

# RIDOH

## Data Modernization Initiative Overview

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November 16, 2023

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# What is the Public Health DMI?

CDC's Data Modernization Initiative (DMI) is at the heart of a national effort to create modern, integrated, and real-time public health data and surveillance that can protect us from any health threat.

Launched in 2020 by CDC, DMI is a multi-year, billion-plus dollar effort to modernize core data and surveillance infrastructure across the federal and state public health landscape.

DMI is not just about technology, but about putting the right people, processes, and policies in place to deliver real-time, high-quality information on both infectious and non-infectious threats.

Our ultimate goal is to move from siloed and brittle public health data systems to connected, resilient, adaptable, and sustainable '**response-ready**' systems that can help us solve problems before they happen and reduce the harm caused by the problems that do happen.

CDC is connecting with partners from across public health and the private sector – including in healthcare, research, and academia – to make sure we get this right.

# CDC and RIDOH Plans for Technology & DMI

## CDC Plans and Goals for Data Modernization

**DMI is how CDC will meet its commitments to:**

- ❖ Strengthen data reporting, management, and analytics across public health
- ❖ Conduct proper surveillance – not just of COVID-19 but also of future public health threats
- ❖ Support our staff in pursuing innovation and building state-of-the-art data science skills
- ❖ Deliver guidance the public can trust

## RIDOH Vision for Technology & Data Modernization

**Developed at Technology & Data Executive Steering Committee**

- ❖ To enable the delivery of efficient, sustainable, data-driven, accessible, equitable and secure public health information systems and services.

### What does this mean for RIDOH?

1. Expect to see DMI related components in current and future CDC grants
2. Robust IT Governance will be a need, and a grant requirement
3. Modernization/leverage of IT Shared Services, hiring IT/Informatics staff
4. Workforce development and training to ensure RIDOH is ready to meet new grant requirements.

# Data Modernization Initiative: Scope

This initiative enables the delivery of **efficient, sustainable, data-driven, accessible, equitable, and secure** public health information systems and services to enhance Public Health operations in Rhode Island.



## Public Health Information Systems

- To support the advancement of platforms to improve efficiency across data and teams



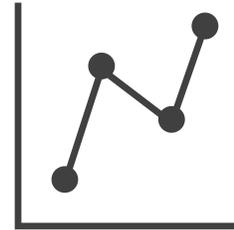
## Data Governance

- To establish a formal framework for gathering, storing, processing and disposition of data



## Data Lakehouse

- A central repository designed to store, process, and secure large amounts of structured, semi-structured, and unstructured data for visualization and analytics



## Dashboarding

- Enables interactive metrics to inform decision-making and statewide outcomes by proactively responding to needs in public health



## Data Learnings and Education

- To ensure staff are well equipped with skills and resources to enhance their daily operations with data.

# CDC Public Health Infrastructure Grant



Nov. 2022 to Dec.  
2027



PI: Sandra Powell  
PM: Rob Lucchetti



**DMI Related Milestones in respective workplans :** Workplan highlighted here is **only** for A3. Core DMI under PHIG and **not** the newly added A3. Supplement and the A3 LDX workplans. The two additional workplans are currently in development and have not been finalized yet.

- **Activity 1 Summary:** Assess and report the current capacity, gaps, and opportunities
- **Activity 2 Summary:** Create implementation plan for modernization of public health data infrastructure
- **Activity 3 Summary:** Create implementation plan for workforce development
- **Activity 4 Summary:** Participate in CDC-sponsored Data Modernization Calls, workshops, and webinars, related to trainings
- **Activity 5 Summary:** Accelerate implementation by proposing innovative modernization projects to enhance data quality, exchange, dissemination, and use

**Overlap:** Most overlap on milestones are with the ED/EDEX and ELC CORE C2. DMI Workplans

- The CDC has highlighted the overlap on this workplan with ELC CORE C2. and has proposed moving overlapped activities to PHIG. See appendix 1 for further details

## Highlights:

- The new workplans for A3. Core DMI, A3 Supplement and A3 LDX are due **July 15<sup>th</sup>, 2023**. However, these workplans should be made in conjunction with the ELC CORE C2. (Due August 25<sup>th</sup>) workplan modifications as well as considerations for ED/EDEX grant.

# ELC Enhancing Detections (ED) & ED Expansion (ED/EX)



ED: May 2020 - July 2024

ED/EX: Jan. 2021 – July 2024



PI: Dr. Utpala Bandy  
PM: Daniela Quilliam



**DMI Related Milestones in respective workplan:** Workplan for ED & ED/EX are combined into one singular workplan

- **Strategy 1, Activity 5:** Increase capacity for timely data management, analysis, and reporting for COVID-19 and other emerging coronavirus and other infections and conditions of public health significance.
- **Strategy 3, Activity 2:** Replacement or Upgrade of Laboratory Information Management System (LIMS)
- **Strategy 4, Activity 4:** Improve understanding of capacity, resources, and patient impact at healthcare facilities through electronic reporting.
- **Strategy 4, Activity 6 :** Establish or improve systems to ensure complete, accurate and immediate (within 24 hrs.) data transmission to a system and open website available to local health officials and the public by county and zip code, that allows for automated transmission of data to the CDC in a machine-readable format.

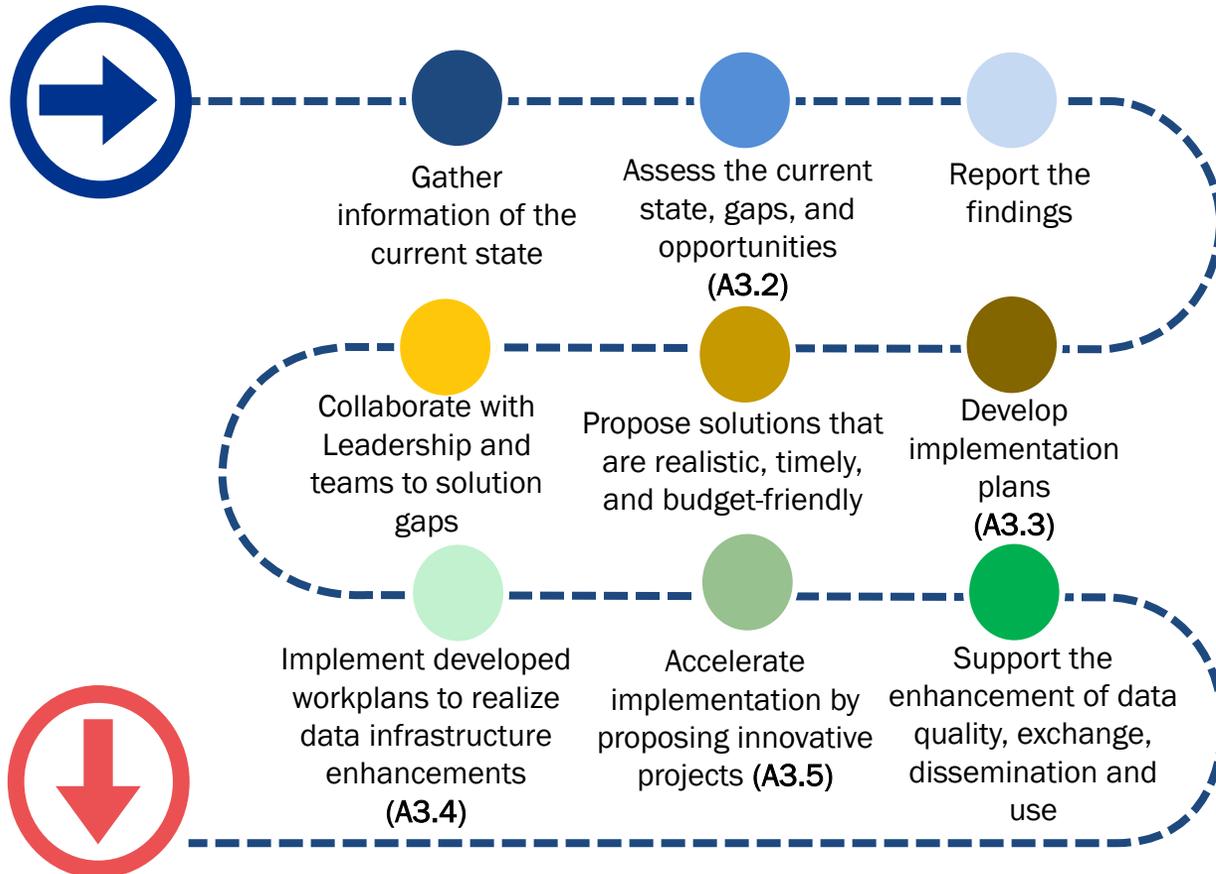
**Overlap:** Most overlap on milestones are with the CORE C2 Workplan as well as the PHIG

- Focus Activities from ED/EDEX with potential Overlap
  - **Strategy 1, Activity 5, Milestone 5:** Perform a gap analysis and a system comparison for infectious disease systems
    - PHIG & CORE C2.
  - **Strategy 4, Activity 6, Milestone 1:** Monitor, assess feasibility, and implement (if possible) a methodology to report death information to CDC. Note that Office of Vital Records reports deaths to NAPHSIS currently.
    - CORE C2– Tier 3
  - **Strategy 3, Activity 2:** Replacement or Upgrade of Laboratory Information Management System (LIMS)
    - CORE C1- HIS 2a.

**Highlights:** This grant will expire July 31<sup>st</sup>, 2024 and the CDC will not be extending this timeline. Therefore, these activities and funding must be complete July of 2024. There is currently no requirements or due dates to re-submit the ED and ED/EX workplan as of right now. Current next step is to consider work defined on ED and ED/EX when preparing for required submissions.

# Strategy 3 - Data Modernization (2/3)

The DMI team aims to take an agile, enterprise-wide approach in incrementally assessing, planning, and implementing modernization activities.



## Snapshot of Strategy 3.2 Workplan and Progress

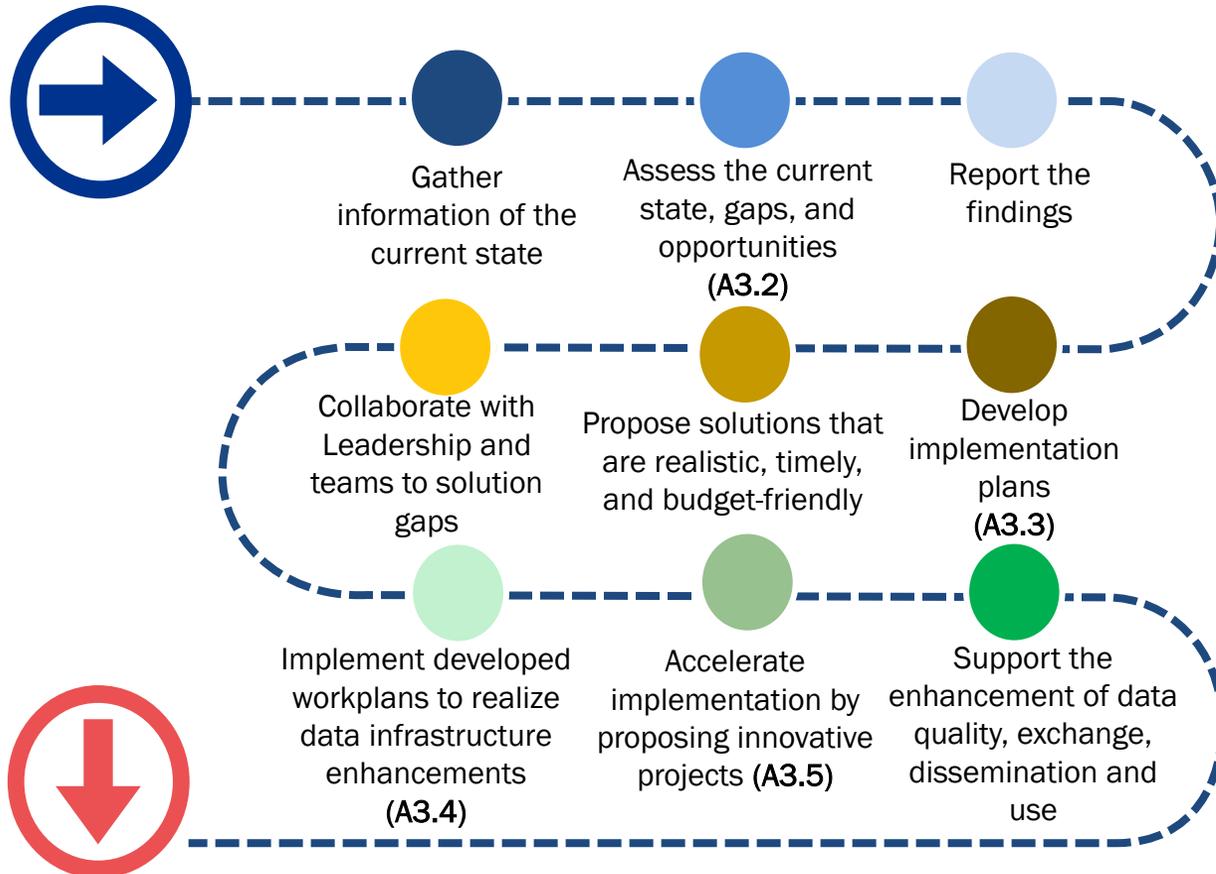
A3.2. Assess and report the current capacity, gaps, and opportunities to modernize the public health data infrastructure and workforce.

- In progress (Data Lakehouse underway; Dashboarding and Workforce (with equity focus) to come) Complete required assessment outlining current capacity, gaps and opportunities. CDC has an assessment tool available for use by jurisdictions.

*Bolstering a modern, connected system to respond to the next emerging public health threat*

# Strategy 3 - Data Modernization (3/3)

The DMI team aims to take an agile, enterprise-wide approach in incrementally assessing, planning, and implementing modernization activities.



*Bolstering a modern, connected system to respond to the next emerging public health threat*

## Snapshot of Strategy 3.3 Workplan and Progress

### A3.3. Create implementation plans

- Ongoing:** Identify enterprise-wide vision and goals for data modernization.
- Define technical standards for tools and services needed to achieve data modernization vision.
- Ongoing:** Incorporate services and resources available from CDC, other jurisdictions, public health partners, health care partners, and city/county/state governmental infrastructure.
- Plan towards iterative outcomes that first focus on addressing problems of highest public health value and lowest technical complexity.
- Utilize agile-focused methodologies to develop implementation plans

# QUESTIONS

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# Focus Areas

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- What areas of challenges does this stakeholder group feel the DMI could incorporate into its scope.
- What forums/stakeholders should be socialized on RIDOH DMI?
- What are your communication requirements?

# Parking Lot

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# Public Health Infrastructure Grant: Overview



**RIDOH has been awarded \$13.78M from the Centers for Disease Control to strengthen basic infrastructure (human capital, services, and systems) to promote and protect health.**

## Supports and sustains the public health workforce

- Recruit, support, and train new and existing public health staff
- Improve planning, systems, processes, and policies to retain public health staff
- Expand engagement to address mental, emotional, and physical well-being

## Strengthens organizational competencies

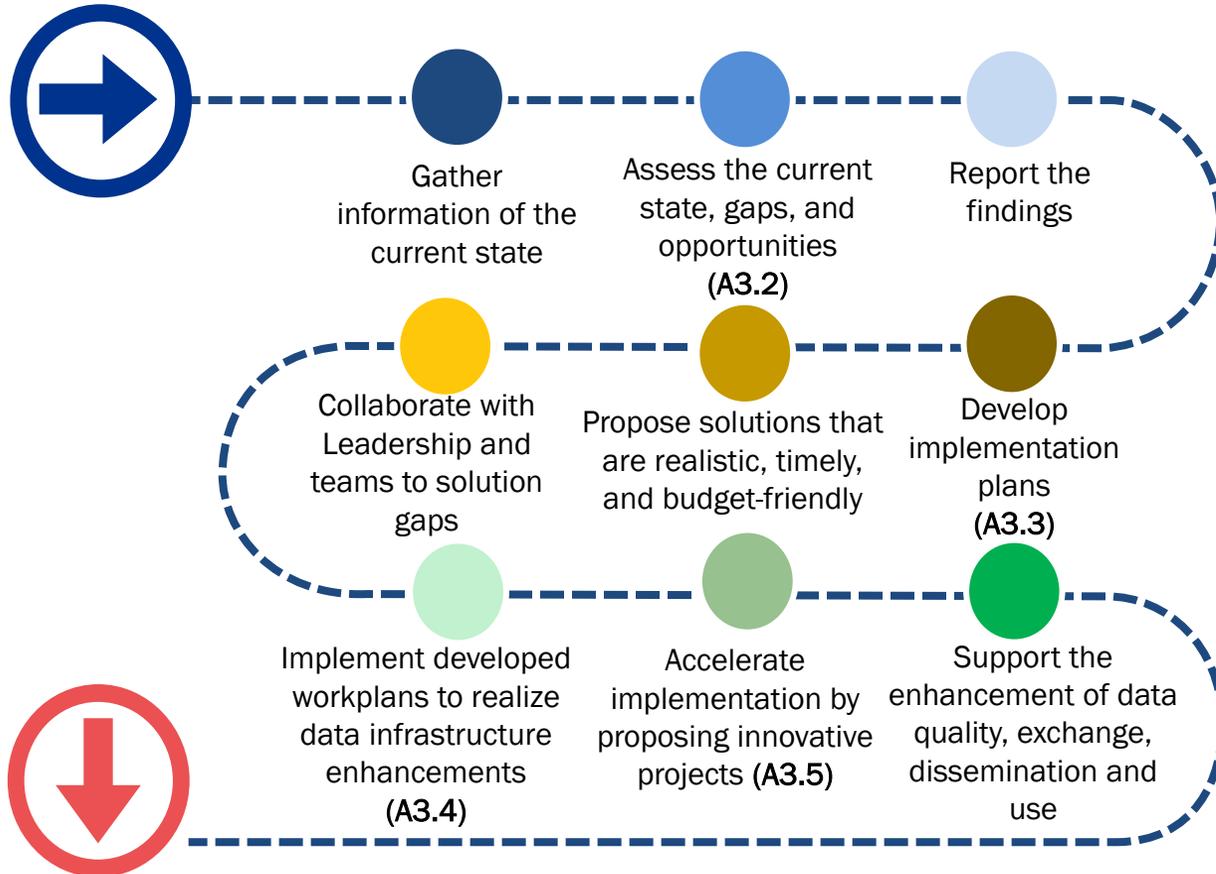
- Improve accountability and performance management
- Enhance communication and policy development
- Improve equity across the department by addressing leadership, governance, and strategic planning

## Establishes a more resilient public health system

- Modernizes core data and surveillance infrastructure across the Dept./Agency
- Supports flexible, scalable, and sustainable infrastructure to ease operations across programs and teams
- Increases data interoperability and availability of public health data (internally and externally)

# Strategy 3 - Data Modernization (1/3)

The DMI team aims to take an agile, enterprise-wide approach in incrementally assessing, planning, and implementing modernization activities.



## Snapshot of Strategy 3.1 Workplan and Progress

**A3.1. Identify a data modernization director and supporting team.**

- ✓ **Completed:** Identify enterprise-wide steering committee to guide assessment, planning and implementation of identified priority activities.
- **In Progress:** Expand departmental policies, procedures, and practices to orient towards an agile procurement, planning and implementation approach for DMI implementation.
- ✓ **Ongoing:** Engage contractors with technology, assessment, planning, system design, and implementation expertise to support activities, if needed.

*Bolstering a modern, connected system to respond to the next emerging public health threat*