

Advancing Data for Public Health Action

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Centers for Disease Control and
Prevention (CDC)



Who We Are

The Office of Public Health Data, Surveillance and Technology (OPHDST) is leading efforts to improve the availability and use of public health data to inform decision-making and action across the public health ecosystem.



Customer-centric, user-focused, mission-based, and here to serve



A team of experts with cross-functional knowledge and skills



Driven by unified public health data strategy that helps focus our resources and clarify our priorities

National Center for Health Statistics, the federal government's principal health statistics agency, reports to OPHDST



CDC's Office of Public Health Data, Surveillance and Technology (OPHDST)

Office of the Director

Detect and Monitor Division

Enables rapid detection on the state and local levels, tracks diseases and conditions nationally and improves surveillance capabilities of STLTs, federal partners and internal officers

Investigate and Respond Division

Empowers STLTs and other PH actors with the tools to investigate, prevent and minimize PH risks and innovate to bolster future responses

Inform and Disseminate Division

Provides the public and PH decision makers timely and actionable data, data products and analytic insights to guide decisions

Data Policy and Standards Division

Helps set and interpret data and technology policy and standards to ensure data transmitted across the PH ecosystem is robust, interoperable and conforms to open data policies

Platforms Division

Ensures that data used across CDC is robust and as accessible as possible, and to make reusable and shareable technologies available across the PH ecosystem

*Our vision
expands on
modernization
efforts and
focuses on critical
components*

**to advance data
for public health
action to
equitably
protect health,
safety and
security.**



The Public Health Data Strategy (PHDS) has put us on a path to achieve our vision by outlining the data, technology, policy and administrative actions needed to exchange critical core data efficiently and securely across health care and public health.

Core public health actions



Public Health Data Goals

1

Strengthen the core of public health data

2

Accelerate access to analytic and automated solutions to support public health investigations and advance health equity

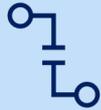
3

Visualize and share actionable insights to inform public health action

4

Advance more open and interoperable public health data

We still need to address our biggest challenges and long-standing pain points



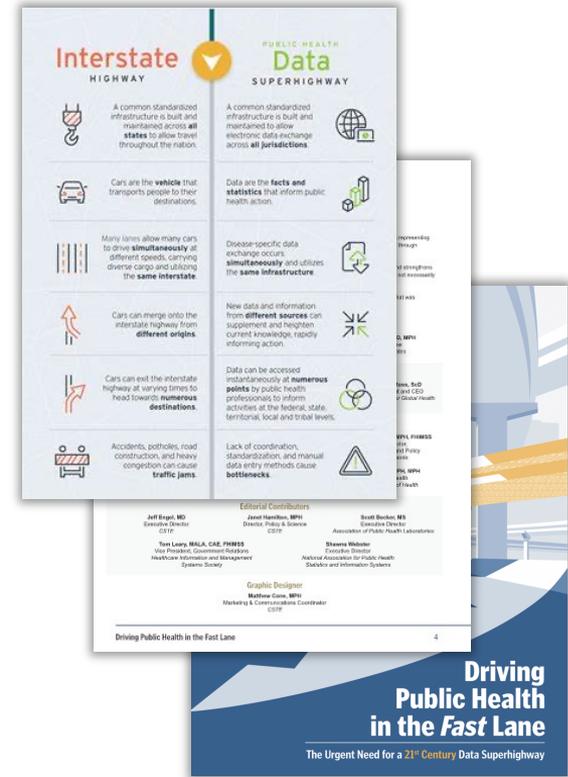
Disconnect between public health and health IT.



Siloed systems across public health and within CDC and jurisdictions.



Manual processes, outdated technology and lagging skills.



"Driving Public Health in the Fast Lane: The Urgent Need for a 21st Century Data Superhighway."
<https://www.cste.org/page/DM-2021>

We need to continue to reduce burden for partners

Tennessee's Public Health Department found that for **11 diseases** they used at least **20 surveillance systems** to send case data to the CDC.

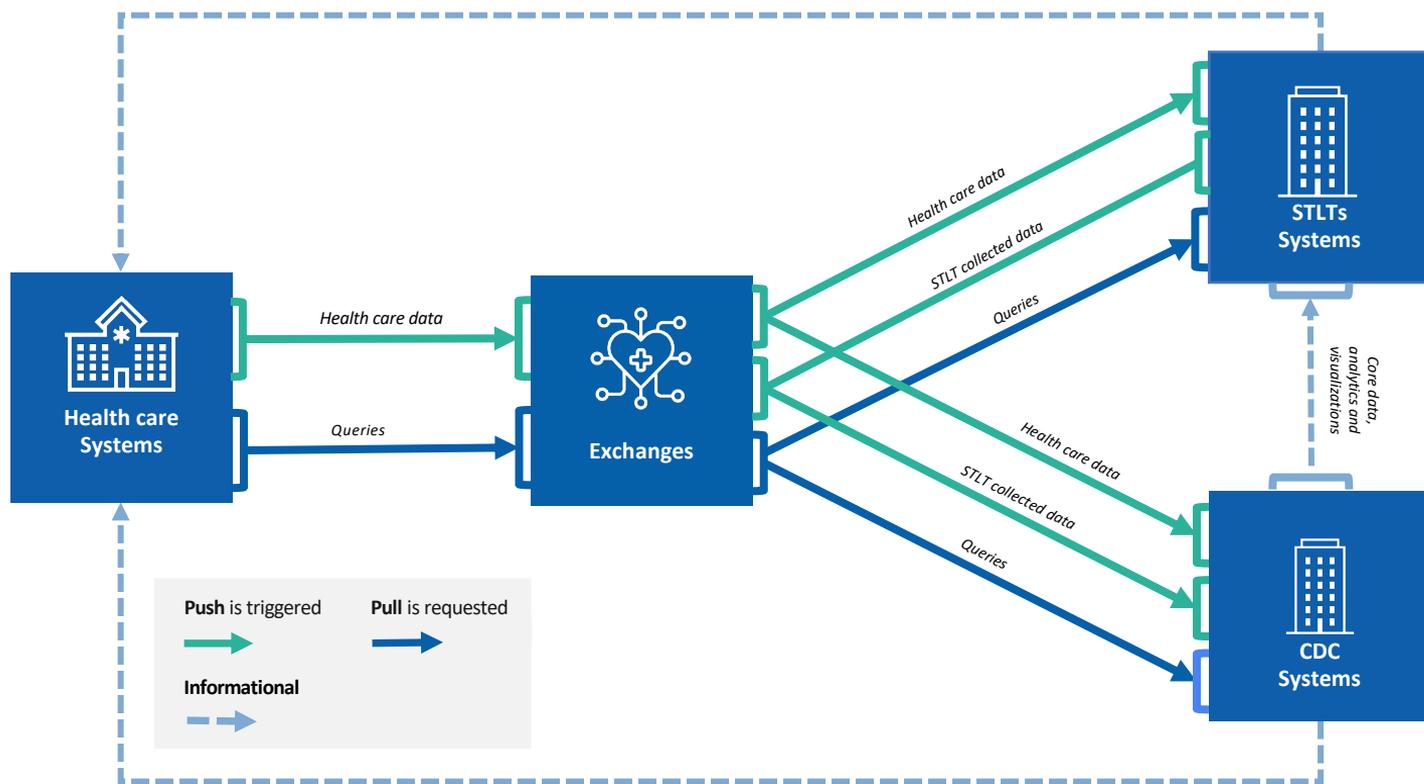


Opportunities within reach

- + Advances in health IT connectivity, interoperability, standardization and regulation.
- + Multiple federal agencies supportive of and engaged in modernization efforts.
- + Modernized, scalable technical approaches ready to expand across public health.
- + CDC prioritizing moving to enterprise approach for data governance and systems.
- + State, Tribal, Local and Territorial (STLT) advances made during pandemic and with DMI funding.



Hypothesized future: data exchange architecture



Transforming the future of data exchange

2024 Targets



eCR and query via TEFCA for near real-time reporting & investigations

2024 Target: 75% of reportable conditions reported by eCR; 40% CAH coverage



Increase coverage of syndromic surveillance to ~100% of ED visits

2024 Target: 95% ED visit coverage; continued improved visualization



~75% state & big city public health jurisdictions and CDC using TEFCA

2024 Target: Two public health use cases live



Broad adoption of FHIR® for most core data sources and across jurisdictions

2024 Target: FHIR® adoption for NVSS and health care measures



Broad adoption of USCDI and USCDI+ across public health

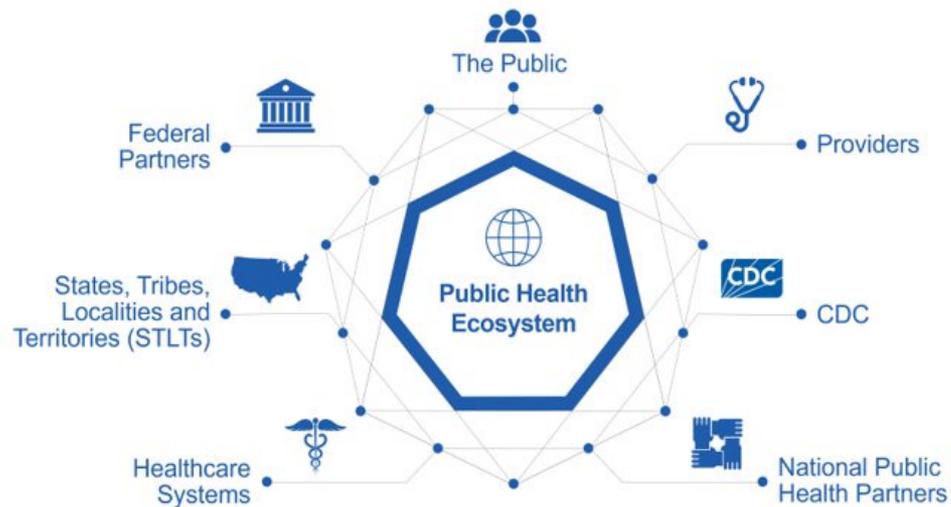
2024 Target: USCDI/+ adoption for case and lab data



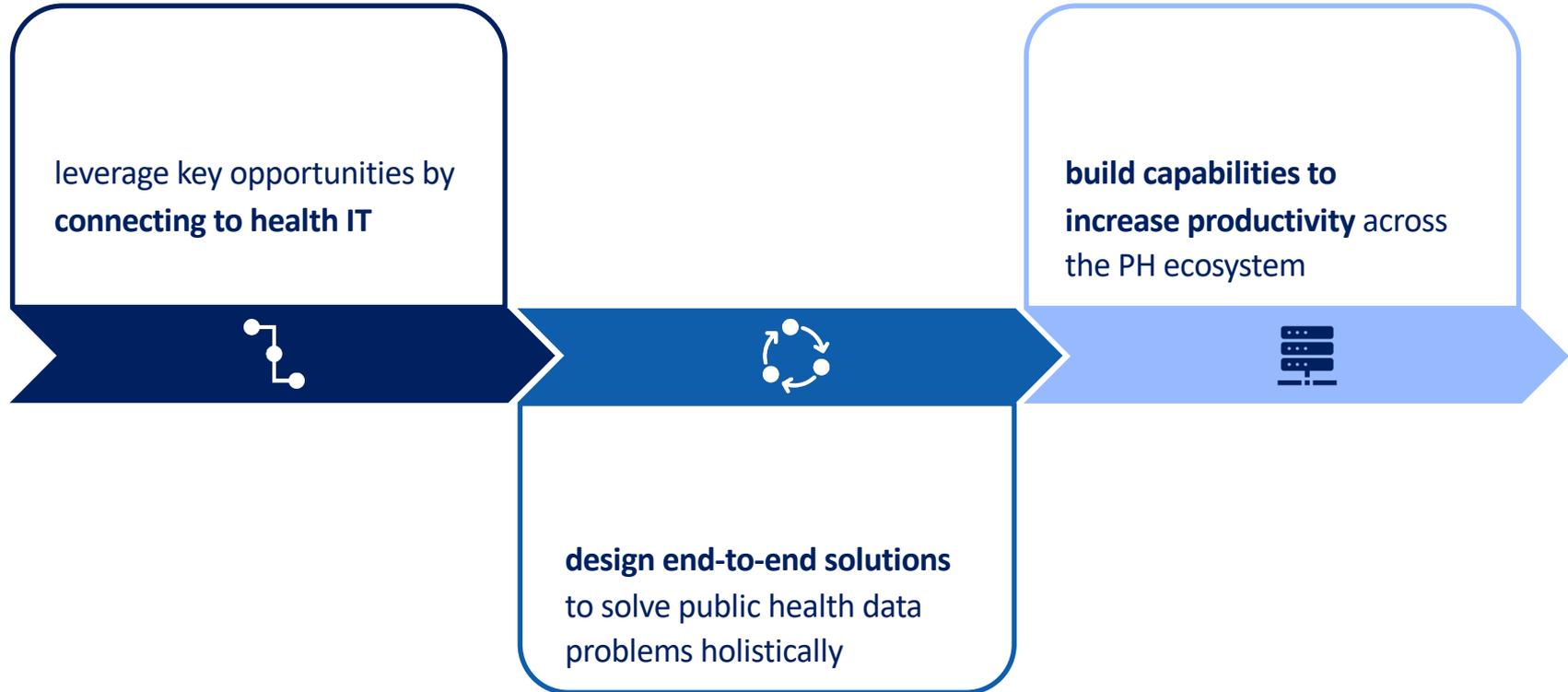
Leading to:

- Near real-time reporting and investigation of novel and serious health threats.
- Faster detection of common public health threats and outbreaks.
- Better insights into chronic disease conditions and trends.
- Nationwide real-time monitoring of public health threats.
- Faster sharing of information back to HC, improving clinical decision-making and patient safety.

Together, we will take a 'One Public Health' approach for Advancing Data for Public Health Action



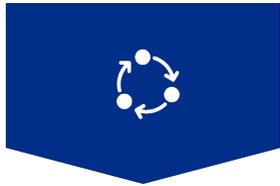
We will advance data for public health action to equitably protect health, safety and security if we ...



CDC's approach to supporting state, tribal, local, and territorial health departments



Continued
funding and
technical
assistance



Collaborations
to design, test,
and learn



Technical, policy,
and logistics
support through
the
implementation
centers



Recruit, place,
and support
100+ technical
experts in PHAs



Maturity model
and guidance
documents

Three engagement opportunities



Connecting to TEFCO

Connect public health to the health IT ecosystem

Go live with 2 STLT public health partners to exchange public health information using TEFCO Network by end of 2024. Alaska, Chicago, South Nevada, and Washington State have agreed to be the first four STLTs and we have the aggressive goal of going live with the eCR use case this summer, well before the end of the year.

★ Immediate need so we are better prepared, opportunity to test new things



Case Service Design (CSD)

Co-creating the future of case data exchange

CSD is a multi-year service design initiative focused on **defining and implementing end-to-end solutions for case data exchange** between healthcare; state, tribal, local, and territorial (STLT) jurisdictions; CDC; and associated partners.

★ Designing solutions holistically with a focus on people and processes



eICR Data Evaluation

Making health data more actionable and insightful for public health.

A collaboration between the CDC and local and state PHAs to **make electronic case data more usable and actionable** by leveraging data engineering expertise and tools developed centrally by CDC to generate insights and inform decision-making at the local, state, and federal levels.

★ Quick tests to understand potential value of EHR data for public health

Creating Our Public Health Data Future Together

Advancing Data for Public Health Action Needs **Everyone**



We Need Your Input on This Vision



Opportunities to Join Pilot Projects and [Learn More](#)



Connect with us

Email: OPHDSTpartnerships@cdc.gov

Subject line: Future State



For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



National Interest in Public Health Pilots

Case Service Design

Cleveland Department of Health
Pima County
Arizona Department of Health
Salt River Pima-Maricopa Indian Community
Maricopa County
Great Lakes Inter-Tribal Epidemiology Center
Minnesota Department of Health
Olmsted County Public Health Services
Boston Public Health Commission
Needham Public Health Department
State of Massachusetts Health Department
Southern Berkshire Public Health Collaborative
Milam County
Texas Public Health Region 7
Texas Department of Health Services
City of Lubbock Health Department
South Plains Health Department
Southern Nevada Health District

TEFCA

Washington State
Alaska
Maryland
Fairfax Country, VA
Dallas County
Chicago
Utah
Chicago
Southern Nevada, NV
Dallas, TX
Houston, TX
New Mexico
New York City
Virginia
California
Washington D.C.
Tennessee
Illinois
Iowa
LA County
Kansas City

eICR Pilot

Dallas County
Chicago