Building the Right Foundation

For the first time, DMI is providing a unified foundation for public health data that is both resourced and comprehensive.

Through this priority, we are improving data collection, analysis, and sharing at CDC and across a set of core public health data sources that are used for all diseases and conditions.

Real-Time Data Collection: We are creating new pathways for surveillance data to flow seamlessly between jurisdictions and CDC, collecting more demographic data, and increasing the number of laboratories and health departments who are connected.

Cloud-Based Services: We are moving more of CDC's data securely into the cloud to streamline the way we process, store, visualize, and share it.

During the COVID-19 response, we have grown our capabilities to respond to any health threat.

Learn More

Automation: We are automating more data from critical sources like electronic health records and death certificates to allow hospitals and other data providers to begin "turning off their fax machines."

State and Local Capabilities: We are answering state, tribal, local, and territorial needs through a mix of funding and technical support, with dedicated data modernization leads in every jurisdiction.

Reimagining data and technology

Public health needs to be able to get the right information to the right people at the right time. DMI is creating common frameworks that connect people and data faster.

A Vision for Public Health Data: The North Star Architecture is transforming how data are coordinated and connected with healthcare and across public health at all levels of government.

- Read how the North Star Architecture redraws the blueprint for public health data
- Learn about the CDC "Front Door" for data

Connecting People with Data Faster: A cloud-based Enterprise Data, Analytics, and Visualization (EDAV) platform is allowing CDC's scientists to catalogue, analyze, and publish findings faster than previously possible.

- Read how modern approaches "lift all boats" at CDC

Modernizing core data sources

With DMI, we've created new and more automated pathways for core data sources that handle cases, lab results, deaths, notifiable diseases, immunizations, and emergency visits. These are systems used by all of CDC and all of public health.

Case data

- Electronic Case Reporting (eCR) is bridging the electronic exchange of information between public health and healthcare for timely, accurate, and accessible disease surveillance. By expanding the use of eCR, DMI is helping public health "turn off the fax machines"
- Case surveillance modernization is making it faster and easier for state health departments to report notifiable disease data to CDC. With DMI, public health is sprinting toward the next generation of case surveillance.

Laboratory data

- Electronic Laboratory Reporting is being enhanced and modernized to better report notifiable conditions and address the surveillance and data needs of today. DMI is expanding laboratory data exchange and blazing new pathways for connection across our nation.

Emergency visit data

- The National Syndromic Surveillance Program is making it easier for public health to receive early warning signals by capturing what's happening in emergency departments and other healthcare facilities.

Death data

- The National Vital Statistics System is transforming surveillance systems so they can deliver high-quality data on births and deaths in near real time, leading to a timelier understanding of death.

Immunization data

- Integrated IT systems — both public and private, as well as new and existing — are used to ensure successful vaccine allocation, distribution, administration, monitoring, and reporting. By bringing this information together, DMI is transforming immunization data from end to end.

Healthcare capacity and utilization data

- Data from the National Healthcare Safety Network assess the availability of healthcare resources like staff, beds, and equipment. This helps communities understand the stress on hospital systems, how many people are sick at any given time, and where best to direct resources.

Support for state, tribal, local, and territorial partners

DMI is providing public health departments and partners with the tools and resources they need to develop and implement the next generation of public health data systems.

This means they spend less time on manual processes like paperwork and data entry, and more time using data to generate lifesaving ideas and insights.

Read in their own words how DMI helps state, local, tribal, and territorial health departments modernize.

> "DMI is a tremendous opportunity to make a big leap forward for public health."

– Philip Huang, MD, MPH, Director, Dallas County Health and Human Services and Chair-Elect, Big Cities Health Coalition

Building the Right Foundation: By the Numbers

More than 170 conditions can be reported using eCR, **up from only 20** at the beginning of 2020.

67% of deaths are now reported electronically **within 10 days** of death (goal=80%).

More than 70% of emergency department data is received **within 24 hours of a visit.**

During the pandemic, we scaled up notifiable disease reporting systems to receive **10X the usual case volume.**

Within the first year of EDAV operation, CDC saved **more than $6.5M dollars** in infrastructure investments that would have been made to build smaller versions of data silos.

OCHIN started using eCR at more than 1,000 healthcare delivery sites, saving a potential **160,000 staff hours** over a 12-month period.

Last Reviewed: June 16, 2023
Source: Centers for Disease Control and Prevention, Office of Public Health Data, Surveillance, and Technology