### CDC Data Modernization Initiative | A Roadmap of Activities and Expected Outcomes



#### **ACTIVITIES**

If we (CDC and partners) do this ...

### COORDINATE PEOPLE AND SYSTEMS

Create interoperable systems: federal, state, local, and healthcare

Coordinate investments, decisions, and policies across CDC and with partners

Make data sharing easier through common policies, practices, and standards

Advance academic and private partnerships

#### ACCELERATE DATA FOR ACTION

Identify data for priority public health needs

Upgrade and modernize IT infrastructure

Strengthen the data science workforce

Adopt open standards and tools while protecting data security

Translate data into evidence-based recommendations

### SUPPORT STRATEGIC INNOVATION

Seek partner-driven data solutions

Develop next-generation tools (e.g., modeling, visualization, predictive analysis, machine learning)

Strengthen predictive analytics and forecasting

# SHORT-TERM OUTCOMES

... then we expect these changes to occur ...

Increased collaboration, communication, and messaging among CDC and partners

Reduced data collection and reporting burden at state, tribal, local, and territorial levels

Improved data sharing and interoperability through common standards like HL7® FHIR®

Increased capacity to quickly analyze, interpret, and act on data

Increased electronic reporting and specific enhancements to flagship CDC surveillance systems

**Stronger workforce** in data science, analytics, modeling, and informatics

**Targeted real-time communication** of data and results

Integration and use of data from new

develop, and deploy next-generation

Quick, continued data analysis with

adjustment of modeling in real time

or non-traditional sources

technologies

Improved pathways to explore,

## INTERMEDIATE OUTCOMES

... which will lead to ...

**Effective coordination** on complex health and emergency response challenges

Timely and complete data reporting to CDC

Efficient, secure data access and exchange between systems across the country

A more comprehensive picture to improve decision-making and protect health for all

Real-time, linked systems that **recognize threats early** to inform timely response

A highly skilled workforce that applies state-of-the-art data skills and tools

**High-quality information and guidance** to protect people's health

Open-source, enterprise-level technologies and coordinated systems

New approaches to address present and future threats

### LONG-TERM OUTCOMES

... our ultimate goals.



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 decisions



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

