

# OPHDST

Office of Public Health Data,  
Surveillance, and Technology

## Public Health Data Strategy

### 2023 Year-End Lookback Report: *From Insights to Impact*

Learn more about  
the Public Health Data  
Strategy at [CDC.gov](https://www.cdc.gov)



## Welcome to the Journey



Sometimes, to truly appreciate how far we've come, we need to look back. Since its establishment in 2023, the Office of Public Health Data, Surveillance, and Technology (OPHDST) has been on a remarkable journey to enhance data capabilities through the Public Health Data Strategy (PHDS).

As we reflect on this journey, we credit much of our progress to a dedicated team, not just in our office or at CDC, but across the public health ecosystem. Together, we are addressing the gaps in the public health data system to improve public health's ability to detect and respond to new and emerging threats, improve health outcomes and promote health equity.

This Lookback Report goes beyond merely recounting our achievements; it serves as a testament to the distance we've traveled. Please join us in sharing this reflection with your network and on social media as we acknowledge our progress in data modernization and look forward to what's next!

Thank you,

Jen

Jennifer Layden MD, PhD  
OPHDST Director

## 2023 Public Health Data Strategy Milestones

### Public Health Data Strategy

The Public Health Data Strategy is a focused, multi-year plan to bridge health data gaps and reduce the complexity of data exchange. The plan launched in 2023 with an ambitious set of 15 milestones. These time-limited markers are integral steps toward our broader vision, each contributing significantly to our journey of progress and innovation. At the end of the year, 12 milestones had been met while work continues on the remaining three.

The strategy aligns with CDC's efforts to build long-term accountability for critical core data sources including cases, laboratory results, emergency department visits, vital statistics, immunizations, hospital capacity and wastewater surveillance. It provides clarity for healthcare organizations, public health partners and the public on actions taken and progress achieved.

Learn more about the [Public Health Data Strategy](#), including new milestones planned through 2025.

### Meeting 2023 Milestones

Each PHDS milestone aligns with one of four public health goals, marking progress from simplifying data submission and improving data system interoperability to enhancing real-time disease surveillance. The milestones we met in 2023 have strengthened public health data systems by **making it easier to share data, providing access to modern tools and improving real-time health monitoring.**

These advances propel public health action.

Through faster responses and streamlined processes, we empower public health to operate at its optimal capacity — swiftly responding to emerging threats, investigating outbreaks effectively and proactively preventing health crises.

# Charting the Course for Improved Public Health Action

The PHDS established four main goals and a set of 15 milestones to confront public health challenges. To date, we have successfully met 12 of these milestones by enhancing detection, streamlining responses and improving information sharing.

## Public Health Data Strategy Goals

### Strengthen Public Health Data

To make sharing health data simpler and more standardized

### Speed Up Health Data Tools Access

To bring modern data tools to more places

### Share Health Insights Quickly

To make vital disease trends accessible

### Advance Data System Interoperability

To improve how different health data systems communicate

## Select 2023 Milestones In Action

### Respiratory Virus Data Channel

*"The escalation in cases has led to an increase in my encouragement for patients to get vaccinated, particularly before the holiday season."*

—Data Channel User

#### Launch of CDC's Groundbreaking Online Respiratory Virus Data Channel Transforms Public Health Through Innovation and Commitment

- **More than four million visitors** since the Data Channel was launched in September 2023 (with more than one million page visits in March 2024).
- **Nine different data sources** across 20 subject areas of CDC are integrated in the Data Channel, which is updated every seven days.

 [View the respiratory threat season preparedness story](#)

### Technology Tools for Rural Hospitals

*"Using eCR saved our healthcare organization almost \$700,000 and 21,900 provider hours over a one-year period compared with manually reporting COVID-19 cases."*

—Dr. Marcus Speaker

#### Expanding Electronic Case Reporting (eCR) Among Critical Access Hospitals (CAHs) Empowers Swift, Secure Public Health Responses

- At the end of 2023, 76 additional CAHs across 24 states were able to send electronic case reports to their STLT public health departments, making a total of **380 CAHs using eCR**.
- Increased number of CAHs using eCR represents faster reporting of healthcare data for more than **1.8 million Americans**.

 [View the reducing data reporting burden story](#)

### Commercial Lab Data Access

*"After a surge in Mycoplasma pneumonia infections in China, CDC used NSSP data to quickly evaluate its spread in the U.S., proving vital for ongoing response."*

—CDC Division of Bacterial Disease

#### Making Commercial Laboratory Data and Visualizations Widely Available Optimizes Vaccine Distribution for Equitable Community Health

- Laboratory data representing **more than 300 million Americans** became available (up from data representing more than 285 million in early 2023).
- Newly available data included information on antibiotic resistance threats, drug tests and **more than 100 conditions**.
- CDC was able to create and share visualizations within **less than a day** of receiving the laboratory data.

 [View the expanded sharing of laboratory data story](#)

### Faster Data Visualization

*"We were able to update the laboratory code to correctly classify the results and update our database during the March data submission."*

—STLT Partner in Tennessee

#### Improving Speed of Access to Maternal and Infant Health-Related Data Informs Critical Health Decisions for Localized Action

- **36 partners across 12 jurisdictions** have accessed automated dashboards and used the information to develop plans for public health action.
- **More than 16 data assets and dashboards** have been developed and shared with jurisdictional partners.
- One CDC program analyst can update, package and share datasets/dashboards with jurisdictions in **less than an hour** (a task that once took multiple analysts several days to accomplish).

 [View the maternal and infant health-related data story](#)

## Shaping the Path to Data Modernization

Data modernization in public health is a continuous process of enhancement and adaptation. CDC's Data Modernization Initiative (DMI), launched in 2019, tackles systemic challenges in data and systems, while championing workforce development, expanding partnerships, fostering cultural change and promoting unified governance. These efforts serve to advance the Public Health Data Strategy.

PHDS propels DMI priorities forward — faster. Harmonizing the PHDS milestones with DMI effectively addresses system fragmentation and enhances healthcare connectivity. Our approach not only achieves our immediate goals but bolsters public health's shared journey to accelerate response to emerging threats and prevent health crises.



### Designing for Public Health

By bringing together teams of experts in public health, human-centered design, product strategy, and data science and engineering, we will co-create flexible solutions to modernize processes and technologies to support the public health workforce. These solutions will enable public health practitioners, healthcare providers and the public easier access to the right public health data for the right public health action.



### Building Modern Capabilities

A notable example of modernization is the improvement of electronic case reporting (eCR). Automating eCR from healthcare providers to public health authorities has markedly decreased the reporting workload. This efficiency not only replaces outdated systems but also speeds up the flow of case data, enhancing our ability to detect threats and respond swiftly.



### Connecting to Health IT

Healthcare data is often relied upon during public health investigations and emergency responses, necessitating repeated exchanges between public health agencies and healthcare providers. Leveraging health IT advancements can help simplify this iterative, burdensome process. Ensuring interoperability and data sharing between healthcare and public health systems enables faster detection and less resource-intensive monitoring.



### Working Together

This mutual journey requires the active participation of government agencies, healthcare providers, researchers and community organizations across the public health and healthcare landscape. Together, we can forge an integrated, efficient and responsive future where public health data systems help address challenges.

We thank you for joining us on this important journey.