



# Update on CDC Surveillance Strategy

Where Data Meets Reality

Board of Scientific Counselors  
National Center for Health Statistics  
September 6-7, 2017

Chesley Richards, M.D., M.P.H.  
CDC Deputy Director for Public Health Scientific Services  
Director, Office of Public Health Scientific Services  
Centers for Disease Control and Prevention  
Atlanta, Georgia 30329

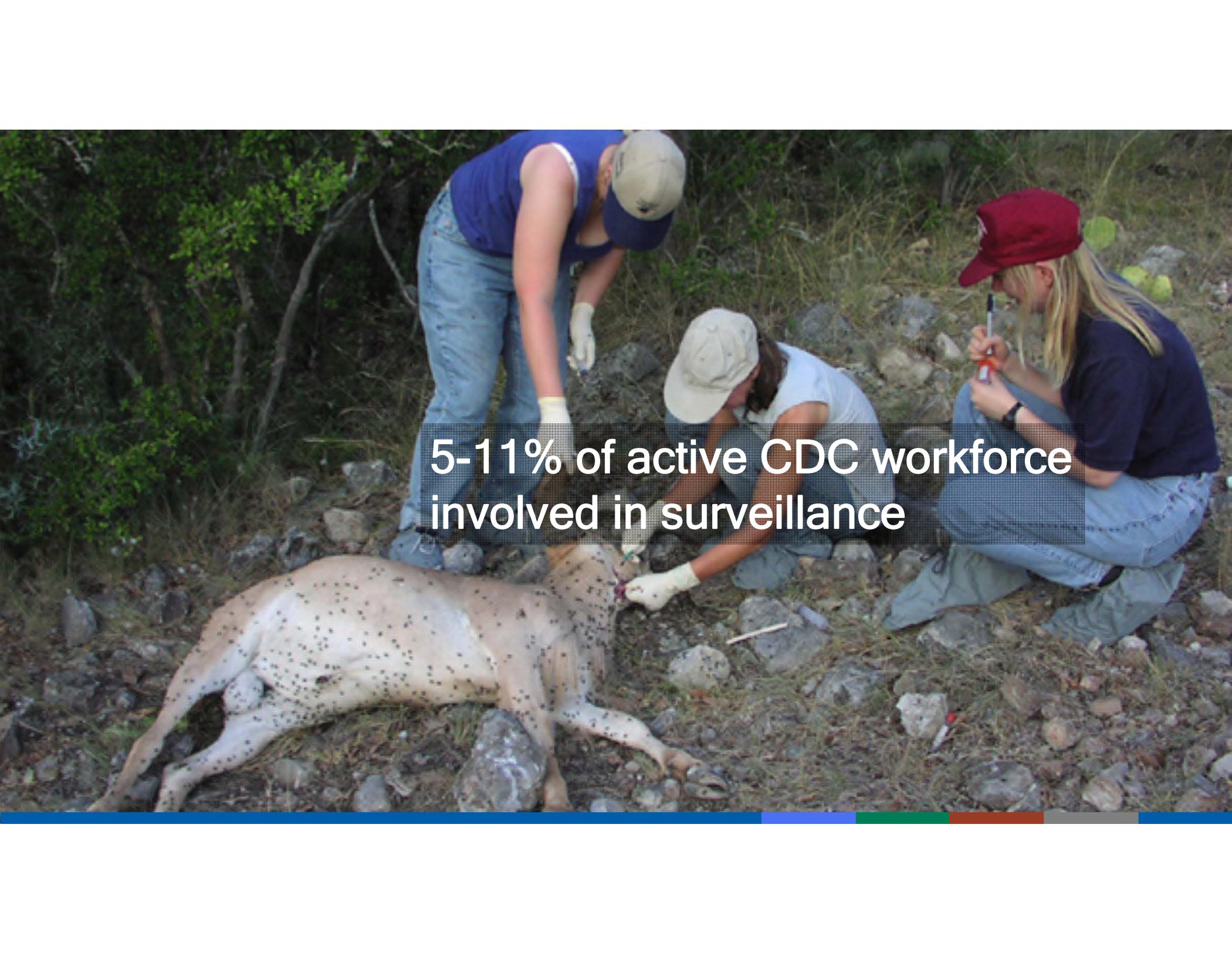
# Why does Surveillance Matter?



- Timely, high quality, actionable data is central to fulfilling the essential functions of public health
- Surveillance is a foundational data activity in public health



There are 120+ surveillance systems at CDC

A photograph showing three people in a field examining a spotted animal, likely a pronghorn or similar wild animal, lying on the ground. One person in a blue shirt and cap is leaning over the animal, another in a white shirt and cap is kneeling and touching the animal's head, and a third in a red cap and dark shirt is kneeling and holding a marker. The ground is rocky and there are some green plants in the background.

5-11% of active CDC workforce  
involved in surveillance

FEDERAL RESERVE NOTE

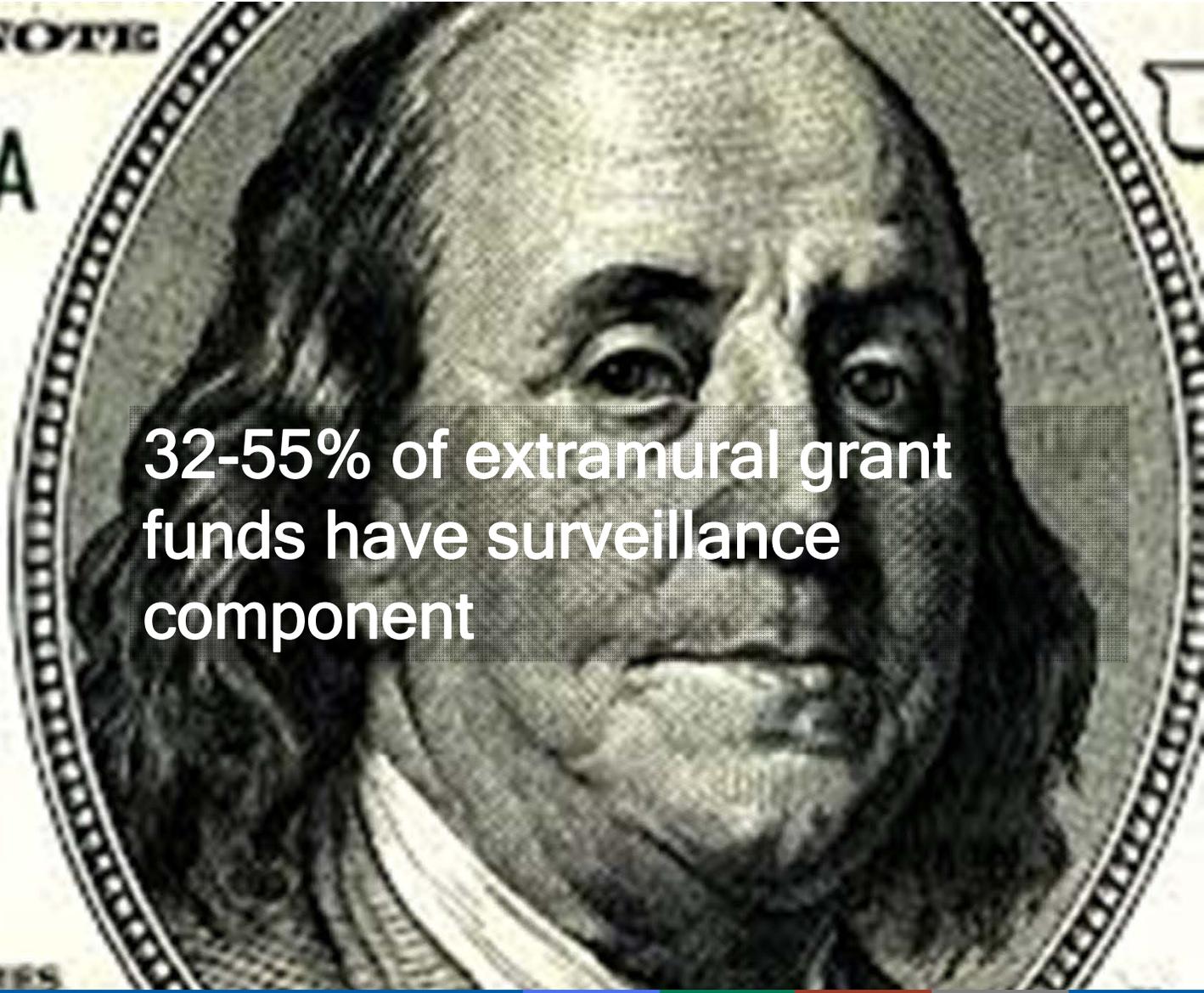
39521863 A



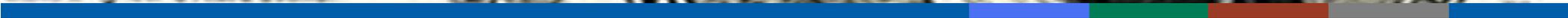
THIS NOTE IS LEGAL TENDER  
FOR ALL DEBTS, PUBLIC AND PRIVATE

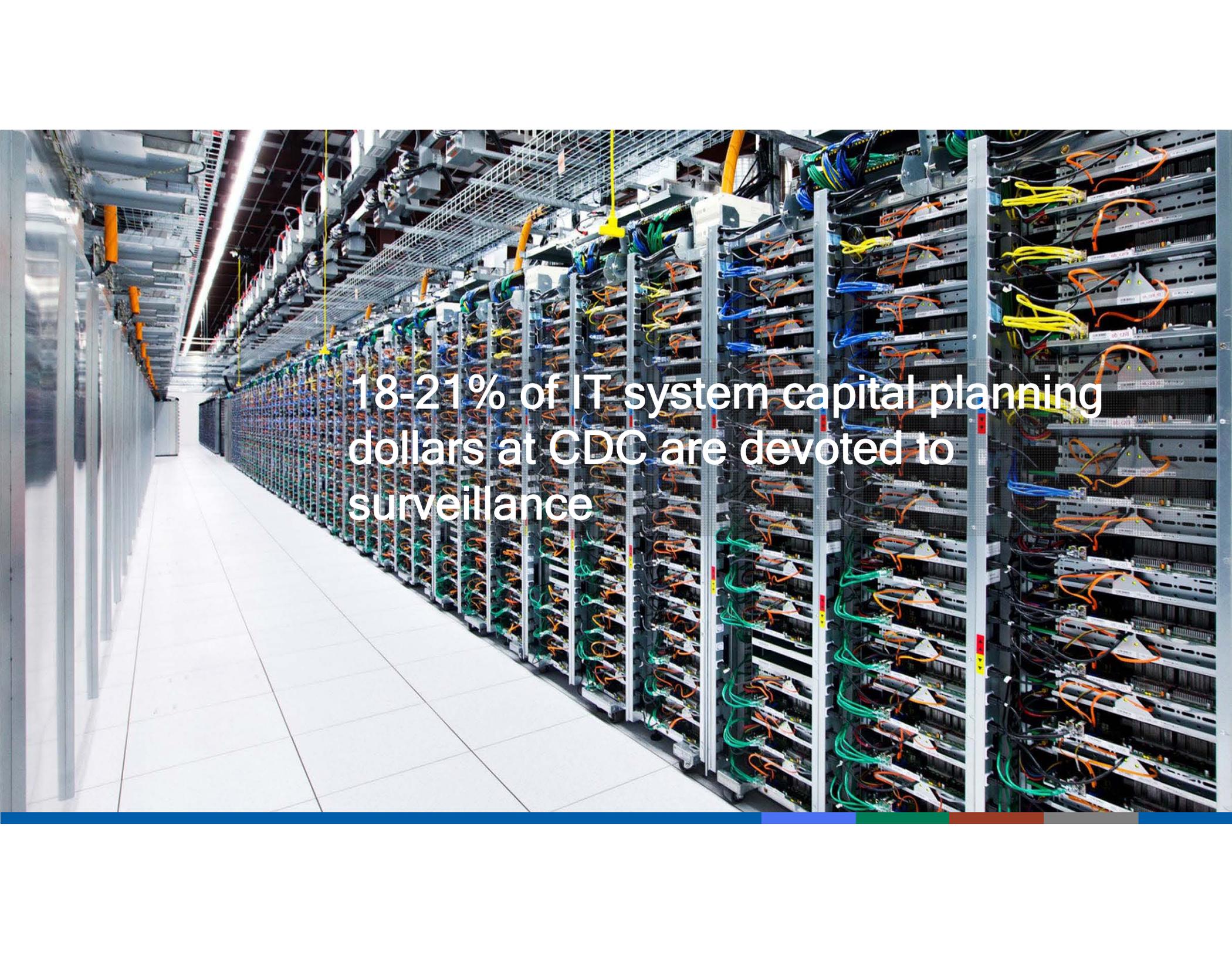
*William B. Flitner*  
Treasurer of the United States

SERIES



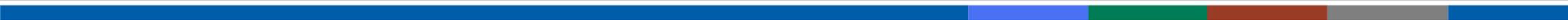
32-55% of extramural grant  
funds have surveillance  
component





18-21% of IT system capital planning dollars at CDC are devoted to surveillance

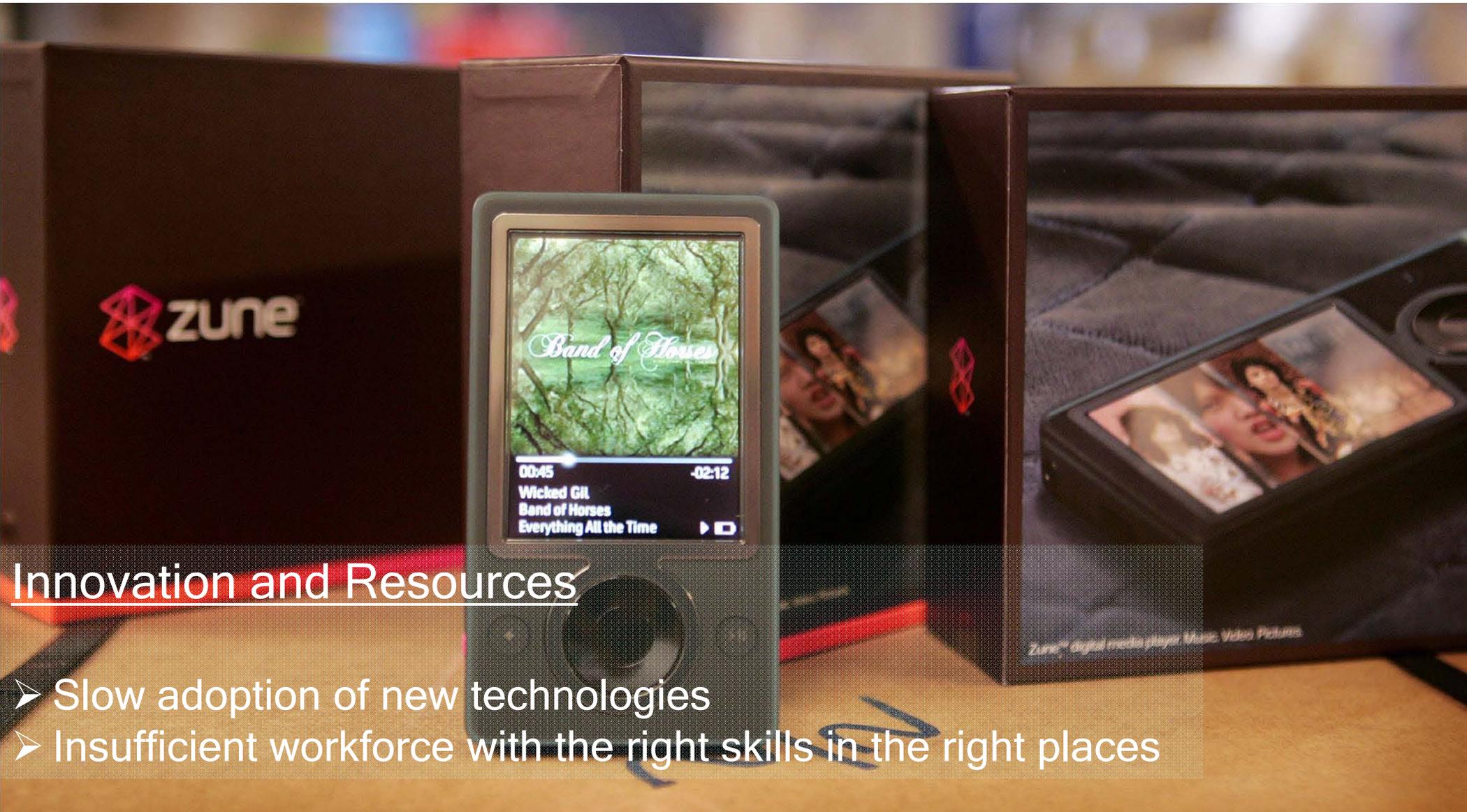
**What are  
the problems?**



# Silos

- Interconnections, interdependencies, efficiencies unrealized
- Local/state health departments: many systems/requirements





## Innovation and Resources

- Slow adoption of new technologies
- Insufficient workforce with the right skills in the right places



## Emerging Health Care Policies

- Electronic Health Records and Meaningful Use Standards
- Interoperability requirements

# CDC Surveillance Strategy



## Getting buy-in Influencers

CDC leadership board

Innovative informatics seed projects

HIT policy committee (FACA)  
representation

HIT Health IT Vendor Forum

Thinking tactically

*4 beginning moves*

**KEY INITIATIVES**

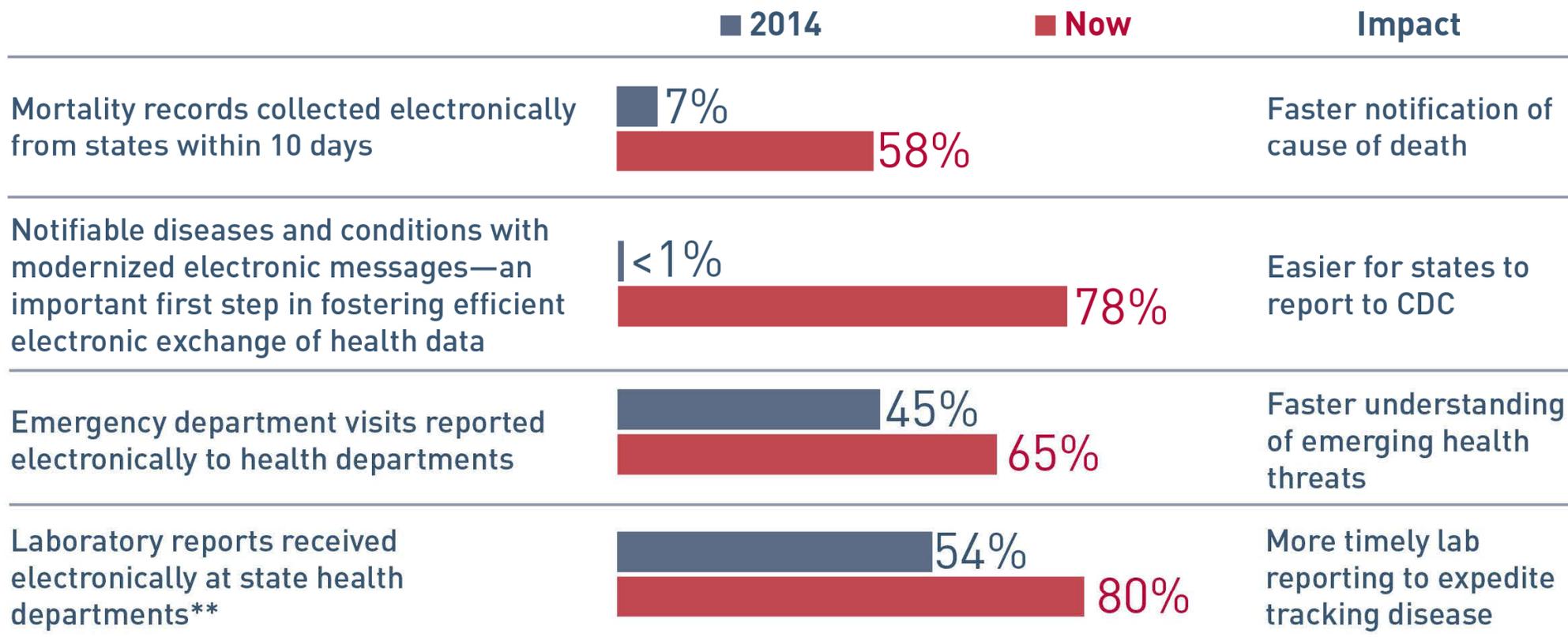
Modernizing the National Vital  
Statistics System

Nationally Notifiable Disease  
Surveillance System Modernization  
Initiative

Enhancing Syndromic Surveillance

Electronic Laboratory Reporting

# System Improvements in Public Health Surveillance\*



\* Percentage change furthered by CDC Surveillance Strategy since 2014

\*\* Approximately 20 million laboratory reports are received annually at health departments—80% are now received electronically.



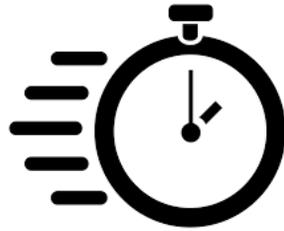
**U.S. Department of Health and Human Services**  
Centers for Disease Control and Prevention

# How Understanding Death Protects Health



Paper-based systems are being replaced with modern Web-based technologies,

Outdated electronic systems are being upgraded



Electronic health records and other tools physicians' use every day are being leveraged to integrate death reporting into physicians' workflows



More timely data are being shared via quarterly provisional estimates, special reports, and early releases of death record information through the National Death Index



Systems are being developed to validate mortality data before they are sent to the states, and piloting new electronic death registration capabilities with states



# Death Records Help the Living

The National Center for Health Statistics and Georgia Tech researchers are looking at death certificate data both to see what can be learned and to support efforts to create



# Where are we headed?

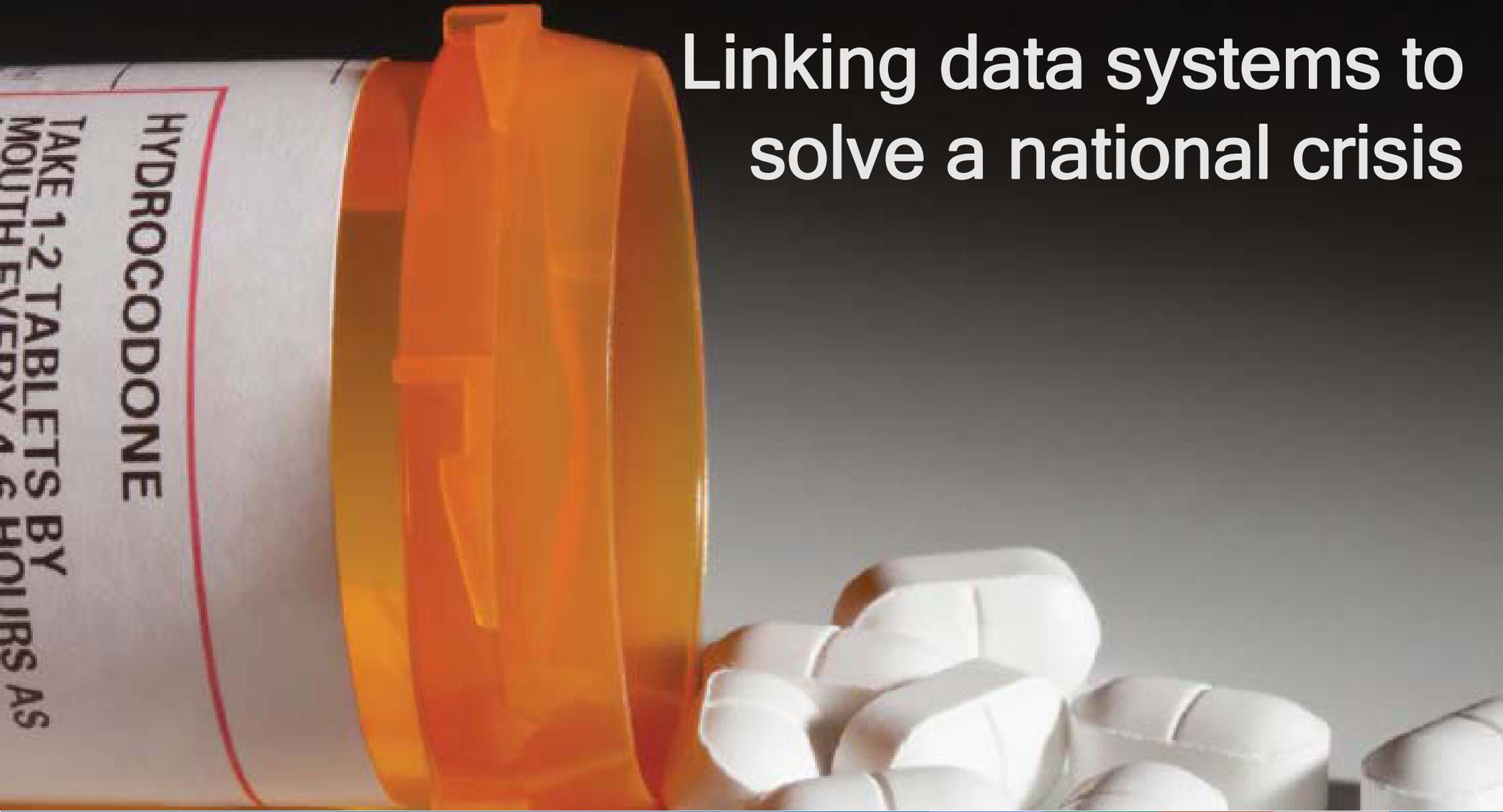
**Newer:** Modern systems,  
more efficiency

**Faster:** Timely data, more  
answers

**Smarter:** Fewer silos, more  
connectivity

**Better:** Clearer picture,  
more protection

# Linking data systems to solve a national crisis



# New initiatives

Digital Bridge

Surveillance Data Platform



Advances in Public Health  
Surveillance and Information  
Dissemination at the Centers for  
Disease Control and Prevention

Trust is key.  
You can only move as  
fast as the speed of  
trust.

Public Health Reports  
2017, Vol. 132(4) 403-410  
Association of Schools and Programs of Public Health

A black and white electron micrograph showing numerous rod-shaped bacteria. Some are in the process of dividing, with visible septa and curved filaments. The background is dark and grainy.

“ The unseen enemy is always the most fearsome.”  
- - George R.R. Martin, A Clash of Kings