

# SUPPORTING TRIBAL PUBLIC HEALTH INFRASTRUCTURE AND EFFORTS TO IMPROVE DATA ACCESS

CDC/ATSDR Tribal Advisory Committee

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# Overview

- CSELS Mission
- Supporting Public Health Infrastructure in Indian Country
  - Public Health Workforce
  - Case Surveillance
  - Data Modernization
- Tribal Public Health Data
- Addressing GAO Recommendations

# CSELS



Data, Surveillance, and Analytics



Laboratory Systems



Public Health Workforce

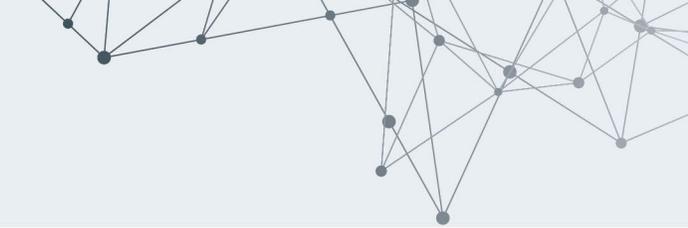


Scientific Communication

## What We Do

CSELS works to strengthen and modernize the public health **infrastructure** of the United States through **science** and **collaboration**

# Snapshot of Selected CSELS Programs



# CSELS Strategic Priorities



## Data, Surveillance, and Analytics

- Modernize case surveillance and implement electronic case reporting
- Expand syndromic surveillance capacity
- Improve data science and informatics capacity



## Laboratory Systems

- Expand laboratory data exchange with public health and clinical laboratories
- Strengthen laboratory training and workforce development



## Public Health Workforce

- Build a diverse and capable pipeline of public health professionals
- Upskill the existing public health workforce

# How CSELS supports Public Health Infrastructure in Indian Country



Public Health Workforce



Case Surveillance



Data Modernization



Efforts to Improve Data Access

# **PUBLIC HEALTH WORKFORCE**



**1**

# Public Health Workforce

## The Foundation of Every Public Health Effort

### What

CDC builds the **workforce** necessary to **protect public health** through recruitment and training

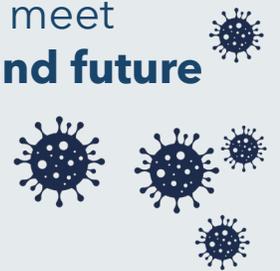


CDC delivers **learning opportunities** for health professionals on many topics, including COVID-19



### Why

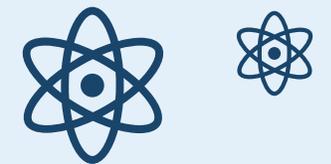
A competent, sustainable, and empowered public health workforce is better prepared to meet **emerging and future challenges**



CDC fellowships are **pipeline programs to CDC Leadership**

### How

CDC uses an **evidence-based approach** to the public workforce, with an emphasis on **diversity** and **data science**



Improving the **diversity of the public health workforce** pipeline through recruitment, selection, and training curriculum

# Developing the Public Health Workforce in Tribal Jurisdictions



**CDC TRAIN:** A national system used by affiliate member organizations to manage and share public health trainings

- In FY21, more than 9,800 CDC TRAIN learners identified their work setting as either Indian Health Service (6,270) or Tribal Health Sites (3,614)
  - In FY21, more than 2,700 new CDC TRAIN learner accounts were created that identified their work setting as either Indian Health Service (1,845) or Tribal Health Sites (915).

## **Training & Continuing Education Online (TCEO)**

- In FY21, more than 15,900 TCEO learners identified their work setting as either Indian Health Service (12,661) or Tribal Health Sites (3,288).

# Developing the Public Health Workforce in Tribal Jurisdictions

## **2022 American Indian, Alaska Native, & Native Hawaiian Career Expo**

November 3, 2022

- CDC will host a virtual recruitment event to provide Tribal students and alumni an opportunity to learn about CDC career opportunities.
- The event will also provide an opportunity to interact with CDC leaders and staff.

For questions or general inquires: **[recruiter@cdc.gov](mailto:recruiter@cdc.gov)**

# **CASE SURVEILLANCE**



**2**

# Case Surveillance and Electronic Case Reporting (eCR)

Data from Healthcare to Public Health Agencies

## What



**CSELS runs NNDSS**, the nation's case surveillance infrastructure

eCR **automatically sends case reports** to public health agencies from an EHR in healthcare



eCR enables **real-time** case reporting to public health agencies

## Why

Automating the case reporting process **replaces time-consuming reporting**



eCR provides a seamless, real-time, **bidirectional transfer** of case report data



eCR improves **data completeness**

## How

**Scaled up eCR for COVID-19** by aligning efforts of:

1. Public Health Agencies
2. Health IT and EHR Vendors
3. Healthcare Organizations

- All **50 states, DC, PR, and 13 large local jurisdictions** have received eCR data
- **14,000+** healthcare facilities in 49 states in production for eCR



# Expanding eCR with Tribal Partners

CDC is working with **Urban Indian Organization healthcare providers** to connect them to the eCR infrastructure, reducing their public health reporting burden.

- The National Council of Urban Indian Health selected three Urban Indian Organizations as subawardees for the **Expanding Electronic Case Reporting To Benefit Urban Tribal Populations** project.

CDC is working with **Tribes** to connect to the eCR infrastructure to receive better and faster data.

- The National Indian Health Board selected two Tribal nations as subawardees for the **Improving Electronic Data Access For Reportable Conditions For Tribal Governments** project.

# Field Work in Action

The CDC Epi Info™ Team conducted individual **Tribal technical assistance sessions** that ranged from general orientations to technical screen sharing collaborations.

- The Epi Info™ team worked with the Albuquerque Area Southwest Tribal Epidemiology Center with a COVID-19 database used to actively collect health data of COVID-19 patients.
- Tribal members reached out seeking a way to use Epi Info web products while maintaining the sovereignty of their data on their dedicated servers.

# **DATA MODERNIZATION**



**3**



DMI is a once-in-a-generation opportunity to strengthen the data and surveillance infrastructure of the United States.

## Priority CSELS DMI Efforts

- Electronic Case Reporting
- Laboratory Data Exchange
- Case Surveillance Modernization
- Syndromic Surveillance Enhancement
- Data Science Workforce and Upskilling

# Accelerating Public Health Data Modernization in Tribal Jurisdictions

## Alaska Native Tribal Health Consortium

- Automating integration of immunization registry data into population health data feeds, creating dashboards, and providing training to users on newly created analysis tools

## Northwest Portland Area Indian Health Board

- Conducted internal DMI needs assessment; implementing action plans & increasing staff upskilling opportunities

## Rocky Mountain Tribal Leaders Council

- Staff upskilling in data management and visualization to improve data use

## Wabanaki Public Health and Wellness

- Process of creating, initiating, and maintaining surveillance structure

# Spotlight on Alaska Native Tribal Health Consortium Efforts

Collaborated with the Alaska DHSS and VacTrAK Vendor

Combined vaccination data with data about patients, to ID patients in each region that met CDC's criteria for high risk of COVID-19



ALASKA NATIVE  
TRIBAL HEALTH  
CONSORTIUM

Established a Data Sharing Agreement to share vaccination data for patients served by ANTHC and 15 other Tribal Health Facilities

Reps from Tribal Health Organizations have access to data and tools used and can apply them in ways that work best for their own regions

# DMI Technical Assistance

Requests for DMI TA can be sent to [csels\\_dmi@cdc.gov](mailto:csels_dmi@cdc.gov)

## Informatics & IT Technical Assistance

Systems  
Architecture/Data  
Exchange &  
Interoperability  
Projects

SME in  
Processing,  
Validating, and  
Routing E-data

Data Reporting  
Between Health  
Department  
Levels

Data Analytics &  
Creating Data  
Visualizations

Creating Data  
Extract Scripts &  
Automated  
Programming  
Interfaces

Developing SOPs

Quality Training  
or Other Learning  
Materials

Maintenance Plan  
When New  
Solution/System is  
Created

## Business Analyst Support

Assess Health  
Information  
Systems  
Capacities &  
Needs

Business Analyst  
Consultant  
Hours to Prioritize  
Activities w/  
External Partner

Project Management  
Support for Systems  
Replacement  
Implementation  
Planning

# **EFFORTS TO IMPROVE DATA ACCESS**



**4**

# EFFORTS TO IMPROVE DATA ACCESS

**Lesliann Helmus, MS, CHTS-CP (she/her/hers)**

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CSELS, Division of Health Informatics and Surveillance

**Georgia Moore, MS (she/her/hers)**

Associate Director for Policy  
Center for State, Tribal, Local and Territorial Support

# Example Data System: Notifiable Diseases

## Jurisdiction Surveillance Process

Other PH Systems Used in Investigation



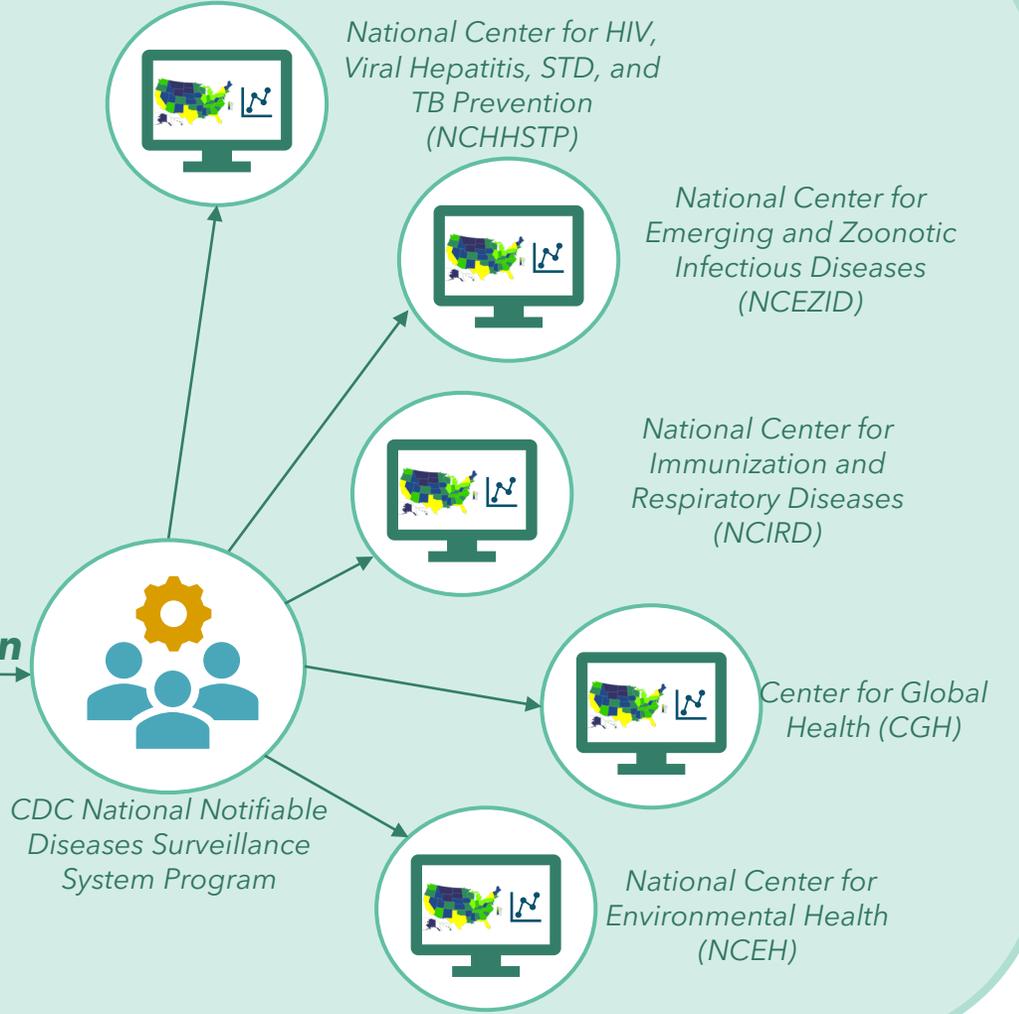
Electronic Lab Reporting (ELR)  
(identifiable data)

Electronic Case Reporting (eCR)  
(identifiable data)



Case Notification  
(de-identified data)

## CDC Surveillance Programs



# Addressing Data and Systems Challenges

## Limitations

- Public health systems have not met tribal data needs
- CDC data are not centralized and standardized
- Native American indicators are often unavailable

## Improvements

- Reworking systems to expand data availability and access
- Centralizing and standardizing through Data Modernization
- Increasing data completeness of tribal affiliation and race

# GAO Recommendations

Agency Affected	Recommendation
<b>Department of Health and Human Services (HHS)</b>	The Secretary of HHS should develop a policy clarifying the HHS data (including monitoring systems, delivery systems, and other protected health information) that are to be made available to TECs as required by federal law.
<b>CDC</b>	The Director of CDC should develop written guidance for TECs on how to request data. Such guidance should include information on data potentially available to TECs, how to request data, agency contacts, criteria the agency will use to review such requests, and time frames for receiving an agency response to data requests.
<b>CDC</b>	The Director of CDC should develop and document agency procedures on reviewing TEC requests for and making data available to TECs. These procedures should include a description of data potentially available to TECs, agency contacts, criteria for reviewing TEC data requests, and time frames for responding to TEC requests.

# GAO Recommendations

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# Thank you!

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