

DMI 2022 SNAPSHOT

What does data modernization look like?

DATA MODERNIZATION LOOKS LIKE...

AN EPIDEMIOLOGIST

spending the day investigating COVID-19 cases instead of entering them into a spreadsheet



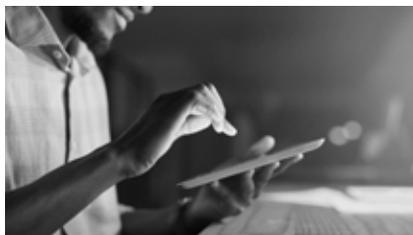
A COMMUNITY HEALTH WORKER

knowing precisely which neighborhood needs a pop-up vaccine clinic



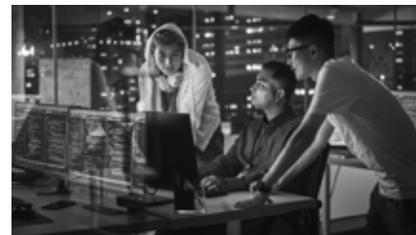
A PUBLIC HEALTH ANALYST

producing a report that used to take two days in just two clicks of a button



A RESEARCH TEAM

analyzing more than 12 million health records to understand latent tuberculosis infection



A RESPONDER

catching an uptick in overdose deaths and sending fentanyl test strips to the frontlines



A DATA SCIENTIST

visualizing social media feeds to help monitor suicide trends



A MULTI-STATE HEALTHCARE NETWORK

saving 160,000 staff hours that would have been spent on paperwork



A POLICYMAKER

using a real-time wastewater surveillance dashboard to send resources where they're needed most



MADE POSSIBLE THROUGH TECHNOLOGIES LIKE...

Automated, **ELECTRONIC REPORTING** that replaces paper and reduces the burden on health department staff

A suite of **CLOUD-BASED** tools that saves time and costs while analyzing more kinds of data faster than ever before

A **DATA CATALOG** where CDC's experts can see which data exist in any part of the agency on any disease or condition

One **FRONT DOOR** for state and local partners to send data to all of CDC instead of sending to multiple programs in multiple ways

A **NORTH STAR ARCHITECTURE** for data that can be used by every level of public health to collect, transform, and share information

COMMON STANDARDS that help different data systems across public health and healthcare speak the same language

Dashboards that **VISUALIZE DATA** and make it available to the public, researchers, and policymakers in real time

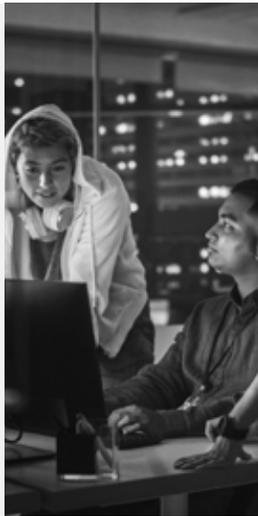
Novel approaches like **ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING** that can discover relationships in the data that are hard for traditional methods to find

AND BY FINDING NEW WAYS TO...

Bring people from across public health, government, academia, and industry together to find common **SOLUTIONS** to common data problems



OPEN UP THE DATA so that more people have access to the information they need for decisions, both in emergencies and every day



Make sure that **HEALTH EQUITY** is “baked in” from the start on everything we do



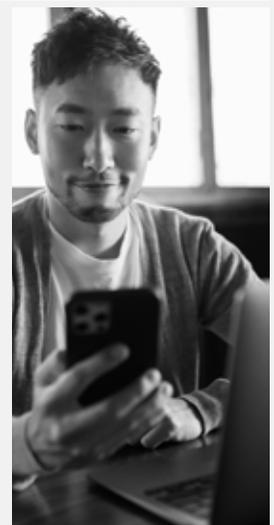
Offer public health staff opportunities to **LEARN BY DOING** and to access the latest data science training anytime, anywhere



Modernize the **POLICIES AND AGREEMENTS** that inform how data are exchanged so that we can get information where it needs to go to save lives



USE RESOURCES WISELY by making sure everything we invest in is connected, flexible, and sustainable for the future



RESULTING IN...



Data increased

20,000+

healthcare facilities delivering automated, real-time case reports—up from just 187 before the pandemic

91%

complete race information in syndromic surveillance—up from 80% in 2019—which is critical important for understanding health disparities

~90%

of death records coded automatically using natural language processing—up from 75% with the previous system—with data to jurisdictions in minutes



Time saved

~80%

decrease in development time for CDC's response and surveillance programs using new Cloud components

1+

year reduction in the time it takes to understand suicide death trends thanks to new "nowcasting" capabilities

~5.5

days from sample collection to data available in CDC's wastewater surveillance system—down from ~4 weeks



People connected

3,700

training hours completed by CDC staff in the Data Academy—an 83% increase over the previous year

18

multi-sector meetings of the Consortium for Data Modernization, covering 24 high-priority topics

200+

CDC staff actively engaged in defining priorities and solving challenges through DMI Implementation Teams

