

## Guidance on classifying STD case reports into *MMWR* week

### Background

State and local jurisdictions report cases of notifiable conditions to the Centers for Disease Control and Prevention (CDC)'s Nationally Notifiable Disease Surveillance System (NNDSS) and assign cases to designated weeks of the epidemiologic year (*MMWR* week). Using the reported *MMWR* week, CDC's Division of STD Prevention assigns reported cases of STDs (chlamydia, gonorrhea, syphilis, and chancroid) to corresponding years for annual reporting and into weeks, months, or quarter for other reporting and quality assurance activities.

CDC's NNDSS recommends that *MMWR* week be assigned according to the variable "event date" and jurisdictions indicate the type of date used for "event date" in a separate variable "event date type." NNDSS has provided jurisdictions further guidance on which "event date type" to use, based on a hierarchy approach [1]:

- Date of disease onset
- Date of diagnosis
- Date of laboratory result
- Date of first report to public (community) health system
- State or *MMWR* report date

However, the current National Electronic Telecommunications System for Surveillance (NETSS) record layout for transmission of STD morbidity data [2] does not allow for transmission of three of the date variables used in the NNDSS guidance (date of disease onset, date of diagnosis, and date of laboratory result), but does allow for transmission of a date variable (date of laboratory specimen collection) not included in the NNDSS guidance.

Based on a review of chlamydia cases reported by 11 jurisdictions during 2013–2014, almost 75% of chlamydia cases were assigned an *MMWR* week using date of first report to public (community) health system even though a date of laboratory specimen collection had been reported to CDC. [2] Classifying the *MMWR* week based on date of laboratory specimen collection instead of the "event date" resulted in reclassifying 60% of cases into different *MMWR* weeks, including the reclassification of 4% of cases into an *MMWR* week with a difference of  $\geq 8$  weeks and 0.7% of cases into a different calendar year.

Using an "event date" relatively distant from the true date of the acquisition of infection - such as the date first reported to the public (community) health system - may be a suboptimal measure of incidence compared with other dates closer to the time of infection. Although few cases would be classified into a different year when using a date closer to time of infection (such as date of laboratory specimen collection), many would be classified into different weeks, which may affect analyses involving more granular time periods such as aberration detection or quarterly reporting, as well as quality assurance measures such as timeliness of reporting to CDC.

### Statement of action to be taken

The objective of the CDC NNDSS hierarchy for assigning "event date" is to use the available date that most closely approximates the date of disease onset (incidence). Date of specimen collection appears to

be available for many cases, but is not currently listed in the CDC NNDSS hierarchy for “event date” or included as an option for “event date type.” Because at least one positive laboratory result is required to meet the case definition for chlamydia, gonorrhea, and syphilis, date of specimen collection, date of laboratory result, and date of diagnosis are expected to occur within several days of each other. Therefore, when date of diagnosis or date of laboratory result are not readily available, but date of laboratory specimen collection date is available, date of laboratory specimen collection should be considered a proxy for date of diagnosis and should be used to assign “event date.”

For reporting STD cases to CDC, jurisdictions should adhere to the hierarchy provided by CDC NNDSS for assignment of *MMWR* week:

- Date of disease onset
- Date of diagnosis (proxy: Date of laboratory specimen collection)
- Date of laboratory result
- Date of first report to public (community) health system
- State or *MMWR* report date

Note: States may choose to assign *MMWR* week differently for different notifiable conditions (e.g., a state’s hepatitis program may assign *MMWR* week using different ‘rules’ than the state’s STD program).

## References

1. CDC. *MMWR* Weeks. Available at: [https://wwwn.cdc.gov/nndss/document/MMWR\\_week\\_overview.pdf](https://wwwn.cdc.gov/nndss/document/MMWR_week_overview.pdf)
2. The National Electronic Telecommunications System for Surveillance (NETSS) CDC Implementation Plan for STD Surveillance Data (Effective as of January 2018). Available at: [https://www.cdc.gov/std/program/std-netssimpln-v5\\_2018jan.pdf](https://www.cdc.gov/std/program/std-netssimpln-v5_2018jan.pdf)
3. Pitasi MA, Kidd SE, Kirkcaldy RD, Torrone EA. Incidence and Timeliness in National Chlamydia Surveillance: The Role of Date Type. Council of State and Territorial Epidemiologist Annual Meeting. June, 2016. Anchorage, AK. Available at: <https://cste.confex.com/cste/2016/webprogram/Paper6444.html>