

Advancing Data for Public Health Action

Jim Kucik, PhD, MPH
Kyle Cobb, MS

Office of Public Health Data,
Surveillance, and Technology
(OPHDST)

Centers for Disease Control
and Prevention (CDC)



Who We Are

The Office of Public Health Data, Surveillance, and Technology (OPHDST) is leading efforts to improve the availability and use of public health data to inform decision-making and action across the public health ecosystem.



Customer-centric, user-focused, mission-based, and here to serve



A team of experts with cross-functional knowledge and skills



Driven by unified health data that helps focus resources and our priorities

National Center for Health Statistics, the federal government's principal health statistics agency, reports to OPHDST



CDC's approach to supporting state, tribal, local, and territorial health departments

- Continued funding and technical assistance
- • Collaborations to design, test, and learn
- • Technical, policy, and logistics support through Implementation Centers
 - Recruit, place, and support 100+ technical experts in jurisdictions
- • Tools and resources

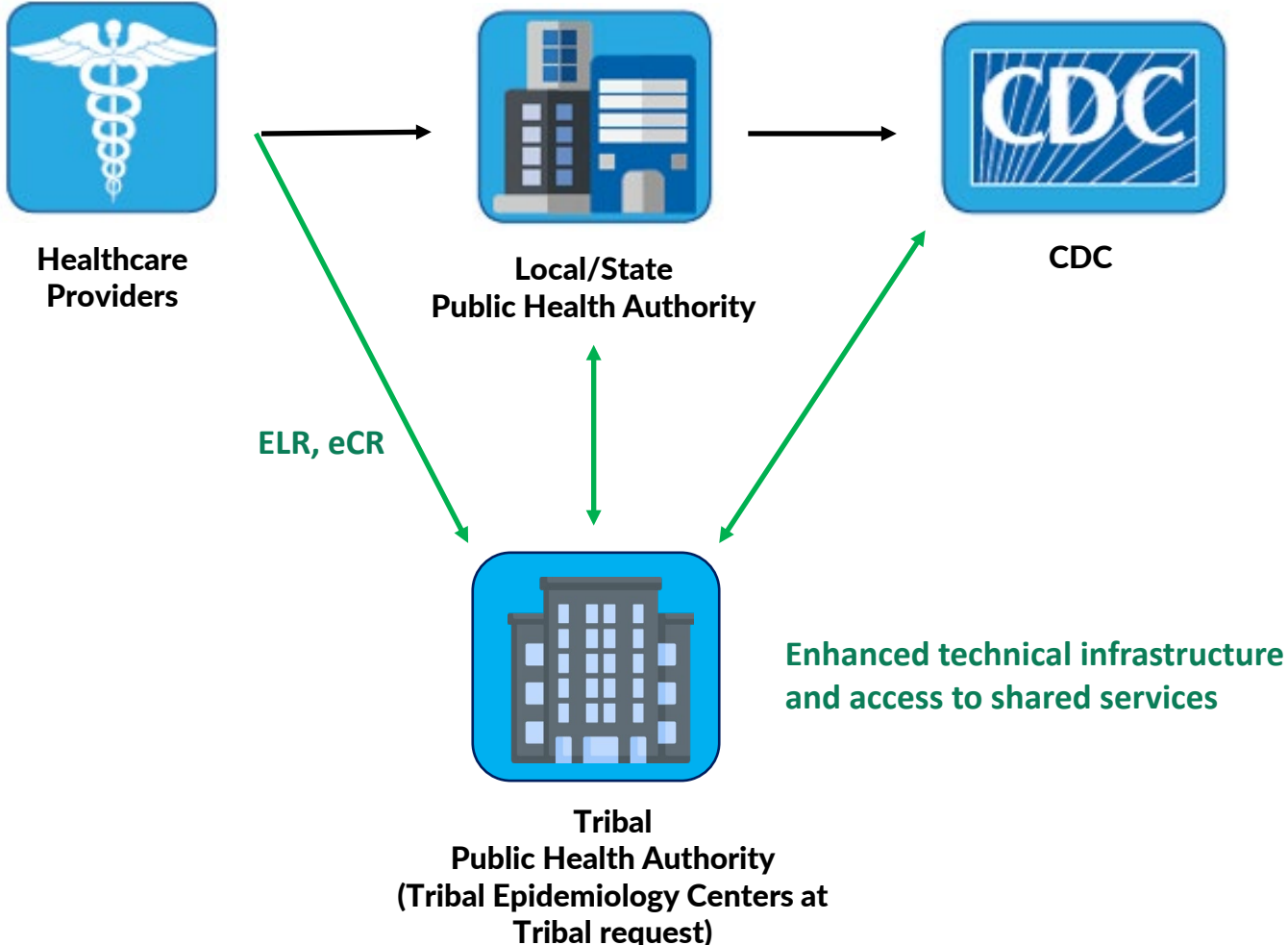


Modernizing Public Health Case Data

Traditional disease reporting

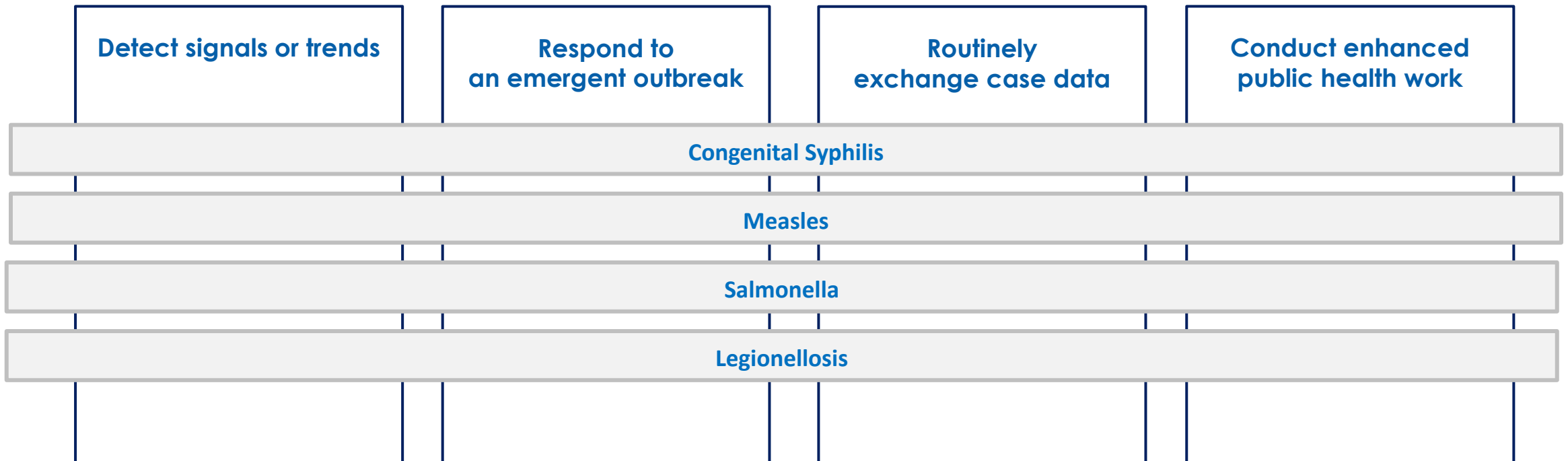
- Very manual
- Limited inclusion of Tribal Public Health

Modernization offers opportunities to improve data access and usability for tribal public health



Case Service Design (CSD): Co-creating solutions

The right data at the right time for the right action: *Use cases across 4 communicable diseases*

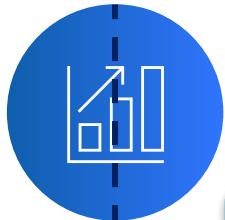


Implementation Centers



National Partners selected to build four implementation centers

- ASTHO (Association of State and Territorial Health Officials)
- NNPHI (National Network of Public Health Institutes)
- PHAB (Public Health Accreditation Board)



\$255 million dedicated to driving public health data modernization

- Three implementation centers to provide support to state, local, and territorial jurisdictions
- One implementation center to provide tribal support



This funding is layered on top of public health infrastructure and capacity grants and data modernization funding



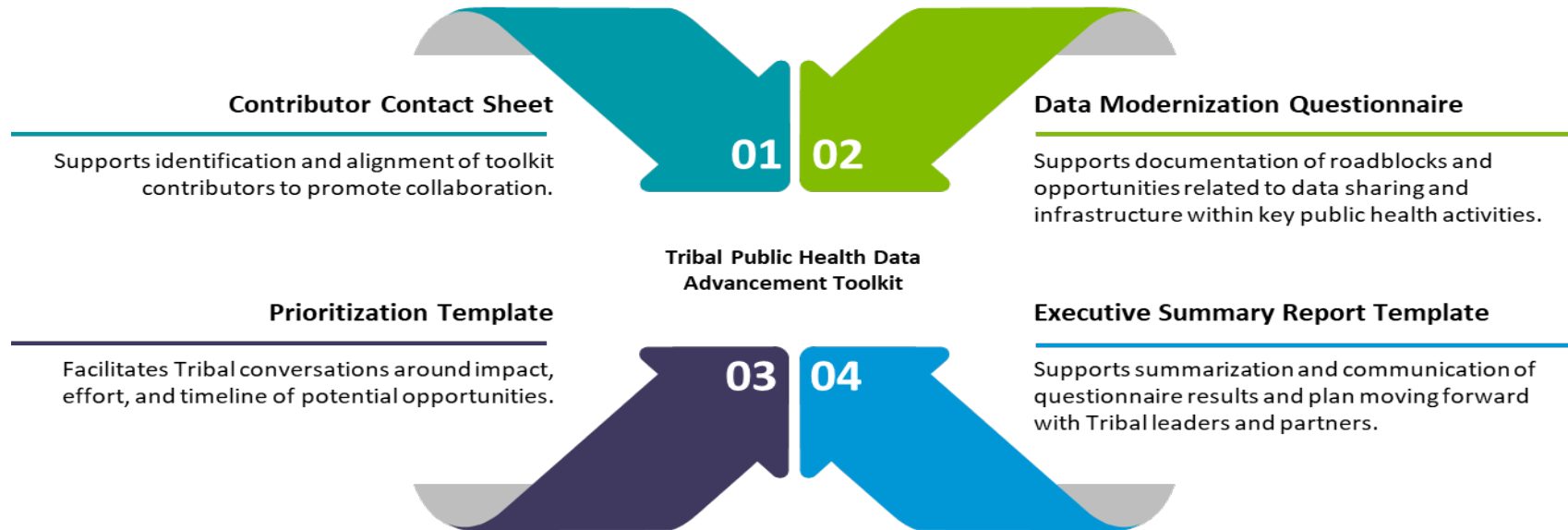
Goals for Implementation Centers:

- **Increase timeliness of data exchange** between health care and public health for public health reporting and priority use cases
- **Improve response time** to public health threat detection, prevention and/or time to intervention
- **Reduce burden** on health care systems/providers and public health jurisdictions for public health data reporting and data exchange
- **Improve data quality and completeness** through the identification and implementation of data linkage methods (i.e., digital ID)

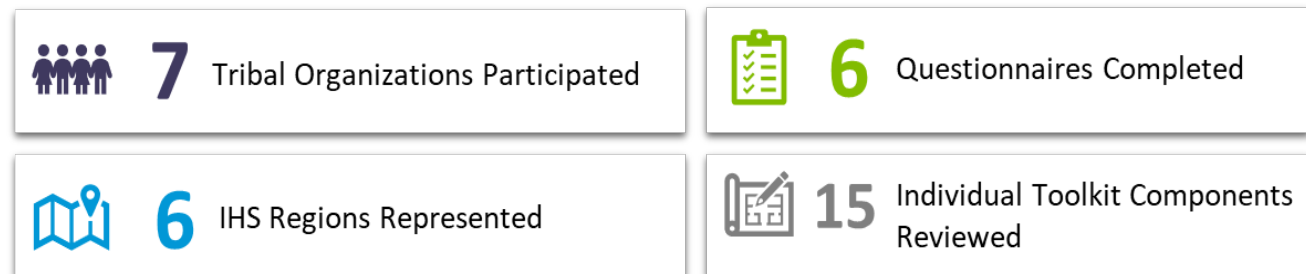
Tribal Public Health Data Advancement Toolkit

- The goal of the toolkit is to support tribes in **identifying** roadblocks and opportunities related to data sharing and infrastructure within key public health activities, **prioritizing** next steps for modernization, and **communicating** key observations with a broader audience.
- A pilot test was conducted in Spring of 2024 to gather feedback on the toolkit.

Toolkit Components

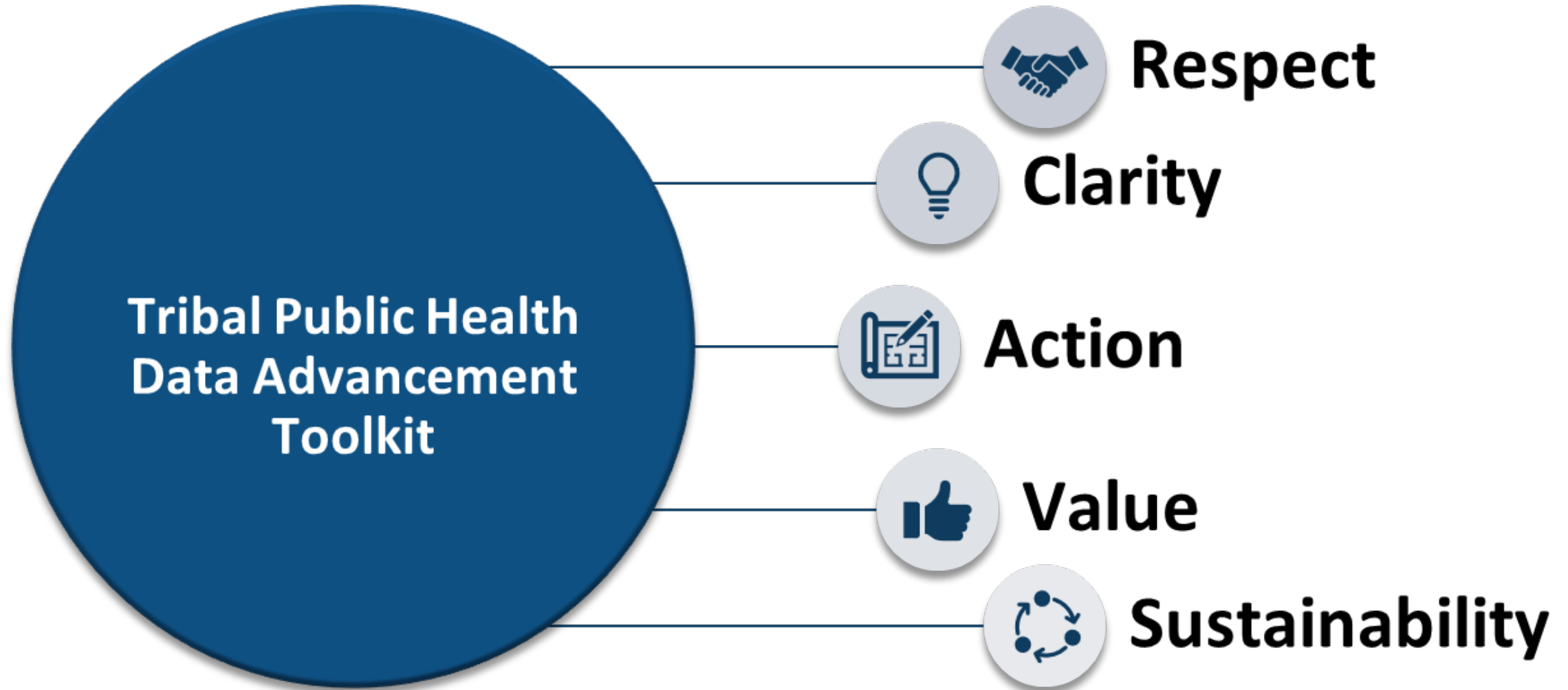


Pilot Test Key Metrics



Tribal Public Health Data Advancement Toolkit:

Guiding Principles



Pilot Test Highlights & Key Takeaways

- The following outcomes of using the toolkit components were highlighted:
 - Took steps to re-establish Tribal Institutional Review Board (IRB).
 - Facilitated collaboration between clinical and public health data teams.
- The following toolkit applications and uses were identified:
 - Support Tribal data modernization action plans.
 - Strengthen Public Health Accreditation Board (PHAB) applications.
 - Identify activities for inclusion within responses to future funding opportunities and technical assistance needs.
 - Inform staffing, training, and professional development.
 - Inform the development of data/IT-related job descriptions.
 - Communicate data sharing and infrastructure needs and roadblocks with Tribal leadership, Tribal partners, and governments, as determined by the Tribe.

The next phase of this effort will include dissemination of the Toolkit and optional Technical Assistance to the broader Tribal public health community. Contact DMAI@chickasaw.com for more information.

What is the Trusted Exchange Framework and Common Agreement (TEFCA?)

“A universal policy and technical floor for nationwide health data interoperability by *simplifying connectivity* for public health authorities and agencies *to exchange information.*”

TEFCA Goals



GOAL 1

Establish a universal policy and technical floor for nationwide interoperability



GOAL 2

Simplify connectivity for organizations to securely exchange information to improve patient care, enhance the welfare of populations, and generate health care value



GOAL 3

Enable individuals to gather their health care information

How Does TEFCA Enable Public Health?



TEFCA provides a new avenue for data access



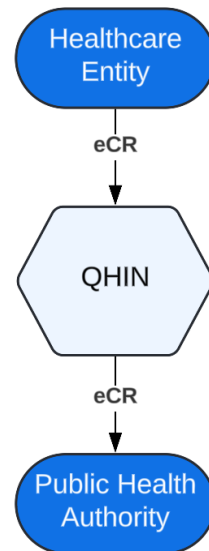
Public health can receive labs and cases routed via the network



Public health can query across the network specific individuals for follow up

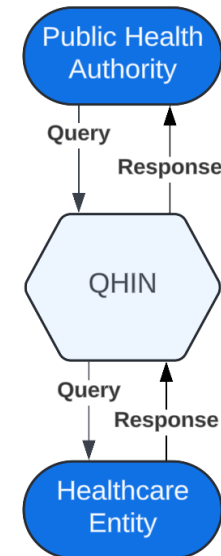
TEFCA Public Health Use Cases

PUSH: data to public health



- **Value: Leverage electronic case reporting**
 - Address agreements and technical specifications.
 - More complete data being available to the case worker.
 - Set the stage for potential future FHIR® exchange.

PULL: request data from healthcare



- **Value: Request data to complete records, longitudinal follow-up**
 - Utilizing TEFCA allows case investigators to more easily search in portal for this information and saves a material amount of time for them.
 - Longitudinal follow-up of cases

Listening Sessions for Tribal Health Authorities

- **OPHDST and OTASA will hold TEFCA listening sessions for tribes, tribal public health authorities, and tribal-serving organizations**
 - **Purpose:** To gain insights on tribal policies, current capabilities, and special considerations for tribal nations when advancing CDC/ATSDR modernization efforts for public health data exchange in a TEFCA-enabled environment.
- **TEFCA Goals for Tribal Nations:**
 - Improve tribal public health capacity
 - Connect tribes and tribal-serving organizations to other Public Health Authorities (PHA) and CDC programs
 - Ensure tribal public health authorities benefit from the same policy and technical advancements available to all PHA

What is the Core DUA?

An *agency-wide data use agreement (DUA) model* that establishes common provisions for all data shared with CDC and addenda to address needs of specific data sources.

Core DUA Initiative

- The Core DUA Initiative is intended to streamline and simplify data sharing between CDC and states, tribes, localities, and territories (STLTs)
- The approach is informed by the COVID-19 pandemic and other lessons learned from recent public health data sharing efforts
- The Initiative covers two primary components (see Figure 1):
 - The **Common Provisions**, which includes terms that apply to all core data sources and has consistent terms for all STLTs
 - The **Data-Specific Addenda**, which will address terms related to specific core data sources

Accessible caption: Graphic depicts the CORE DUA concept, with a circle encompassing six other smaller circles with dotted lines for: Syndromic Surveillance Data, Vital Statistics Data, Vaccine Administration Data, Hospital Capacity Data, Lab-Based Diagnostic Test Data, and Case Data. In the center of those six circles is a dark, singular circle that says Common Provisions.

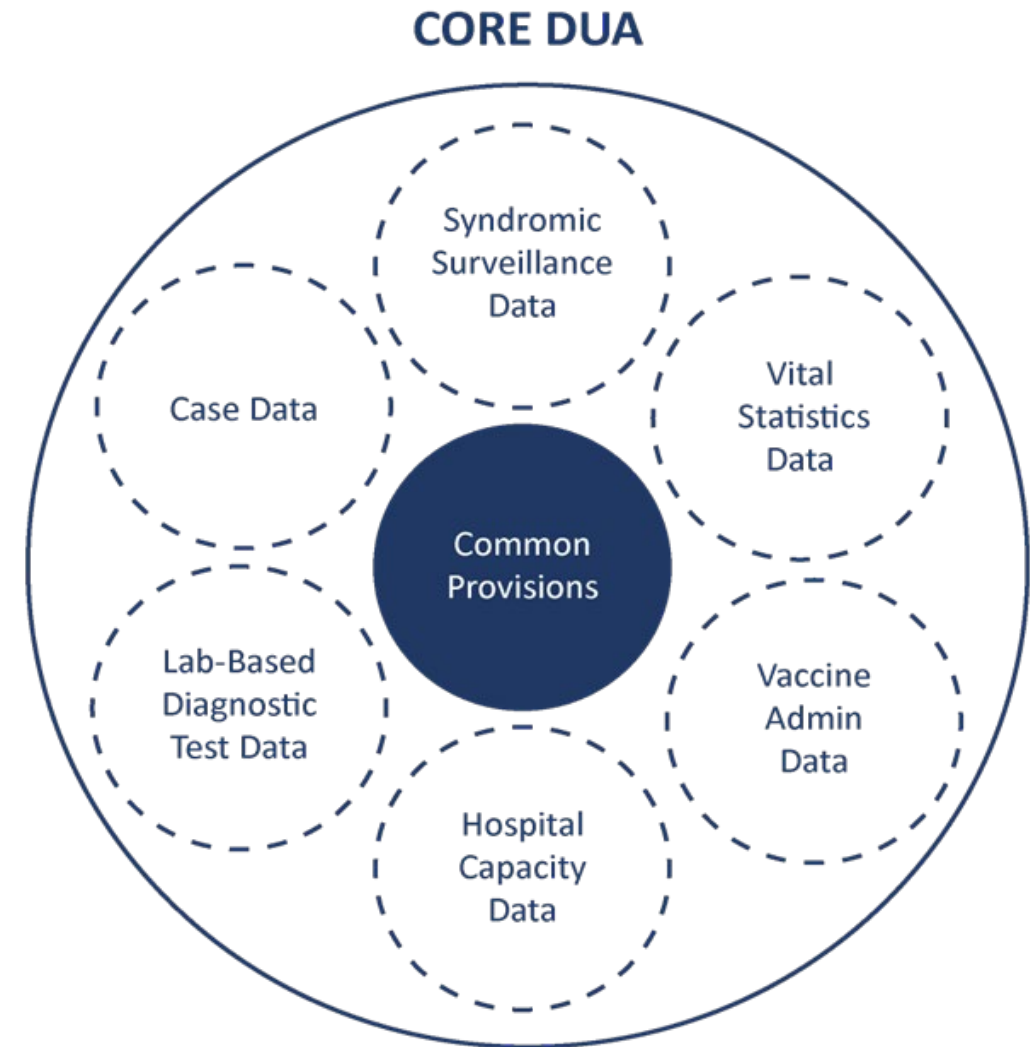
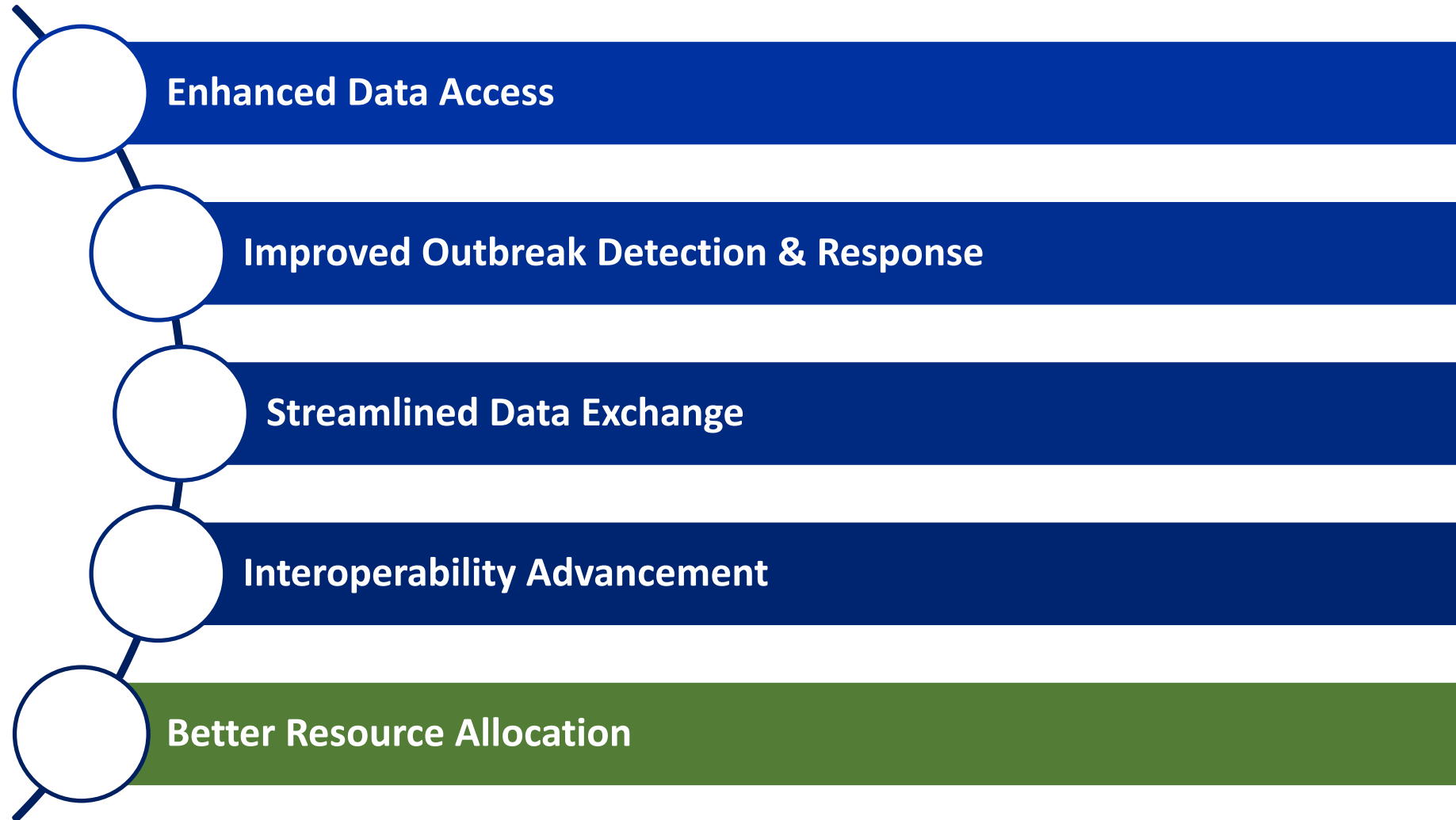


Figure 1: The Core DUA for each Jurisdiction will include Common Provisions, plus Data-Specific Addenda for core data sources.

These initiatives enable...



Thank you for your engagement!

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 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.



Appendix A: Modernization Public Health Case Data Diagram (Section 508

Alternative Text Version)

- Traditional disease reporting is very manual and has limited inclusion of Tribal Public Health. Modernization offers opportunities to improve data access and usability for tribal public health.
- This diagram has four icons inside teal boxes that represent the following public health entities: healthcare providers, local/state public health authority, CDC, and Tribal Public Health Authority (or Tribal Epidemiology Centers at Tribal request).
- There are arrows between the boxes to show the directionality of data flow between these public health entities.
- In this diagram, Tribal Public Health Authority has enhanced technical infrastructure and access to shared services.
- Healthcare Providers can send data to Tribal Public Health Authority (Tribal Epidemiology Centers at Tribal request) via ELR or eCR and can send data to Local/State Public Health Authority.
- There is a bidirectional exchange of data between Tribal Public Health Authority (Tribal Epidemiology Centers at Tribal request) and Local/State Public Health Authority.
- Local/State Public Health Authority can also send data to CDC.
- There is a bidirectional relationship between Tribal Public Health Authority (Tribal Epidemiology Centers at Tribal request) and CDC.

Appendix B: Case Service Design (CSD): Co-creating solutions (Section 508 Alternative Text Version)

- Diagram that shows four communicable diseases (congenital syphilis, measles, salmonella, and legionellosis) as examples of data needed to detect signals or trends, respond to an emergent outbreak, routine exchange of case data, and to conduct enhanced public health work.
- Title: The right data at the right time for the right action: use cases across 4 communicable diseases.
- There are four side-by-side, equally-sized white rectangles with blue text. The first box says: “Detect signals or trends”. The second box says: “Respond to an emergent outbreak”. The third box says: “Routinely exchange case data”. The fourth box says: “Conduct enhanced public health work”.
- Spanning across all of these boxes are four gray boxes with blue text inside. The first box says: “congenital syphilis”. The second box says: “measles”. The third box says: “salmonella”. The fourth box says: “legionellosis”.
- These boxes are stretched across the original four boxes which implies that data on these four diseases are needed to do four public health activities: detecting signals or trends, responding to an emergent outbreak, routinely exchanging case data, and conducting enhanced public health work.

Appendix C: Tribal Public Health Data Advancement Toolkit Components Graphic (Section 508 Alternative Text Version)

- Graphic with 4 arrows all pointing to the words: “Tribal Public Health Data Advancement Toolkit”.
- Each arrow represents four items contained in the toolkit.
- The first item is the Contributor Contact Sheet. Collecting contact information from the contributor supports the identification and alignment of toolkit contributors to promote collaboration.
- The second item is the Data Modernization Questionnaire. This questionnaire supports documentation of roadblocks and opportunities related to data sharing and infrastructure within key public health activities.
- The third item is the Prioritization Template, which facilitates Tribal conversations around impact, effort, and timeline of potential opportunities.
- The fourth item is the Executive Summary Report Template which supports summarization and communication of questionnaire results and plan moving forward with Tribal leaders and partners.