

North Carolina Disease Data Dashboard

Data Resources

Data Infrastructure and Data Notes

The North Carolina Division of Public Health (DPH) receives both paper and electronic lab results and case reports daily of any individual who tests positive for a condition or disease deemed reportable by State and Federal law. There are currently 82 reportable diseases for the state of North Carolina, and healthcare organizations such as: hospitals, primary care offices, clinics, local health departments, pharmacies, testing facilities, and laboratories are required to send notification to NC DPH between 24 hours and 7 days following the diagnosis confirmation. The timeline for reporting is based on law, and generally more serious and/or infectious conditions that require action on behalf of public health and safety to protect the population at large. For more information on reporting requirements, or to review the North Carolina Code statute for reportable conditions, you can visit:

- o Reportable Conditions/Diseases in NC: <http://reports.oah.state.nc.us/ncac/title%2010a%20-%20health%20and%20human%20services/chapter%2041%20-%20epidemiology%20health/subchapter%20a/10a%20ncac%2041a%20.0101.html>
- o NC DHHS Communicable Disease Surveillance & Reporting: <https://epi.dph.ncdhhs.gov/cd/report.html>

Data Considerations

The interactive North Carolina Disease Data Dashboard (NCD3) presents case counts for reportable communicable diseases in the state of North Carolina. Yearly disease counts and rates (per 100,000 persons) are displayed for North Carolina as a whole and for each county.

Data have been extracted from the North Carolina Electronic Disease Surveillance System (NC EDSS). NC EDSS is a component of the Centers for Disease Control and Prevention (CDC) initiative to move states to web-based health surveillance and reporting systems. NC EDSS is also part of the Public Health Information Network (PHIN).

NC EDSS is used by the North Carolina DPH, and the state's 86 local and multi-county district health departments. NC EDSS creates a central repository of person-based public health data. Along with automated processing of electronic lab and case reports, NC DHHS and LHD staff collect and enter data, which are included in the dashboard, including cases, deaths, and demographic information for all reportable communicable diseases.

Case Criteria: Cases were included on the NCD3 dashboard if they met the disease-specific case definition as a probable or confirmed case. (E. coli – shiga toxin producing case counts also include suspect cases). The case definitions used for each reportable disease are available here:

<http://epi.publichealth.nc.gov/cd/lhds/manuals/cd/toc.html>

Case counts for diseases displayed on the NCD3 dashboard are based on the following dates:

- Date of Earliest HIV diagnosis: HIV and AIDS
- Date of provider diagnosis: Primary Syphilis; Secondary Syphilis; Non-Primary/Non-Secondary Early Syphilis; and Late Latent Syphilis
- Date of birth: Congenital Syphilis
- MMWR Date¹: C. auris infection; Carbapenem-resistant Enterobacteriaceae (CRE); Perinatal Hepatitis B; Chronic Hepatitis B; Sickle Cell Disease; Staph aureus reduced susceptible to vancomycin (VISA); Toxic Shock Syndrome, non-streptococcal; and Toxic Shock Syndrome, streptococcal
- Alternative MMWR Date²: Chlamydia; Gonorrhea; and Chronic Hepatitis B
- Symptom Onset Date: All other diseases

¹"MMWR date" is derived using the following hierarchy of date fields: 1) The earliest date of illness identification, 2) Earliest laboratory specimen collection date, 3) Date of provider diagnosis, 4) Date of initial report to public health, and 5) Event create date in NC EDSS. Prior to 2016, the MMWR date was based only on the date the event was reported to public health.

²"Alternative MMWR Date" is derived using the following hierarchy of date fields: 1) The earliest date of illness identification, 2) Date of Initial Report to Public Health, 3) Specimen collection date, 4) Date identified as contact, 5) Event create date in NC EDSS.

Case criteria, methodology for counting cases, and included populations often vary by disease. Annual case counts in this NCD3 dashboard may differ from those published for North Carolina by the Centers for Disease Control and Prevention (CDC). This is because North Carolina publishes case counts for all reports meeting case definition, including classifications of Confirmed and Probable. Surveillance, investigation, and control measures are applied to all reported cases regardless of classification. Data are suppressed for any cell for which the population denominator is less than 500, and for additional cells as needed to prevent discovery of the suppressed cells by subtracting from row or column totals.

Annual case count and incidence rates for diseases included on the NCD3 dashboard may also differ from those published by North Carolina DPH at <https://epi.dph.ncdhhs.gov/cd/figures.html> because data may have been extracted at different time points or processed differently.

Population Data: The NCD3 Dashboard uses the Census demographic population estimates from the Census Bureau's Population Estimates Program (PEP) to estimate population rate denominators. More information about Census Population and Housing Estimates is available at the website: <https://www.census.gov/programs-surveys/popest/data/special-tab/content.html>

Incidence rates for Influenza - Adult Death, Influenza - Pediatric Death, and HIV are calculated using age-specific population estimates. Incidence rates for all other diseases are calculated using total (all ages combined) population estimates.

Contact Information

For questions, comments, concerns, or technical assistance, please contact us at cdb_dashboard@dhhs.nc.gov.