AN URGENT NEED TO MODERNIZE

PUBLIC HEALTH IS ENTERING A NEW ERA.

The Coronavirus Aid, Relief, and Economic Security (CARES) Act provided CDC with $500 million specifically for public health data modernization. New investments have enabled CDC to take the first steps to strengthen the public health data and surveillance infrastructure of the United States. CDC’s Data Modernization Initiative (DMI) is bringing together state, tribal, local, and territorial (STLT) public health jurisdictions and our private and public sector partners to create modern, interoperable, and real-time public health data and surveillance systems that will protect the American public.

CDC’S DMI APPROACH

Data are the foundation to public health, as public health depends on widespread and rapid access to data to drive decision-making. Through a set of targeted investments across three priority thematic areas, CDC aims to promote seamless reporting of clinical and laboratory data to public health, ensure interoperability among core public health surveillance systems, and support cross-cutting upgrades, such as migration to the cloud and access to new data sources. Collectively, these activities will help ensure that the systems and services funded by CDC will scale nationwide and adapt to meet evolving needs.

DATA SHARING ACROSS THE PUBLIC HEALTH ECOSYSTEM

Automate data collection and support multi-directional data flows among STLT partners and CDC.

ENHANCING CDC SERVICES AND SYSTEMS FOR ONGOING DATA MODERNIZATION

Adopt enterprise-wide infrastructure and services that enable data linking, sharing, analysis, and visualization.

NEW STANDARDS AND APPROACHES FOR PUBLIC HEALTH REPORTING

Conduct real-world testing of new standards for accessing data in electronic health records and assess the policy implications of these new approaches.

CDC DATA MODERNIZATION FUNDING OVERVIEW

In FY 2020, CDC obligated over $130 million of CARES Act funding to support “Enhancing CDC Services and Systems for Ongoing Data Modernization,” including contracts for cloud migration, enterprise data analysis, and rapid person-based data collection.

In FY 2021, CDC plans to obligate another $200 million to support the DMI three priority thematic areas, including system-to-system interoperability for scalable responses and cloud-based data lakes for rapid detection and response.

In total, $500 million from CARES will enable CDC to begin to expand its public health and surveillance infrastructure by helping improve public health’s ability to inform the public, evaluate health outcomes, and inform evidence-based decision-making, policy, and public health response.
A PLAN FOR COMPREHENSIVE PUBLIC HEALTH DATA TRANSFORMATION

STRENGTHENING THE CORE OF PUBLIC HEALTH

COVID-19 has underscored the need to make investments that support multi-directional and multilayered data flow and allow for more dynamic exploration and interpretation of data. DMI Initiatives within the three priority thematic areas will modernize the public health landscape and align to the U.S. Public Health Surveillance Enterprise core data systems:

- **Syndromic Surveillance**
  - Gives faster understanding of emerging health threats through electronic reporting of emergency department visits

- **Electronic Case Reporting**
  - Offers earlier disease detection and intervention through automated reporting of certain diseases and conditions from electronic health records

- **Notifiable Diseases**
  - Reduces burden on states for reporting notifiable diseases to CDC through modernized electronic messages

- **Electronic Laboratory Reporting**
  - Supports faster, more complete automated laboratory reporting of notifiable conditions to local and state health departments

- **Vital Records**
  - Captures data from ~6 million births and deaths annually that can signal changes in trends, monitor urgent public health events, and provide faster notification of cause of death

LONG-TERM OUTCOMES OF DMI

- CDC can rapidly identify and effectively mitigate emerging threats

- Trusted data promotes evidence-based behaviors, interventions, and solutions to protect health

- Every American has equal opportunity to attain the highest level of health possible

- All people have the right information at the right time to make sound decisions

- Our country is better prepared for, and protected from, all types of public health threats

CDC’s DMI investments build on and complement other activities, such as CDC’s engagement with the United States Digital Service and other work to fight the COVID-19 pandemic.

We still need sustained investments to improve accessibility and interoperability with state and local partners, scale services across the agency, and ensure widespread adoption.

LOOKING FORWARD >>