

Centers for Disease Control and Prevention (CDC)

A CDC Roadmap for Data Modernization

CDC is dedicated to unlocking the full potential of data for disease detection and elimination. The Data Modernization Initiative (DMI) marks the first comprehensive strategy to modernize data, technology, and workforce capabilities—together and at once. This initiative supports public health surveillance, research and, ultimately, decision making.

It addresses key questions, including:

- How do we improve timeliness and quality of data?
- How can we better coordinate data activities and systems?
- How can we reduce burden on data partners?
- How can we integrate emerging technologies more effectively?

In the long term, this initiative will help CDC and its partners chart a course to a future where data drives action in real time—efficiently, flexibly, rapidly, and with impact—in a post-COVID world. The COVID-19 pandemic has underscored public health’s need to modernize – and delivered a powerful drive to make it happen. To do this work strategically and effectively, we have developed a roadmap for data modernization that will keep our purpose front and center.

[*The CDC Data Modernization Initiative: A Roadmap of Activities and Expected Outcomes* pdf icon](#)[PDF – 315 KB] clearly lays out a path from where we are now to where we need to be. This framework:

- Presents a vision of what our modernization strategy was created to do
- Guides decisions for allocating resources
- Provides a structure to track our progress and success along the way

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 enterprise -- Automate data collection and support multi- directional data flows among state, territorial, and local partners and CDC.

New stands 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.

Enhancing CDC services and systems for ongoing data modernization -- Adopt enterprise-wide infrastructure and services that enable data linking, sharing, analysis, and visualization.

More information on the CDC Data Modernization Initiative can be found at:

<https://www.cdc.gov/surveillance/surveillance-data-strategies/data-IT-transformation.html>