

What's Working Right Now: Low-Cost Tools from Local Health Departments

June 30, 2026

Agenda

- Welcome
- Presentation
 - Using REDCap to Build Shared Community Data Infrastructure at Low Cost
 - Winter Count: Affordable Electronic Disease Surveillance for Public Health
- Q&A
- Closing



General Information



Recording: This webinar is being recorded. A link to the recording will be shared with participants.



Audio: All participant are muted to minimize background noise. Please remain muted and raise your hands to ask questions.



Questions: We encourage your questions! Use the Q&A feature to drop your questions or raise your hand to come off mute. Questions will be addressed during the designated Q&A portion.



Technical Issues: If you experience any technical difficulties, try refreshing your browser or exiting and rejoining the session. You can also reach out in the chat for assistance.

About NACCHO

- NACCHO is comprised of nearly **3,300 local health departments (LHDs)** across the United States. Our mission is to serve as a **leader, partner, catalyst,** and **voice** with local health departments.

- ✓ Advocacy
- ✓ Partnerships
- ✓ Funding
- ✓ Training and Education
- ✓ Networking
- ✓ Resources, tools, and technical assistance



Winter Count: Affordable Electronic Disease Surveillance for Public Health

Ryan Berger

NACCHO360 | Louisville, KY | July 2026

A Low-Cost, Scalable Approach to Modernizing Epidemiology and Disease Surveillance

For Local and Tribal Public Health Authorities

Ryan Berger | CDC Foundation WAI Placement / Great Plains Tribal Epidemiology Center



GREAT PLAINS TRIBAL HEALTH

This information is supported by Indian Health Service of the U.S. Department of Health and Human Services (HHS), Grant Number U1B1IHS0007. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by Indian Health Service.



NACCHO
Promising Practice
Award Winner



About Great Plains Tribal Epidemiology Center

- GPTEC is one of six departments within the Great Plains Tribal Health (GPTH) Board, providing health technical assistance, training, and services to Tribes and Tribal-serving organizations.
- Congressionally designated Public Health Authority — one of 12 Tribal Epidemiology Centers designated under 25 U.S.C. §1621m to support American Indian and Alaska Native communities, Tribes, Tribal Organizations, and Urban Indian organizations.
- Tribal data sovereignty — GPTEC's data governance is empowered by GPTH Tribal resolutions, guided by a Tribal Advisory Council of Great Plains Area Tribal health directors and leaders.
- Sovereign public health authority — as sovereign governments that predate the United States, Nations are recognized as Public Health Authorities under HIPAA (45 CFR §164.501), with authority to govern their own public health data.
-



This information is supported by Indian Health Service of the U.S. Department of Health and Human Services (HHS), Grant Number U1B1IH50007. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by Indian Health Service.



○ Staging Environment- features may change frequently.

X

Monitor & Investigate

Secure access to Great Plains Area data to monitor Tribal health, track cases, and support Relatives.

Sign In

About us

Winter Count is a modern public health data and case investigation system built by the Great Plains Tribal Epidemiology Center (GPTEC), to strengthen Tribal health leadership and advance



Monitor Health

Access Dashboards and Analysis designed for Tribal Health Directors. View timely, reliable data

Core System Components

PIPES Automated Ingestion Pipelines

Electronic lab reporting (ELR), electronic case reporting (eCR), and other datasets ingested automatically using HL7, proprietary/REST for IHS, South Dakota DOH— eliminating manual data entry and reducing lag time.

LAKE Cloud Data Lake

Centralized storage organized into Raw, Cleaned, and Analytics-ready tiers, ensuring data quality is maintained and traceable at every stage of processing.

MPI Master Person Index

De-duplication across jurisdictions enables accurate patient matching and consistent denominators for epidemiological analysis without creating privacy risks.

EDSS Lightweight EDSS

Configurable workflows for 80+ reportable conditions — adapted to local needs and governance requirements without expensive custom development or vendor lock-in.

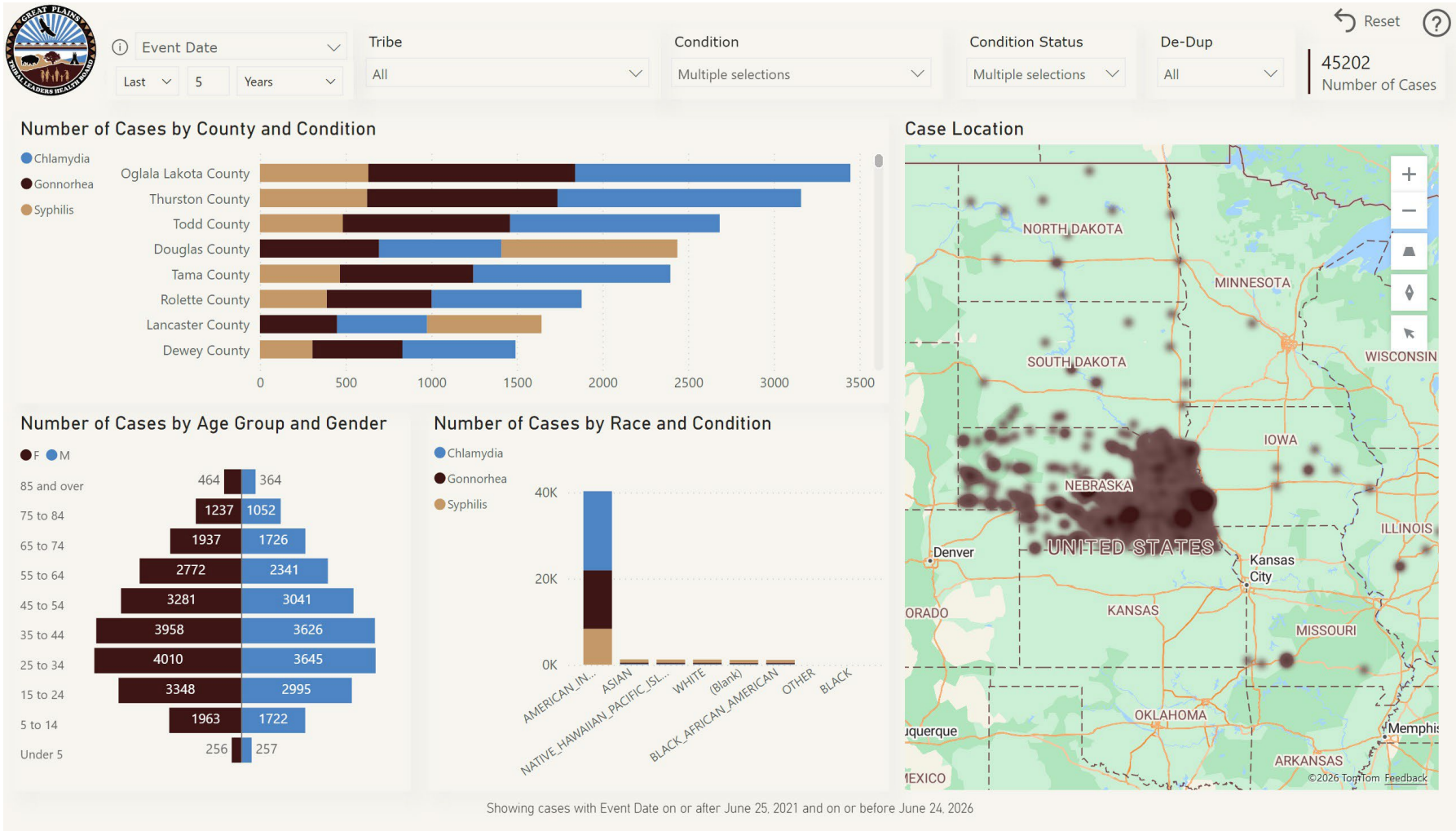
CLOUD Cloud Storage and Analytics Platform

Leverage commercially available cloud storage, compute, and analytics capabilities.



**GREAT PLAINS
TRIBAL HEALTH**





Governance & Security

Built in from day one — not bolted on afterward

RBAC Role-Based Access Controls

Granular permissions ensure each user sees only what they're authorized to see — at the Tribe, jurisdiction, or condition level.

SOV Tribal Data Sovereignty

Policy-driven data-sharing rules and governance workflows honor intergovernmental agreements and Tribal ownership of health data.

LOG Audit Logging

Every data access and system action is logged, providing full accountability and supporting compliance and reporting requirements.

ISO Environment Isolation

Separate dev, test, and production environments prevent accidental data exposure or disruption to live surveillance operations.



GREAT PLAINS
TRIBAL HEALTH
EPIDEMIOLOGY CENTER

Results

Cost ↓

Substantial reduction in total cost of ownership vs. traditional EDSS

Weeks → Hours

Manual data cleaning & preparation time reduced dramatically

Trust ↑

Users report improved data confidence and faster access to actionable insights

01 Faster Outbreak Detection

Automated pipelines accelerate data availability, enabling earlier identification of outbreak signals and faster public health response.

02 Shared Analytics, Local Control

Consistent denominators and trend views across jurisdictions — while each Tribe retains control over its own data access.

03 Reduced Implementation Risk

Incremental adoption (ingestion then analytics then case management) aligns delivery with grant cycles and reduces rollout risk.

04 Resilient Despite Turnover

Users reported greater confidence that the platform would outlast staff changes — a persistent challenge for smaller PHAs.



**GREAT PLAINS
TRIBAL HEALTH**





THANK YOU

Questions & Discussion

ryan@colstrategy.com | NACCHO360 | Louisville, KY | July 2026



**GREAT PLAINS
TRIBAL HEALTH**

Great Plains Tribal Health 2611 | Elderberry Blvd, Rapid City, SD | greatplainstribalhealth.org



Using REDCap to Build Shared Community Data Infrastructure at Low Cost

Andrew Delicata



REDCap for Emergency Preparedness

June 30, 2026

NACCHO Low Cost Solutions

Andrew Delicata

Rhode Island Department of Health

Projects Overview

01

Active Monitoring

REDCap monitoring of
high-consequence pathogens (Ebola,
Measles, others)

02

Outbreak Investigations

REDCap instruments for foodborne
illness &
emergency scenarios

03

Mass Dispensing

REDCap-driven distribution of
medical countermeasures (vaccines and
pills)

Active Monitoring

REDCap symptom monitoring for individuals potentially exposed to ebola, measles, and other high consequence pathogens like H5N1, mpox, etc....

REDCap instruments track individuals exposed to high-consequence pathogens to enable rapid public health response, and uses Twilio to send SMS messages

Custom REDCap forms capture exposure, symptoms, and health status over defined monitoring periods.

Key pathogens monitored

1

Ebola

Hemorrhagic fever virus

Monitoring: 21 days from last exposure

2

Measles

Highly contagious viral illness

Monitoring: 14 days from last exposure

3

Other HCP

Additional pathogens per
CDC/RIDOH designation

Outbreak Investigations

Foodborne Illness

- REDCap-based traceback investigations for contaminated food sources
- Laboratory coordination with state and CDC
- Case counting and cluster identification
- Partner notification and recall support

Emergency Scenarios

- Bioterrorism event response and investigation
- Natural disaster and mass casualty coordination
- REDCap mobile field investigation deployment
- Real-time REDCap situational awareness reporting

Mass Dispensing

Medical Countermeasures

REDCap supports rapid distribution of medications and prophylaxis to the public during a public health emergency.

REDCap instruments support POD operations across Rhode Island.

Program overview

Target population

All Rhode Island residents during declared emergencies

Dispensing model

POD sites coordinated with local health partners

Countermeasures

Antibiotics, antivirals, and other emergency medications

REDCap Platform

Registration, dispensing, and reporting — all in REDCap

Why VAMS isn't ideal

Vaccine Administration Management System — considerations for Rhode Island

1

Funding Uncertainty

VAMS is provided free through CDC, but long-term availability is unclear. Dependency on a platform that could be discontinued creates operational risk.

2

Training Complexity

The system is complex and difficult to train staff on — particularly challenging in the time-compressed conditions of an emergency response.

3

Slow Modifications

Changes and customizations require engagement with an outside vendor. Modifications are not fast enough to meet emergency timelines.

REDCap: already here, already working. Built for response before the emergency arrives.

Active Monitoring · Outbreak Investigations · Mass Dispensing



Andrew Delicata

REDCap Program Administrator
CDC Foundation (WAI)
CAIDE, Rhode Island Department of Health
andrew.delicata.ctr@health.ri.gov



Future webinar dates ...

*What's Working Right
Now: Low-Cost Tools from
Local Health Departments
webinar series*

- *Tuesday, July 7, 1-2pm ET*





[Evaluation] What's Working Right
Now: Low-Cost Tools from Local
Health Departments #2



For any questions, please email phinformatics@naccho.org