# NCHS's 2024 Year in Review: Major Milestones and Accomplishments

NCHS accomplished many successes across broad public health disciplines in 2024, including the following standout achievements:

# Vital Records

# Modernization of the National Vital Statistics System

The NVSS Modernization Initiative made major strides in 2024 to make vital records reporting faster and more efficient. Jurisdictional vital records offices adopted the Health Level 7 Fast Healthcare Interoperability Resources (FHIR) mortality standard—a significant leap forward that allows vital records offices to share death certificate data with NCHS more efficiently. By the end of 2024, 12 jurisdictions had su ccessfully implemented this modernized process.

The transition to FHIR for death certificate data has reduced the processing time for receiving and handling coded cause-of-death and race information from NCHS by as much as 75%. As a result, public health officials can access important data much more quickly. In 2025, NCHS will continue to expand FHIR use by transitioning another 12 jurisdictions to the new standard. Building on the success achieved with death record data, NCHS will expand testing the exchange of birth records using FHIR.

# Accelerated availability of vital records data through CDC WONDER

As a result of enhancements to the CDC WONDER system, provisional birth and death data are now available to users with death data updated weekly and birth data updated monthly. Before these enhancements, users could access only final data for a calendar year through CDC WONDER, and those data were not typically available until nearly a year after the close of the previous year.

In 2024, the provisional data available through CDC WONDER was also expanded to include births in Puerto Rico. Provisional birth and death data for the remaining U.S. territories are expected to be added to the system in early 2025. The availability of current data for all jurisdictions is critical for the early identification of emerging health conditions and changing causes of death. Early identification will improve the ability to respond quickly to new health threats. In 2024, data users accessed birth and death data through WONDER approximately 2 million times per month.



# Rapid Surveys System

NCHS fields <u>Rapid Surveys</u> fast and often, adapting its surveys as specific public health questions arise. This makes evidence-based decision-making better and faster for those working to protect and improve health in the United States. NCHS conducts Rapid Surveys several times each year. No two Rapid Surveys are alike; each survey includes a broad range of questions based on CDC's needs at that time.

In 2024, NCHS has released data from five rounds of data collection, with the most recent release on December 12, 2024. These data relate to positive childhood experiences, sources of information on childhood vaccines, and reasons for difficulty getting children vaccinated.

Data from Rapids Surveys Releases can be accessed via NCHS's online tool.

# NCHS Data Query System

The NCHS <u>Data Query System</u> (DQS) is NCHS's first cross-cutting data query and visualization tool, bringing together data from across NCHS and other data systems into one easy-to-use portal. DQS includes data on more than 150 topics. This statistically rigorous data tool is dynamic, flexible, and responsive to user needs.

DQS's defining feature is its ability to bring together disparate data assets into a single access point and present information in a standardized way. Data users can explore similar estimates from different data systems, along with accompanying statistical information, so users can select the most useful estimates for their purpose. Data users can download estimates in chart or table format and can access DQS via web or mobile devices. These factors improve efficiencies in the way users can access NCHS data systems.

DQS data assets are updated on a rolling basis. In fact, more than two-thirds of DQS's data have already been updated since the tool was launched in May 2024. Enhancements to the application are underway to continue to improve data users' experience with the system.

# Health Care Surveys

# Implementation of cloud technology in health care surveys

In 2024, NCHS began collecting, processing, and analyzing electronic health record data in the cloud for the National Hospital Care Survey and the National Ambulatory Medical Care Survey (NAMCS) Health Center Component. This enhancement of data infrastructure allows for more timely collection and processing of electronic health record (EHR) and claims data. Cloud technology has reduced the processing time for the large healthcare datasets to just hours instead of days on the previous platform.

#### First linkages of EHR data from 2021 NAMCS Health Center Component

For the first time in its 50-year history, NAMCS has begun linking its survey data to external data files. Linkage between NAMCS and death certificate data from the National Death Index (NDI) data were released through the NCHS Research Data Center in October 2024. Linking NAMCS HC Component data with NDI mortality data provides the opportunity to conduct a vast array of patient health outcome studies to investigate the association of a wide variety of health factors with mortality. NAMCS linkage with federal housing assistance program data was released in December 2024. This linkage could support studies focused on the effect of housing assistance program participation on health.

#### Health center visit estimates

In 2024, NCHS released its first interactive dashboard of <u>Preliminary Estimates of Visits to Health Centers in the United States</u>. Data include all health center visits by demographic characteristics, as well as visits for maternal, mental, and respiratory health. January—June 2024 data were released in December 2024, with a lag time of only 6 months. Release of these preliminary estimates aligns with CDC's priority on Supporting Young Families (maternal health visits) and NCHS's goal to accelerate health data capabilities by providing more timely data for policymakers.

#### New Innovative Statistical Tools

# Model-based early estimates

NCHS developed and published a <u>new modeling tool</u> for small domain estimation, which will help analysts produce estimates for small subgroups. This new tool offers substantial improvements in estimate precision and accuracy, allowing for the dissemination of more data on disparities for small subpopulations. The ability to make more precise estimates will provide critical support for targeted public health interventions.

#### Virtual Data Enclave

In 2024, NCHS's Research Data Center (RDC) processed and approved 58 applications for access to restricted-use data. Now fully operational, the NCHS Virtual Data Enclave (VDE) onboarded 12 federal employee-based projects. The NCHS RDC plays a crucial role in facilitating data researchers' access to high-quality restricted-use data, while also ensuring privacy. These data are essential to advancing public health research that informs policies and interventions.