, and/or, b) those who reported that they considered themselves gay/homosexual or bisexual. Men who have sex with women (MSW) are defined as men who reported having sex with women exclusively, or who did not report the sex of their sex partners but reported that they considered themselves to be straight/heterosexual.

Data presented in figures in this report from the sentinel surveillance component of SSuN include data from nine of the 10 participating Cycle 3 jurisdictions (Baltimore [Maryland], Miami [Florida], Boston [Massachusetts], Minneapolis [Minnesota], Multnomah County [Oregon], New York City [New York], Philadelphia [Pennsylvania], San Francisco [California], and Seattle [Washington]), except for Figure GG which includes data from the seven Cycle 3 jurisdictions which provided data on P&S syphilis diagnoses (Baltimore [Maryland], Miami [Florida], Minneapolis [Minnesota], Multnomah County [Oregon], New York City [New York], San Francisco [California], and Seattle [Washington]).

Data presented in figures in this report from the population component of SSuN for 2019 include gonorrhea cases sampled from all funded jurisdictions January – September in Cycle 3 and for October – December for sites continuing into Cycle 4. Trend data across previous cycles of SSuN (Figure 26) include only those jurisdictions participating continuously in Cycles 2 through 4 (Baltimore, California [excluding San Francisco], Philadelphia, New York City, San Francisco, and Washington State).

# Gonococcal Isolate Surveillance Project

Data on antimicrobial susceptibility in *Neisseria gonorrhoeae* were collected through the Gonococcal Isolate Surveillance Project (GISP), a sentinel system of selected STD clinics located at an average of 27 GISP sentinel sites and 4 regional laboratories in the United States. More details about GISP are available here: https://www.cdc.gov/std/GISP/.

For 2019, the antimicrobial agents tested by GISP were ceftriaxone, cefixime, azithromycin, ciprofloxacin, penicillin, tetracycline, and gentamicin.

Many of the antimicrobial susceptibility criteria used in GISP for 2019 are also recommended by the Clinical and Laboratory Standards Institute (CLSI).[2] As of December 2019, the CLSI criteria for resistance to ceftriaxone, cefixime, gentamicin, and azithromycin and for susceptibility to gentamicin have not been established for *N. gonorrhoeae*. The following criteria are used in GISP:

Ceftriaxone, minimum inhibitory concentration (MIC) ≥0.5 µg/ml (decreased susceptibility)

Ceftriaxone, MIC ≥0.125 µg/ml (elevated MIC)

Cefixime, MIC ≥0.5 µg/ml (decreased susceptibility)

Cefixime, MIC ≥0.25 µg/ml (elevated MIC)

Azithromycin, MIC ≥2.0 µg/ml (elevated MIC)

Ciprofloxacin, MIC ≥1.0 µg/ml (resistance)

Ciprofloxacin, MIC 0.125–0.5 µg/ml (intermediate resistance)

Penicillin, MIC ≥2.0 µg/ml (resistance)

Tetracycline, MIC ≥2.0 µg/ml (resistance)

Gentamicin (MIC values correlated with susceptibility and resistance have not been established)

# National Job Training Program

The National Job Training Program (NJTP) is the largest nationwide residential career training program in the country. The NJTP is conducted by the Office of Job Corps, Employment and Training Administration, US Department of Labor. The program helps eligible young people ages 16 through 24 complete their high school education, trains them for meaningful careers, and assists them with obtaining employment. As part of the health and wellness program, NJTP students are provided a medical examination at enrollment, including chlamydia and gonorrhea screening. De-identified chlamydia and gonorrhea test results are provided to CDC by the U.S. Department of Labor. More information is available at: https://www.dol.gov/agencies/eta/jobcorps

Chlamydia and gonorrhea prevalence were calculated for males and females entering the NJTP. To increase the stability of the estimates, chlamydia or gonorrhea prevalence data are presented when valid test results for 100 or more students per year are available for the population subgroup and state. The majority of NJTP's chlamydia screening tests are conducted by a single national contract laboratory and are included in the data provided to CDC. Gonorrhea screening tests in some training centers are conducted by local laboratories; results from these tests are not provided to CDC. To minimize bias from missing test results, gonorrhea test results are included only if the number of gonorrhea tests submitted is greater than 90% of the number of chlamydia tests submitted from the same center for the same period.

# References

1. Grey JA, Bernstein KT, Sullivan PS, et al. Estimating the population sizes of men who have sex with men in US states and counties using data from the American Community Survey. *JMIR Public Health Surveill*. 2016;2(1):e14.
2. Clinical and Laboratory Standards Institute. Performance standards for antimicrobial susceptibility testing; Twenty-fifth informational supplement. In. Wayne (PA): Clinical and Laboratory Standards Institute; 2015.

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