



Public Health Infrastructure (TECPHI) Program

Addressing Public Health in Indian Country

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Acronyms

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AASTEC	Albuquerque Area Southwest Tribal Epidemiology Center
AIAN	American Indian and Alaska Native
ANEC	Alaska Native Epidemiology Center
ANTHC	Alaska Native Tribal Health Consortium
APRs	Annual Performance Reports
BRFSS	Behavioral Risk Factor Surveillance System
CHAs	Community Health Assessments
CDC	Centers for Disease Control and Prevention
СТЕС	California Tribal Epidemiology Center
CoP	Community of Practice
DHHS	Department of Health and Human Services
DSAs	Data sharing agreements
EPG	Evaluation Practice Group
GLITEC	Great Lakes Inter-Tribal Epidemiology Center
GPTEC	Great Plains Tribal Epidemiology Center
IHS	Indian Health Service
ITCA	Inter Tribal Council of Arizona, Inc. Tribal Epidemiology Center
NEC	Navajo Epidemiology Center
NCC	Network Coordinating Center
NWTEC	Northwest Tribal Epidemiology Center
OKTEC	Oklahoma Area Tribal Epidemiology Center
PMs	Performance measures
RMTEC	Rocky Mountain Tribal Epidemiology Center
TA	Technical assistance
TECPHI	Tribal Epidemiology Center's Public Health Infrastructure Program
TECs	Tribal Epidemiology Centers
T/TO/UIOs	Tribes, Tribal organizations, and urban Indian organizations
USET	United South and Eastern Tribes, Inc. Tribal Epidemiology Center
UIHI	Urban Indian Health Institute

Executive Summary

The Tribal Epidemiology Centers Public Health Infrastructure (TECPHI) Program Year 3 Progress Report shares stories of achievement and growth of the 12 regional Tribal Epidemiology Centers (TECs) and the Network Coordinating Center (NCC).

Funded by the Centers for Disease Control and Prevention's (CDC) National Center for Chronic Disease Prevention and Health Promotion, this innovative 5-year cooperative agreement is designed to increase internal TEC capacity and infrastructure for disease surveillance, improving the effectiveness of health promotion and disease prevention, and engaging in sustainability activities. Funding has enabled TECs to deliver enhanced, culturally-informed, public health services to the Tribes, Tribal organizations, and urban Indian organizations (T/TO/UIOs) they serve.

TECs and the COVID-19 Pandemic: Meeting the Needs of T/TO/UIOs

Many TECPHI Program work plans and activities were impacted as TECs pivoted standard operating procedures to meet public health and community needs in addressing the COVID-19 pandemic. All TECs have demonstrated their ability to shift priorities to emergency response while continuing routine activities. TEC experiences during the COVID-19 pandemic are shared throughout this report with many positive outcomes to highlight.

The TECPHI Program Evaluation Approach and Plan

The TECPHI Program is guided by one overarching question:



The national TECPHI Program Evaluation Plan was collaboratively developed by the TECs and the CDC in Year 1 to collect data that monitors progress in building capacity and infrastructure. The plan includes a logic model, four additional evaluation questions, 8 corresponding performance measures, and qualitative data components.

Evaluation Questions	Performance Measure(s)	
To what extent has the capacity of TECs to collect and monitor data on health status of Tribal populations increased as a result of TECPHI funding?	Number of TEC staff Number of trainings provided or supported by TECs	
To what extent have partnerships between TECs and area partners and organizations been enhanced or established as a result of TECPHI funding?	3. Number of new or expanded partnerships with TECs 4. Number of new or expanded data sharing agreements (DSAs) with TECs	
To what extent has awareness of the services and expertise offered by TECs increased as a result of TECPHI activities?	5. Number of publications produced by TECs 6. Number of users of TEC websites	
To what extent has technical assistance (TA) been delivered by TECs to area partners and organizations to develop capacity in the use of data for surveillance and epidemiology and health priority setting as a result of TECPHI funding?	7. Number of TA requests fulfilled by TECs	
Impacts All Evaluation Questions	8. Number of grant opportunities applied for or supported by TECs	

TECPHI Program Year 3 Progress: Key Findings

Key findings are broadly categorized by the 8 TECPHI Program performance measures. Additional indicators related to the TECPHI Program performance measures have been included in the key findings to further illustrate TEC progress and growth.

Indicators related to:

Number of TEC staff.

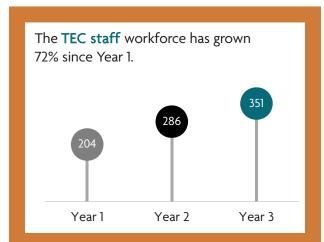
- 351 total staff
- 65 new staff
- 38% of staff are supported by TECPHI funding
- 33% of staff are American Indian and Alaska Native (AIAN) people
- >75% of staff have a health-related degree compared to 45% in Year 1
- 23 interns hosted by 5 TECs

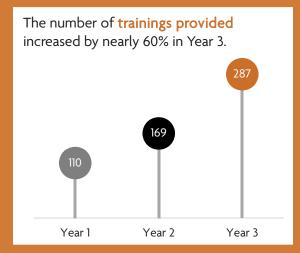
Number of trainings provided or supported by TECs.

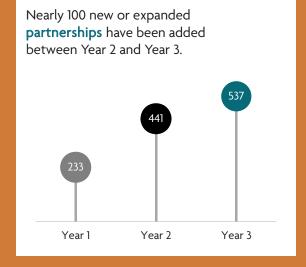
- 287 technical training opportunities
- ~60% increase in number of trainings
- >40,000 total individuals (staff and public) were trained through a variety of virtual offerings

Number of new or expanded partnerships with TECs.

- 537 new or expanded partnerships;
 ~40% were established with
 T/TO/UIOs
- **59** new or expanded partnerships with Tribal or State Health Departments
- 62 TEC-to-TEC collaborations
- 8 TECs provided sub-awards to T/TO/UIOs
- 27 TEC Director meetings to address the COVID-19 response and needs of T/TO/UIOs
- All 12 TECs participated in TECPHI Network Coordinating Center (NCC) activities







Number of new or expanded DSAs with TECs.

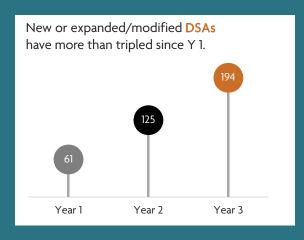
- 194 new or expanded access to over 200 datasets
- 70% of new or expanded DSAs were with T/TO/UIOs
- 9 TECs participated in COVID-19 contact tracing and/or case investigation activities for T/TO/UIOs

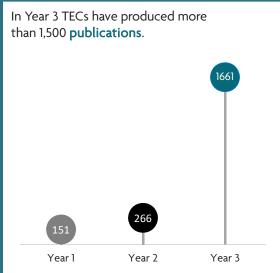
Number of publications produced by TECs.

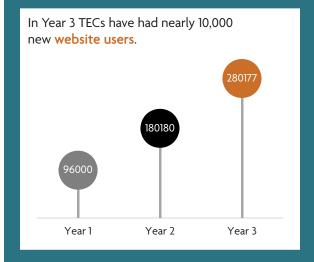
- >1,660 publications produced representing a 500% increase from Year 2. Many of these publications were produced to share COVID-19 related data and communications materials
- >200 more TEC Facebook followers and >75 more TEC Instagram likes
- 4 webinars featuring TEC Directors and staff
- 2 virtual exhibit booths at national conferences hosted by the NCC

Number of users of TEC websites.

- >280,000 users of websites representing a 50% increase from Year 2
- >14,277 new and returning visitors to Tribalepicenters.org
- >2,000 downloads from Tribalepicenters.org
- >360 registered users on TECConnect.org





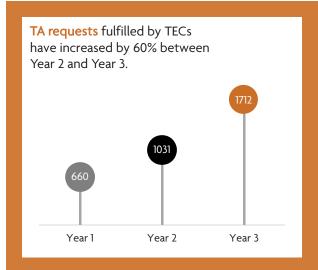


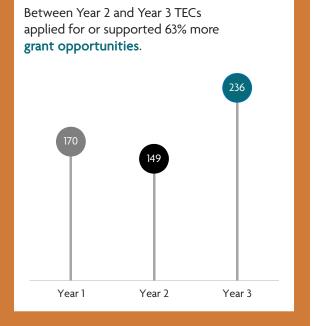
Number of TA requests fulfilled by TECs.

- >1,700 TA requests fulfilled
- 1/3 of those requests involved accessing, collecting, analyzing, and summarizing COVID-19 data
- ~45% of those requests were fulfilled for T/TO/UIOs

Number of grant opportunities applied for or supported by TECs.

- >230 total grants applied for or supported
- 58% of the grants provided funding to support TEC activities
- >84% of the grants applied for and awarded were federal grants, many of which supported COVID-19 response efforts
- 7 TECs and the NCC offered grant writing and management trainings
- 9 TECs have formulated and/or monitored a Strategic Plan
- 10 TECs have participated in and/or provided Strategic Planning training to T/ TO/UIOs
- 7 TECs have formulated and/or monitored a Sustainability Plan
- 6 TECs have participated in and/or provided Sustainability Planning training to T/TO/UIOs





Storytelling and the TECPHI Program

Storytelling is an important aspect of the TECPHI Program Evaluation. In addition to contributing the performance measure data, the TECs and the NCC are participating in a photo narrative project (a process similar to PhotoVoice). A brief narrative and 1-2 photos are submitted each year that reflect upon experiences related to the evaluation questions. The TEC and NCC photos are featured throughout this report. All TEC and NCC photos, along with the full narratives can be found in the separate TECPHI Program Year 3 Photo Narrative report.

Two additional qualitative projects were collected from the TECs and the NCC at the end of Year 3 – one project to provide additional context to one of the 8 performance measures, and the other project to highlight experiences during the COVID-19 pandemic. TECs had the freedom to choose their approach to the qualitative projects (e.g. key informant interviews, digital storytelling, variety of artistic and visualization techniques, etc.). TECs could choose what activity to feature from Years 1-3 of the TECPHI Program. All TEC and NCC qualitative project submissions can be found in the separate TECPHI Program Qualitative Projects report.

Conclusion

TECs made significant progress in answering the TECPHI Program Evaluation questions over the past three years. TECs have increased their ability to collect and monitor data with continued growth of TEC staff and amplified knowledge through a variety of trainings. Diverse partnerships, both internally and externally, were established even while navigating the challenges of working virtually. The TECs were able to access more and better quality data to support health priorities for T/TO/UIOs and COVID-19 response efforts. The TECs leveraged communication and marketing strategies to expand the reach of health related data and information and hugely increased production of communication materials to share with Tribal partners. Finally, the TECs continued to refine processes to deliver exemplary technical assistance and customer service.

The TECPHI Program has continued to evolve throughout Year 3 with increases in staffing, communication, technical assistance capacity, and improved infrastructure for chronic disease prevention activities. The TECs were able to quickly expand skills to meet the immediate needs of their T/TO/UIOs during the past year, perfectly illustrating an answer to the question "What can TECs do now that they could not do before?"

The TECPHI Program

In 2017, the Centers for Disease Control and Prevention's (CDC) National Center for Chronic Disease Prevention and Health Promotion funded Tribal Epidemiology Centers (TECs) for a 5-year cooperative agreement called the Tribal Epidemiology Centers Public Health Infrastructure (TECPHI) Program.

The TECPHI Program is a comprehensive funding opportunity supporting each of the 12 TECs and one Network Coordinating Center (NCC). The TECPHI Program funds activities at the TECs and at the NCC that are guided by the following three key strategies:

- strengthening public health capacity and infrastructure;
- implementing activities to improve effectiveness of health promotion and disease prevention; and
- engaging in sustainability activities.

The Alaska Native Tribal Health Consortium's (ANTHC) Alaska Native Epidemiology Center (ANEC) serves as the NCC for the TECPHI Program. The NCC provides central TECPHI Program organization, facilitates collaborative projects and communication, and implements the national TECPHI Evaluation Plan.

This report shares stories of achievement since the inception of TECPHI Program in 2017. It also includes TEC experiences during the COVID-19 pandemic. Please note that this report does not reflect the full breadth and depth of work the TECs do each day to serve their partners. The NCC continues to work with TECs to develop innovative approaches to share accomplishments.

How is public health capacity, infrastructure, and sustainability defined for the TECPHI Program?

Definitions are tailored to the TECPHI Program and describe TEC work in a Tribal health context – they have evolved as the TECs and the NCC have made headway on anticipated outcomes.

Public Health Capacity

The ability to respond to public health needs by possessing the "skills, motivation, knowledge, and attitude" needed to perform the TEC seven core functions:

- 1. collecting and monitoring data;
- 2. evaluating data and health care delivery systems;
- 3. identifying health priorities;
- 4. making recommendations for health service needs;
- 5. making recommendations for improving health care delivery systems;
- 6. providing epidemiologic and other technical assistance; and
- 7. providing disease surveillance.

Public Health Infrastructure

The foundation and framework that enables a functioning public health system to include:

- a workforce trained in public health core competencies;
- an information and data systems to rapidly analyze, assess, and communicate information;
- an ability to respond in a culturally relevant way to AIAN public health needs; and
- an established plan to sustain a program's efforts once funding has ended.

Sustainability

The ability of a public health program to:

- maintain core program components and activities consistent with goals and objectives;
- respond and adapt to AIAN public health needs; and
- provide continued benefits and value to those they serve.

What is a Tribal Epidemiology Center?

In 1996, four Tribal Epidemiology Centers (TECs) were established by the Indian Health Care Improvement Act (IHCIA) as a way to provide enhanced public health support to American Indian and Alaska Native (AIAN) Peoples, Tribes, Tribal organizations, and urban Indian organizations (T/TO/UIOs). Today, 12 TECs serve AIAN people and T/ TO/UIOs in each of the 12 Indian Health Service (IHS) Areas (see map on pg. 10), with one serving urban AIAN Peoples across the nation. The permanent reauthorization of the IHCIA in 2010 acknowledged TECs as public health authorities. This law directs the Secretary of the Department of Health and Human Services to grant each TEC access to data, data sets, monitoring systems, delivery systems, and other protected health information within the possession of the Secretary (25 USC 1621m(e)(1)).

TECs strive to maintain a proficiency in data collection, dissemination, surveillance services, as well as conducting epidemiologic studies. Each TEC is uniquely positioned in their respective service regions to provide technical assistance (TA) in these public health activities to T/TO/UIOs.

The TEC Mission

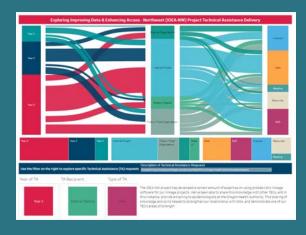
To improve the health status of American Indian and Alaska Native people by identification and understanding of health risks and inequities, strengthening public health capacity, and assisting in disease prevention and control.

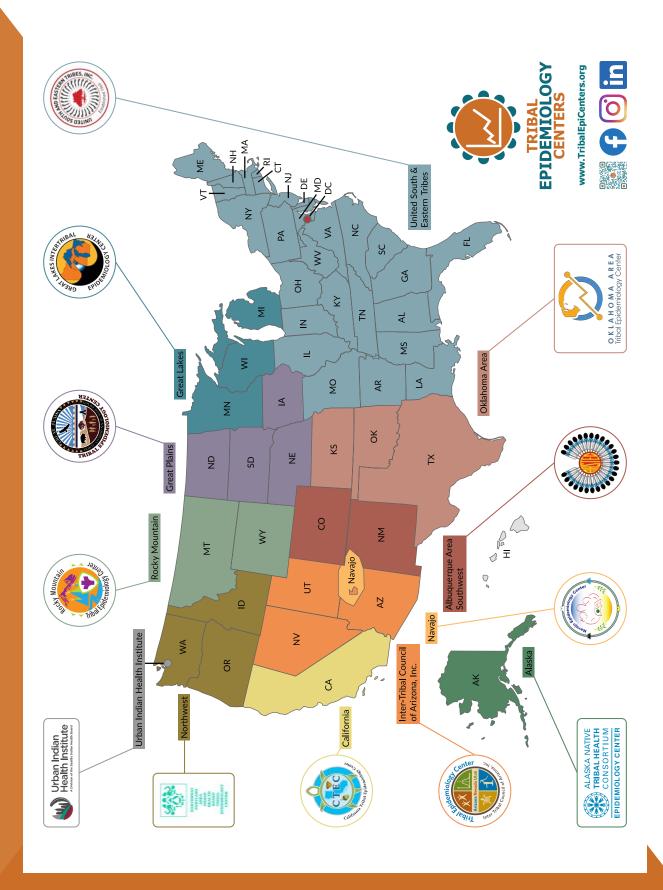
TECs share the mission of improving AIAN health by identifying health risks, strengthening public health capacity, and developing solutions for disease prevention and control by performing their seven core functions.* The TECs work in partnership with T/TO/UIOs and others towards this mission. Support from Tribal and urban Indian leadership, adequate funding, and access to valid and reliable data are other essential factors.

TECs operationalize the seven core functions in different ways based on priorities and needs of the AIAN people and T/TO/UIOs they serve, as well as to the presence or absence of funding sources for additional projects and programs.

*See definition of public health capacity in box on page 10.

NWTEC have increased the awareness of their organization, services, and expertise among Tribal, state, and federal partners. Staff participate as subject matter experts in state and national workgroups and provided extensive technical assistance to Tribes, TECs, state entities, and non-profits.





TECs and the COVID-19 Pandemic

Meeting the Needs of T/TO/UIOs

On March 13, 2020, COVID-19 was declared a pandemic by the World Health Organization and has remained a worldwide public health emergency during the writing of this report. This time has been a crucial period and has had significant impacts on the TECs, their parent organizations, and the T/TO/UIOs they serve.

Many TECPHI Program work plans and related activities were impacted as TECs adjusted standard operating procedures to meet public health and community needs. Understanding the impacts of COVID-19 on TECs is necessary for the interpreting the results presented in this progress report.

Despite the challenges of the last year, TECs have truly delivered on their ability to build capacity, infrastructure, and sustainability through new and continued partnerships, projects, data collection, analysis, and dissemination.



RMTEC conducted several in-person Tribal site visits to deliver personal protective equipment (PPE). Thousands of facemasks, face shields, gowns, bottles of disinfectant spray, bottles of hand sanitizer, and gloves were distributed.

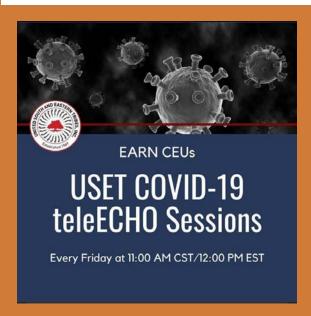
GPTEC delivered over 20,000 N95s, 200,000 gloves, 30,000 KN95s, 12,000 face shields, 10,000 digital thermometers, 600 infrared thermometers, and 1,500 oximeters directly to Tribal leaders and partners.



COVID-19 response efforts are only a fraction of the total work TECs perform for their T/TO/UIOs, however; they are integral to Year 3 TEC achievements. Response-related activities performed by TECs include, but are not limited to, the creation, initiation, maintenance, and/or facilitation of:

- access to federal, state, and local datasets;
- COVID-19 data dashboards;
- COVID-19 situation reports;
- data sharing agreements;
- data collection systems
- COVID-19 sub-award funding to communities;

- contact tracing and case investigation;
- training in contact tracing;
- grant writing support;
- PPE collection and distribution plans; and
- factsheets, resources, and public health messaging.





USET began hosting virtual weekly COVID-19 ECHO sessions in April of 2020. The ECHO format offers complimentary Continuing Education Units for nursing and medical staff who attend and complete evaluation surveys. By the end of September, USET hosted 20 COVID-19 ECHO sessions.

COVID-19 case investigation, contact tracing, and data analysis

Trust is an important part of collecting and working with T/TO/UIO data and information. Based on the trust TECs have built, Tribal communities and leadership asked for assistance with COVID-19 contact tracing, case investigation efforts, data analysis, and dissemination. In direct response, staff from nine of the 12 TECs immediately received training to conduct contact tracing and case investigations for their communities.

AASTEC, ANEC, CTEC, GPTEC, RMTEC, and USET, became subject matter experts in case investigations and contact tracing and adapted trainings for their communities. They provided their services to Tribal community members and clinic staff.

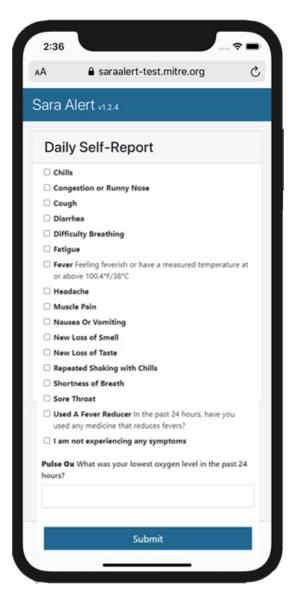
GLITEC made the Sara Alert system available for Area Tribes allowing health clinics to enroll individuals at risk of a COVID-19 infection or who tested positive. USET and ANEC used the REDCap secure web application to create COVID-19 surveillance and data collection tools.

TEC staff are well equipped to communicate challenging information to community members in a culturally-informed manner. In several cases, TECs established procedures with the IHS, states, and/or local health departments to contact, monitor, and follow-up with AIAN individuals exposed to COVID-19 in their areas.



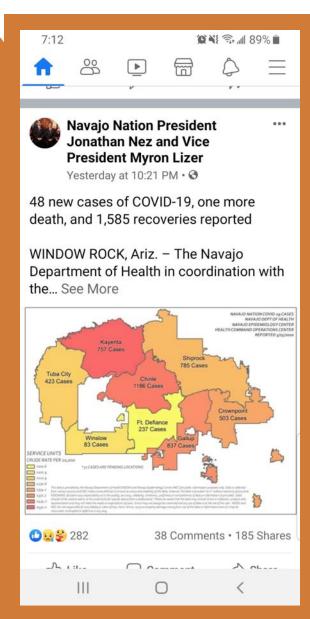
the data in order to improve their own local

responses and tracking capabilities.



GLITEC offered Tribal and urban clinics the Sara Alert COVID-19 monitoring system allowing the clinics to enroll individuals at risk of developing a coronavirus infection; individuals enrolled in the system could enter their symptoms daily, providing Tribal health clinics with real-time insights.

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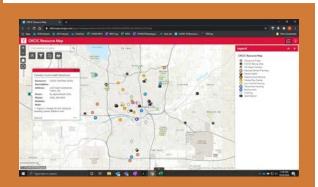


The daily Situation Report provided to the Navajo Nation Office of the President and Vice President, was posted on the President's Facebook. This support to the President has been vital in data translation and communicating with the Navajo people about the impacts of COVID-19 cases on the Navajo Nation.

OKTEC completed case investigations and contact tracing for over 500 COVID-19 positive cases across Oklahoma for the IHS; AASTEC staff acted as community-specific epidemiologist leads for case investigations, contact tracing, and contact monitoring for hundreds of AIAN individuals; and ANEC supported the Municipality of Anchorage conducting contact tracing for a cluster of cases associated with a shelter for persons experiencing homelessness.

Several TECs also provided daily or weekly situational reports or created data dashboards so Tribal leaders and community members could have up to date information. NEC provided over 200 COVID-19 situational reports to Navajo Nation and USET created over 750 for their Tribes and communities.

Other COVID-19 education materials were shared on a variety of social media platforms, websites, and in print. UIHI created a series of COVID-19 informational factsheets and coloring pages designed by Indigenous artists. CTEC also developed a series of posters featuring Tribal leaders.



The UIHI Evaluation Team created an interactive resource map with over 250 resources categorized by hygiene, food assistance, COVID testing sites, shelters, and included options for public transportation.

Stronger Working Together: The TEC Director Community of Practice

The COVID-19 pandemic has impacted all TECs, both professionally and personally. The TECs and their staff have proven their ability to swiftly respond to requests from T/TO/UIOs, while also managing remote working situations. Despite challenges and hardships during the pandemic, there have been many positive outcomes to highlight.

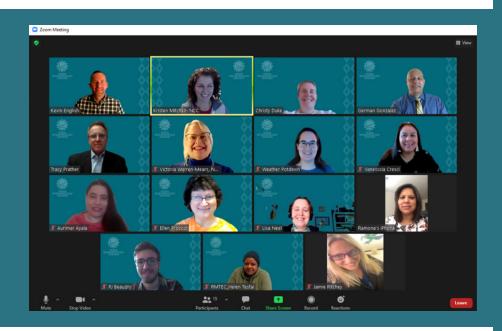
The 12 TEC Directors had been meeting on a weekly basis since the beginning March of 2020. Currently they continue to meet on a bi-weekly basis. The weekly meeting was initially a short-term solution for TEC Directors to strategize activities and initiatives around COVID-19 and to learn from each other. However, this weekly call evolved into a true "community of practice" (CoP) where topics were discussed as a group. The regular meeting has become a valued space to share resources and knowledge, engage with other partners, and to improve organizational emergency response efforts for T/TO/UIOs.

The meetings have continued for over a year and discussion topics have expanded from COVID-19 crisis response to include other general discussions related to Tribal health, the designation and application of public health authority, data access and management, and planning collaborative initiatives.

The frequency of communication among the TEC Directors in Year 3 is in sharp contrast to the quarterly meetings prior to the pandemic. The NCC has participated in the meetings since their inception to document discussions and action items.

Working together, the TEC Directors have been able to educate partners about common needs and have gained access to important data sets required for pandemic response. Greater impact is achieved when a group with common needs and interests work as a collective as seen here in this CoP.

The TEC
Directors have
been meeting
on a weekly
basis since the
beginning March
of 2020 to discuss
response efforts
to COVID-19 and
a variety of other
Tribal health
topics.





Through a partnership with Michigan, a GLITEC staff member covered the topic of Collecting Race and Ancestry Information in one of Michigan's Monthly Minute Video series.

Raising Awareness: Public health authority, data access, and data quality

A cornerstone to improving the public's health is ensuring the existence of accurate and reliable data, as it influences health care policy, decision-making, and funding. As designated public health authorities, TECs are able to support AIAN people and T/TO/UIO response efforts in public health emergencies and other surveillance activities.

TECs often collaborate with federal, state, and local agencies on data-related issues; however, the COVID-19 pandemic has highlighted many data issues TECs experience, such as barriers to accessing data (including establishing data sharing agreements), poor data quality, missingness of data, and racial misclassification.

The TECs have leveraged increased understanding of the importance of data this past year to raise awareness of data deficiencies and gaps. It has become apparent how current practices at state and federal level do not accurately represent how AIAN populations have been affected by the COVID-19 pandemic, nor with many other health disparities.

TEC Directors and staff have been interviewed on a variety of media outlets including radio shows, podcasts, and online news sources to raise awareness of the importance of quality and complete data in understanding the impact of COVID-19 on AIAN people. The NCC has listed many of these media highlights on the TECs in the Media page of the TEC website.

The TEC Directors and their staff have also collaborated to offer four online panel presentations describing TEC COVID-19 support of T/TO/UIOs.

- Hosted by the National Congress of American Indians Policy Research Center in May 2020, four TEC Directors shared how they initiated COVID-19 support for T/TO/UIOs at the beginning of the pandemic.
- 2. Hosted by the NCC and facilitated by Abigail Echo-Hawk, MA, Director of UIHI, 11 TEC Directors held a roundtable discussion in May 2020. The participants described COVID-19 response in Indian country, TEC public health authority, the importance of Indigenous data sovereignty, and the challenges TECs have experienced accessing data from state and federal organizations.
- 3. Facilitated by the National Academy of Sciences, Engineering and Medicine, two TEC Directors contributed to the Preliminary Framework for Equitable Allocation of COVID-19 Vaccine in September 2020. One served as a committee member and the other provided testimony during the public listening session.
- 4. Hosted by the CDC Preventive Medicine Residency and Fellowship Program, five TECs participated in a Grand Rounds discussion in November 2020. The participants discussed systems-based approaches and leadership practices to address AIAN population health issues and public health emergencies.

COVID-19 RESPONSE in INDIAN COUNTRY:

Roundtable with the Tribal Epidemiology Center Directors

MAY 21, 2020





Facilitated by:

Abigail Echo-Hawk

Director:

Urban Indian Health Institute



ADVANCING PUBLIC HEALTH IN INDIAN COUNTRY

The NCC hosted the TEC Directors Roundtable session where 11 of the 12 Directors shared completed and ongoing response efforts to COVID-19 to a diverse audience of 217 who including Tribal members, federal partners, the media, interested public, TEC staff, and others.

TECPHI Program Evaluation Plan

The NCC initiated the development of the national TECPHI Program Evaluation Plan during the first year of the program by conducting 31 key informant interviews. Interviewees included TEC staff, the CDC, and other partners.

Questions focused on past evaluation efforts by TECs and helped determine expectations for the TECPHI Program Evaluation Plan. Respondents indicated they wanted:

- a straightforward performance measurement (PM) plan consistent across all TECs;
- PMs that are tied to other indicators (e.g. evaluation questions);
- data that would be reflective of individual and collective success;
- a low burden data submission process;
- clear communication between reporting entities;
- data that would be relatable to T/TO/ UIOs: and
- an opportunity for TECs to tell their own stories.

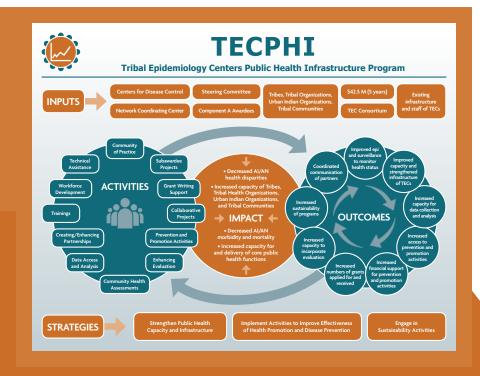
As a next step, the NCC convened the TECPHI Evaluation CoP Group with representatives from each TEC. Discussions within the group led to the creation of the national TECPHI Program Evaluation Plan that includes a logic model, one overarching and four additional evaluation questions, 8 corresponding PMs, and qualitative data components.

The TECPHI Logic Model (see figure below) communicates the intent of the evaluation approach. It acts as a roadmap describing TEC and partner contributions, activities, and anticipated outcomes of the Program.

Data collected monitors progress in building TEC capacity and infrastructure. As new data, and changing contexts emerge, updates of goals, and anticipated progress may occur over time. The national TECPHI Program Evaluation Plan is dynamic and allows TECs the flexibility to describe their work in a way that is most useful to their organization and partners.

Several questions were added to the data collection in Year 3 to gather information related to COVID-19 case investigation and contact tracing efforts, strategic planning, and sustainability planning.

The TECPHI Logic
Model communicates
the intent of the
evaluation approach.
It acts as a roadmap
describing TEC and
partner contributions,
activities, and
anticipated outcomes
of the Program.



What can TECs do now that they could not do before?

The TECPHI Program's overarching evaluation question, "What can TECs do now that they could not do before?" speaks to the main purpose of the Program — to increase capacity and strengthen infrastructure and sustainability of TECs. Four other evaluation questions and corresponding data from 8 PMs will track progress over time.

Program Objectives	Evaluation Questions	Performance Measures
Growing and Building the TEC Workforce	To what extent has the capacity of TECs to collect and monitor data on health status of Tribal populations increased as a result of TECPHI funding?	1. Number of TEC staff 2. Number of trainings provided or supported by TECs
Developing Partnerships and Increasing Collaborations	To what extent have partnerships between TECs and area partners and organizations been enhanced or established as a result of TECPHI funding?	3. Number of new or expanded partnerships with TECs 4. Number of new or expanded data sharing agreements (DSAs) with TECs
Improving Communication and Outreach	To what extent has awareness of the services and expertise offered by TECs increased as a result of TECPHI activities?	5. Number of publications produced by TECs 6. Number of users of TEC websites
Enhancing TA and Support to Tribes, Tribal Organizations, and Urban Indian Organizations	To what extent has TA been delivered by TECs to area partners and organizations to develop capacity in the use of data for surveillance and epidemiology and health priority setting as a result of TECPHI funding?	7. Number of TA requests fulfilled by TECs
Planning for Sustainability	*Impacts All Evaluation Questions	8. Number of grant opportunities applied for or supported by TECs*

Showing and Telling

Each year the TECs and the NCC participate in a photo narrative project (a process similar to PhotoVoice).* Brief narratives and 1-2 photos share experiences that speak to the evaluation questions. These photos help the TECs and the NCC "fill gaps" and provide context to the quantitative PM data.

Two additional qualitative projects were collected from the TECs and the NCC at the end of Year 3 - one to provide additional context to a PM, and the other to highlight experiences during the COVID-19 pandemic. TECs had freedom to choose their approach for both of the qualitative projects (e.g. key informant interviews, digital storytelling, variety of artistic and visualization techniques, etc.). They could also choose which activity to feature from Years 1-3 of the Program.



After attending UIHI's Indigenous Evaluation workshop, a participant stated the most important thing they learned was "... Indigenous Evaluation is not always about the tools of evaluation, but the way that these tools are used, the feeling, the purpose, and the pace."

STORYTELLING: A Traditional Way of Sharing

Storytelling is an important aspect of Indigenous evaluation. Stories "support the interpretation of the data" and are a traditional way of sharing what does and does not work.¹

Stories allow participants to provide context to their experience. By incorporating stories into evaluation, participants are able to reflect on the relationship of activities to the anticipated outcomes or goals of their work.²

- Tribal Evaluation Workgroup. (2013). A Roadmap for Collaborative and Effective Evaluation in Tribal Communities. Children's Bureau, Administration for Children and Families, U.S. Department of Health and Human Services.
- 2. LaFrance, J., & Nichols, R. (2009). Indigenous evaluation framework: Telling our story in our place and time. Alexandria, VA: American Indian Higher Education Consortium (AIHEC).

*Special thanks to the Urban Indian Health Institute for their insight and advice. The TECPHI photo narrative project was inspired by the community participatory evaluation approach used with their awardees.

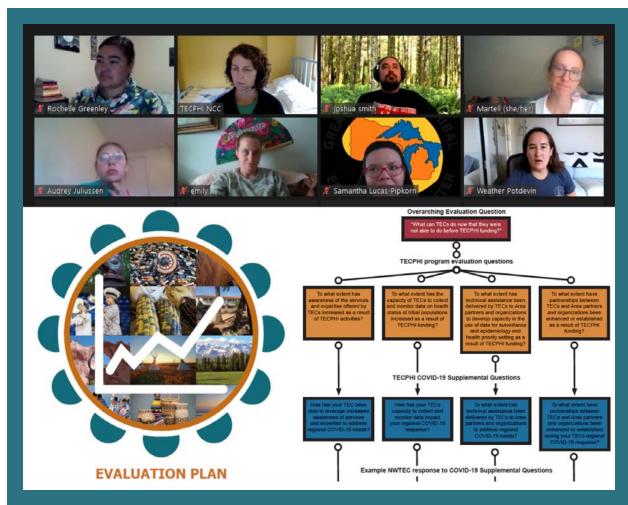
Community-Driven Evaluation: COVID-19 Qualitative Project

May 2020, participants of the TECPHI Evaluation CoP meeting decided to complete a qualitative COVID-19 project in addition to the annual deliverables. The project guidelines were left open for TECs to decide the best way to report on activities. Reporting did not have to include projects directly funded by the TECPHI Program as there were differences in experiences and how each TEC operationalized response efforts.

COVID-19 projects share stories of:

- flexibility during a time of emergency;
- capacity for growth during unsure times;
- virtual relationships initiated and maintained with partners and communities;
- increased capacity (e.g. data capacity, data stewardship, work in barrier reduction, etc.); and
- operational capacity as public health authorities individually and as a collaborative.

All TECs and the NCC's Year 3 and COVID-19 qualitative project submissions can be found in the TECPHI Program Qualitative Projects report.



To highlight TEC response efforts during the COVID-19 pandemic, members of the TECPHI Program Evaluation CoP decided to complete an additional COVID-related qualitative project. Joshua Smith from NWTEC took the lead in drafting a framework and an example template to get the TECs started.

TECPHI Program Progress Report Evaluation Data & Data Sources

The quantitative and qualitative data presented in this report are intended to share TECPHI Program progress, guide program implementation, and inform future activities. This Year 3 Progress Report draws on data and information from the following six sources:

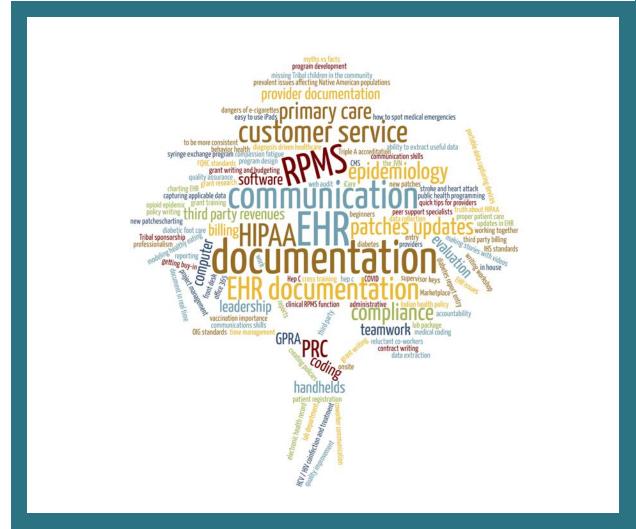
Evaluation Data	Data Source	Description	Data Analysis	
Performance Measures	Primary data annually collected from TECs and the NCC using a REDCap survey instrument. Each TEC and the NCC are emailed a unique link to submit data to maintain confidentiality.	Quantitative data and brief narrative data collected from all TECs and the NCC on an annual basis that is used to monitor TECPHI Program progress.	Data is downloaded into an Excel spreadsheet and analyzed using descriptive statistics.	
2. Photo Narratives		Photos with brief narratives describing the TECs and NCC experiences related to each of the evaluation questions.	Photo narratives and qualitative projects are shared as	
3. Year 3 Qualitative Projects		A qualitative project of the TECs' choosing to provide additional story and context for one of the 8 PMs. TECs could submit projects through the REDCap survey or by email.	submitted in full in the appendices. Photos with brief, truncated narratives are featured	
4. COVID-19 Qualitative Projects		A qualitative project of the TECs' choosing to provide additional story and context of experiences during the COVID-19 pandemic. TECs could submit projects through the REDCap survey or by email.	throughout the Progress Report to illustrate the PMs, evaluation questions, or theme of the report section.	
5. FY2020 Annual Performance Reports (APRs)	TEC and NCC APRs submitted to the CDC and shared with NCC via CDC Secure Access Management Services (SAMS).	The APRs are one of the annual required reporting documents submitted to the CDC. The reports describe activities and progress TEC and the NCC made on TECPHI project work plans from April 1, 2019 to March 31, 2020.	APRs and evaluation reports are reviewed and analyzed using content analysis. Stories, examples of successes, challenges, themes, etc. are collected from	
6. Year 3 TECPHI Program Interim Evaluation Reports	TEC and NCC Interim Evaluation reports annually submitted to the CDC and shared with NCC via CDC SAMS.	TECPHI Interim Evaluation Reports were submitted to the CDC and reflect findings from Year 3 of the individual TEC projects. The interim evaluation reports are concise documents sharing basic information, highlights of work completed, and progress made answering evaluation questions.	narrative data and organized by PM, evaluation question, or theme to share the story of the TECPHI Program over the past year.	

TECPHI Program Evaluation Findings

Data and findings in the following sections are organized around the five TECPHI Program Objectives:

- 1. Growing and Building the TEC Workforce;
- 2. Developing Partnerships and Increasing Collaborations;
- 3. Improving Communication and Outreach;
- 4. Enhancing Technical Assistance and Support to Partners; and
- 5. Planning for Sustainability.

The key findings in each section are broadly categorized by the 8 TECPHI PMs. Additional indicators related to the PMs have been included in the key findings to further illustrate TEC progress and growth.



To better comprehend the kinds of support needed, USET surveyed health staff on their perceptions of capacity needs. The word cloud highlights the findings.

Growing & Building a Public Health Workforce

A well-staffed and competent public health workforce is a key component to improving TEC capacity, infrastructure, and sustainability. All TECs hired new staff, supported professional development, and provided trainings to their T/TO/UIO workforce on a range of topics to build core public health competencies as well as to develop skills related to the COVID-19 pandemic and emergency response. Other activities during Year 3 included supporting interns, student practicum placements, and contracting subject matter experts.

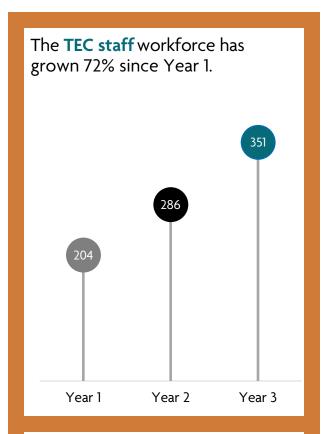
Year 3 Key Findings:

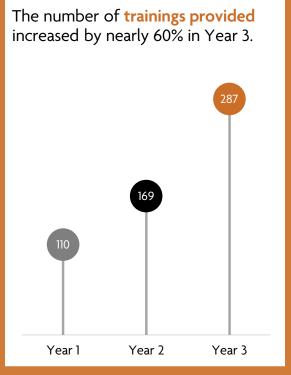
Number of TEC staff.

- 351 total staff
- 65 new staff
- 38% of staff are supported by TECPHI funding
- 33% of staff are American Indian and Alaska Native (AIAN) people
- >75% of staff have a health-related degree compared to 45% in Year 1

Number of trainings provided or supported by TECs.

- 287 technical training opportunities
- ~60% increase in number of trainings
- >40,000 total individuals (staff and public) were trained through a variety of virtual offerings





Staffing has been dynamic over the past year and TECs have nearly doubled in size since Year 1 of the TECPHI Program (2017). Shifts in priorities due to pandemic response and funding available to support emergency operations have increased employment opportunities at all TECs. The majority of TECs gained staff and filled positions for project managers, statisticians, epidemiologists, evaluators, communication specialists and administrative support. Several TECs hired CDC Foundation staff, whose work has been dedicated to COVID-19 support activities like case investigations and contact tracing.

AASTEC, ANEC, CTEC, NWTEC, OKTEC, and UIHI hosted interns who were involved in a variety of projects within the TECs and community partners. Projects included public health research, chronic disease

reporting, data entry/analysis, evaluation activities, maternal and child health epidemiology consultation, and oral health data reports.

Two of the interns at UIHI and one at ANEC were hired as full time staff. NWTEC assisted an AIAN PhD candidate with an analysis of Oregon Violent Death Reporting System data.

With travel and in-person restrictions, TECs adapted training opportunities to online formats. For many TECs, the training focus has been on COVID-19 contact tracing and case investigations and emergency response structures and systems. As examples, NEC provided trainings to CDC Response teams and new CDC Foundation staff, while GPTEC provided several levels of Incident Command System trainings.

This photo shows the growth of the UIHI **Evaluation Team over** the years of TECPHI funding and the role the internship program played in that growth. Each year, a previous intern became a full-time staff.









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Educational opportunities around effective public health practices like data visualization, SAS programming, advanced Excel, grant writing and management, health data literacy, data linkages, and evaluation were also provided:

- CTEC organized seven opioid-related trainings.
- GLITEC hosted the first-ever Convening of Bemidji Area Oral Health Professionals.
- ITCA offered a "Health Literacy" training with attendance from 10 Tribal partners, as well as a "Quality Improvement Basics" workshop with attendance from 9 Tribal partners.
- OKTEC held a large multi-day training seminar to create Tribal Health Improvement Plans and covered the necessary components of effective plans.
- The NCC provided a virtual 10-week
 Certified in Public Health exam study group, co-hosted by the GLITEC Director.

TECs have also assessed training needs for staff and partners:

- AASTEC distributed an online training needs and preferences survey to colleagues and partners to inform future training opportunities and development.
- GLITEC surveyed staff to assess perceptions of the internal working environment, level of staff engagement, and self-reflected epidemiology competencies.
- ITCA completed a series of key informant interviews assessing Tribal public health infrastructure, workforce, and data systems to inform future training, TA, and activities.



OKTEC offered Excel 101 trainings to partner organizations throughout Oklahoma to increase data collection and data management capacity.

Challenges

Although TECs have retained and added staff, many have faced difficulty recruiting qualified individuals and have experienced high turnover. These challenges are attributed to task re-assignment during the COVID-19 response, huge hiring competition among organizations in public health related fields, and internal human resource issues related to employee onboarding.

Leadership and staff have adjusted to working remotely, provided a continuum of services, met community needs virtually and have risen to meet challenges as exemplified throughout this report.



ANEC used infrastructure it built in the first two years of the TECPHI Program to work collaboratively and stay connected virtually when the COVID-19 global pandemic forced the entire department to work from home.

Developing Partnerships and Increasing Collaborations

Effective partnerships and collaborations are essential for increased communication around best practices and developing trusting relationships among partners.

Maintaining and expanding DSAs with T/TO/UIOs, state, and federal partners to increase access to a variety of data is a key outcome of these partnerships and collaborations.

Data access has been especially critical during COVID-19 response. TECs have made progress in expanding DSAs with T/TO/UIOs, counties, states, and federal partners which affords TECs an increased ability to support Program implementation and community needs.

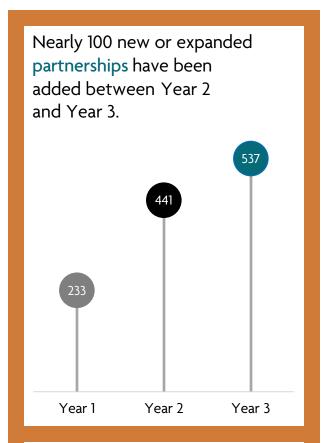
Year 3 Key Findings:

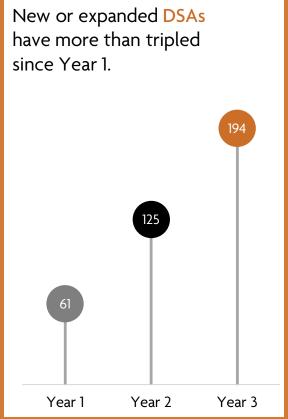
Number of new or expanded partnerships with TECs.

- 537 new or expanded partnerships;
 ~40% were established with T/TO/UIOs
- **59** new or expanded partnerships with Tribal or State Health Departments
- 62 TEC-to-TEC collaborations
- 8 TECs provided sub-awards to T/TO/UIOs
- 27 TEC Director meetings to address the COVID-19 response and needs of T/TO/UIOs
- All 12 TECs participated in TECPHI Network Coordinating Center (NCC) activities

Number of new or expanded DSAs with TECs.

- 194 new or expanded access to over 200 datasets
- 70% of new or expanded DSAs were with T/TO/UIOs
- 9 TECs participated in COVID-19 contact tracing and/or case investigation activities for T/TO/UIOs







While attending a conference, USET Evaluation Specialists were able to step away and engage in a TEC-to-TEC visit with GLITEC.

Public Health Infrastructure Working Group
Copperhead Room
Homewood Suites by Hilton Phoenix Tempe ASU Area
2104 E. Rio Salado Parkway, Tempe, AZ 85281
December 12, 2019

O9:00am - 09:15am
Sign-In and Welcome
Partnering with Tribal Health Jurisdictions
Beca Scratton, STD Control Manager
Arizona Department of Health Services

O9:55am - 09:55am
Spotting Patients with Suspected RMSF
Jennifer Collins, Communicable Disease Epidemiologist
Maricopa County Department of Public Health
Maricopa County Department of Public Health
Maricopa County Department of Health Services

10:15am - 10:45am
Tubervalosis Tid Bits for Public Health Services

10:45am - 11:00am

11:15am - 12:00pm
Tribal, County, and State Partnerships Discussion
TECHI Tribal, Valory, Land State Partnerships Discussion
TECHI Tribal Patients
Maricopa Department of Public Health
12:00pm - 01:00pm
Networking Lunch (Provided)
O1:00pm - 01:30pm
Comments, Questions, and Evaluations

ITCA organized a Public Health Working Group for their sub-awardee Tribes. Invitations were also extended to all Phoenix and Tucson IHS Area Tribes. TECs work with various partners to facilitate knowledge-sharing and problemsolving, select health priorities, and leverage resources. Trust, maintaining, and building relationships with T/TO/UIOs and Tribal leadership is essential for program sustainability and effective, consistent service delivery in Indian Country. TECs reported establishing partnerships with T/TO/UIOs, state and county health departments, other health organizations, and other sectors. The TECs worked together frequently on various activities. Partnerships ranged from formalized contractual agreements for specific services to more informal relationships.

AASTEC, CTEC, GLITEC, GPTEC, ITCA, RMTEC, UIHI, and USET provided TECPHIfunded sub-awards to Tribal partners. The sub-awards ranged from mini-grants to larger, long-term projects and funded a variety of initiatives. For example, AASTEC, CTEC, GPTEC, UIHI, and USET provided funding, support, and targeted TA for community health assessment projects. ITCA coordinated a sub-awardee Public Health Working Group and conducted site visits where they helped awardees create data dissemination plans for their projects.

ANEC enhanced their partnership with the ANTHC Dental Health Aide Therapy (DHAT) program by expanding a training curriculum to include instruction on epidemiology, evaluation, and data tracking. They also completed an epidemiology project to improve the DHAT program's ability to perform future public health community projects.

AASTEC has maintained connections with the IHS Albuquerque Area Health Promotion and Disease Prevention Council, the CSTE Tribal Subcommittee, and several other state of New Mexico coalitions and work groups. On the west coast CTEC, preserved working relations with a variety of coalitions and work groups in California, the National Indian Health Board, and the Native American Environmental Protection Coalition.

OKTEC has supported the Oklahoma Native Oral Health Network project, which has seen steady growth in membership with 115 members representing six states and seven Tribal Nations.

RMTEC continued to foster relationships with Tribal health departments and the National Indian Health Board, and has expanded their reach by collaborating with chemical dependency centers, diabetes programs, dentistry, opioid experts, and the states of Montana and Wyoming (through various departments, coalitions and workgroups).



ANEC continued its partnership with ANTHC's Dental Health Aide Therapy (DHAT) program and provided introductory public health, epidemiology, and evaluation training to DHAT cohorts.

All TECs worked towards establishing new and/or expanding current DSAs and other partnerships to improve monitoring of health status for the T/TO/UIOs they serve. DSAs are integral to providing sustained epidemiological support and TA, and have become increasingly important during the COVID-19 pandemic. Tribal leadership depends on accurate data and timely information to make decisions for the communities they represent.

Several TECs made strides in accessing or working with new data or completing new data projects:

- CTEC released the California Health Interview Survey 2018 data collection which includes the AIAN oversampling.
- GLITEC partnered with the Minnesota Department of Health to complete an oversample of AIAN 3rd graders participating in an oral health Basic Screening Survey (BSS) that will include all Tribal schools in the state.
- NWTEC signed a pilot DSA with the IHS to obtain Portland Area patient registration data from the IHS General Data Mart and completed seven linkages during the reporting period.
- OKTEC obtained data from the Healthcare Cost and Utilization Project from six years of hospital discharge data and emergency department. Staff further formatted the ICD-9/10 codes into meaningful descriptions and groupings.

ITCA organized a Quality Improvement training with the Public Health Foundation to support moving forward to create standard operating procedures for the TEC.

TECs enhanced data management systems to improve data collection, public health surveillance, quality assurance, and accessibility of data by T/TO/UIOs:

- ANEC finalized a data sharing agreement with the State of Alaska for COVID-19 related data. Staff have used the data to produce Situation Reports for Incident Command, predictive modeling, and presentations. They also implemented Syndromic Surveillance reporting for three large Tribal health organizations.
- ITCA organized a Quality Improvement training with the Public Health Foundation to help create standard operating procedures for the TEC.
- NEC implemented ArcGIS and SharePoint to enhance data management processes.
- RMTEC finalized their Data Management Policies and Procedures Manual.
- UIHI created a process of categorizing and cataloguing Epi Data Mart content in a searchable library and developed a standardized system of case definitions and code tables.

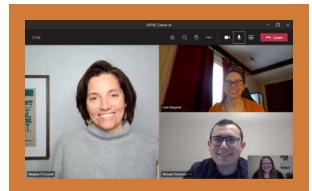


Challenges

The COVID-19 pandemic inhibited some relationship-building activities that would have required travel or in-person site visits, project planning, and implementation. TECs reported that many T/TO/UIOs needed to reallocate staff to support COVID-19 activities and their sub-awardees faced challenges spending funds due to reductions in operations, community gatherings, and/or area closures.

Barriers to data access and sharing included lack of federal and state datasets, limited resources/staffing for data analysis, and delays establishing data sharing agreements due to organizational negotiations. These barriers to data access have been amplified during the COVID-19 pandemic.

Although many TEC offices have been, and continue to be closed, TEC staff and their partners successfully transitioned to work from alternate locations. TECs have been and re-formatting all operations to suit online collaborative work.



Great Plains emergency operations staff facilitated a partnership with the CDC Foundation Corps to mobilize a robust COVID-19 response to data and TA requests, Tribal data and assessment needs, reports, and communications.

All TECs continued to seek new and innovative approaches to connect with partners, maintain relationships, increase access to data sources, and identify opportunities to educate partners and the public of the importance of TEC access to data.



AASTEC used virtual platforms to enhance their network between programs, Tribal communities, and outside partners. The immediate need to coordinate multiple efforts to address the COVID-19 pandemic greatly strengthened those relationships.

Improving Communication & Outreach

TECs have been working to improve data dissemination and communication with external audiences. TECs have also worked to increase presence and reach on social media platforms, share information on Tribalepicenters.org, individual websites, speaking events, and conferences. A variety of media, publications, and data visualization techniques have been used to share the value of TECs and communicate progress on public health initiatives.

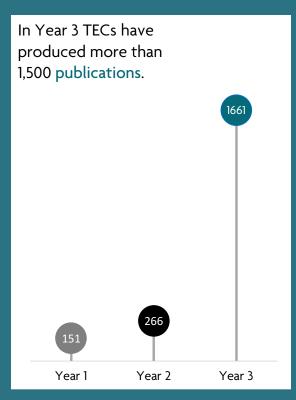
Year 3 Key Findings:

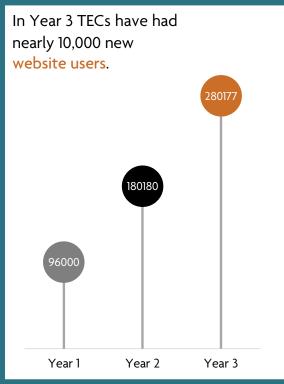
Number of publications produced by TECs.

- >1,660 publications produced representing a 500% increase from Year 2. Many of these publications were produced to share COVID-19 related data and communications materials
- >200 more TEC Facebook followers and >75 more TEC Instagram likes
- 4 webinars featuring TEC Directors and staff
- 2 virtual exhibit booths at national conferences hosted by the NCC

Number of users of TECs websites.

- >280,000 users of websites representing a 50% increase from Year 2
- >14,277 new and returning visitors to Tribalepicenters.org
- >2,000 downloads from Tribalepicenters.org
- >360 registered users on TECConnect.org





Engaging TEC Audiences

The COVID-19 pandemic increased the need to provide real-time and accurate health information. TECs have enhanced information outlets to share culturally-informed public health messaging, status updates, and COVID-19 resources and education materials.

TECs created social media campaigns that emphasized supporting individual and community wellness during the pandemic, as well as produced factsheets, videos, and other forms of messaging related to COVID-19. The NCC consolidated links to TEC-specific COVID-19 resources and information on Tribalepicenters.org.

The number of publications produced and disseminated by TECs greatly increased, with a reported 500% upswing in the last year. Many of these publications were COVID-19 related data and communications materials. For example, USET created over 750 COVID-19 reports for their Tribes and communities and the NEC produced over 200 Navajo Nation COVID-19 situation reports.

Publications also included peer reviewed articles, community health profiles, and health status factsheets. Of note, several TECs collaborated with states and the Council of State and Territorial Epidemiologists to write two CDC Morbidity and Mortality Weekly Reports:

- -Hatcher SM, Agnew-Brune C, Anderson M, et al. COVID-19 Among American Indian and Alaska Native Persons 23 States, January 31–July 3, 2020. MMWR Morb Mortal Wkly Rep 2020;69:1166–1169.
- -Arrazola J, Masiello MM, Joshi S, et al. COVID-19 Mortality Among American Indian and Alaska Native Persons — 14 States, January–June 2020. MMWR Morb Mortal Wkly Rep 2020;69:1853–1856.







After COVID-19 resulted in a decrease in caregivers bringing their children to receive routine childhood immunizations, GLITEC created social media images (banners and squares) and flat reminder-recall postcards to encourage community members to bring children for routine vaccinations.

TECs also strengthened methods of data visualization and dissemination to improve the understanding of and access to information. Many TECs added data dashboards on their websites, making data communication more efficient:

- AASTEC created and began populating a matrix of key health indicators from several data sources.
- ANEC collaborated with the ANTHC Injury Prevention program to update the Alaska Native Injury Atlas.
- GPTEC developed data dashboards using Tableau that are interactive and have a wide range of health data available to Great Plains Area Tribal partners.
- NWTEC developed a data dashboard to track emergency department visits for COVID-19 and related outcomes among AIAN people in Northwest states.

The NCC worked to provide more public visibility of TECs by ramping up social media efforts and partnering with a podcaster who has featured TEC staff on her Epidemiology Careers Podcast.

TECs also utilized ArcGIS to create interactive maps. NEC used ArcGIS for pandemic response to track and easily report COVID-19 cases per jurisdiction, which were used by the Navajo Nation for public dissemination. UIHI developed COVID-19 resource maps in ArcGIS to share information about services and facilities available for homeless individuals, including location of testing sites and public restrooms.

During a strategic planning session in Year 2, the TEC Directors recognized the need to increase engagement with external audiences and share the value of TECs with T/TO/UIOs, partners, and funders in a more cohesive and consistent manner. The NCC coordinated activities to increase outreach, collaboration, and communication that resulted in an increase in posts and engagement across both Facebook and Instagram. Additionally, the NCC has partnered with a podcaster to feature a staff from each TEC to discuss career paths in public health and working for a TEC. Three of the 12 TEC staff episodes made the podcast's "Top 10" most listened list for 2020.

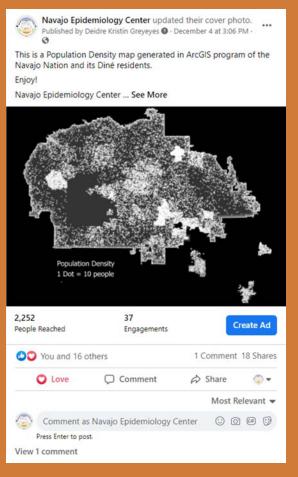


Challenges

A substantial challenge for all TECs this past year was ensuring that accurate and timely information was communicated to Tribal leaders and T/TO/UIOs. TECs are accustomed to sharing information in person, but have made meaningful connections by leveraging social media and other online platforms.



RMTEC finds that site visits are one of the most effective ways to increase awareness about the public health services the TEC can offer and the expertise staff can bring to address health needs. This meal was a healthy breakfast served during a pre-pandemic site visit to discuss data planning and training needs for a project.



NEC successfully launched their Facebook page to share updated COVID-19 information. NEC used ArcGIS Pro to illustrate population density on the Navajo Nation.

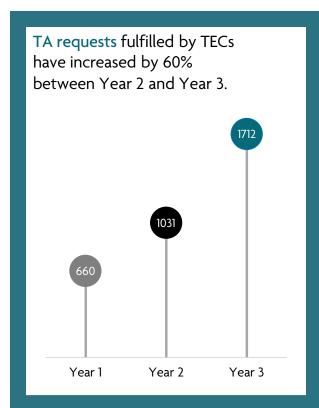
Enhancing Technical Assistance & Support

Providing technical assistance (TA) is a significant way TECs contribute to the health and well-being of Tribal community members and T/TO/UIOs. TA is the process of providing customized information, support, and/or responses (proactively or by request) and can be delivered in many different ways. It may come in the form of sharing expertise, skills training and consulting services, working with data, policy development, site visits, grant writing and management, and more. Many COVID-19 response activities focused on providing TA on contact tracing, development of fact sheets, situational reports, and identifying funding sources.

Year 3 Key Findings:

Number of TA requests fulfilled by TECs.

- >1,700 TA requests fulfilled
- 1/3 of those requests involved accessing, collecting, analyzing, and summarizing, COVID-19 data
- ~45% of those requests were fulfilled for T/TO/UIOs



Year 3 saw an increased capacity to respond to TA; both in routine requests and requests related to the COVID-19 pandemic. The demand for TA services has been significant since the beginning of the COVID-19 pandemic.** Six TECs responded to TA requests for developing Community Health Assessments (CHAs) or provided training to Tribal staff on how to access, process, and compile data into CHAs:

- AASTEC provided the analysis and dissemination of a Tribe's CHA data.
- ANEC worked with the State of Alaska to finalize the Healthy Alaskans 2030 state health improvement plan.
- GPTEC assisted with an assessment to guide the updating of a Tribe's master health plan.



Healthy Alaskans 2030

ANEC continued to participate in developing Alaska's State Health Improvement Plan, Healthy Alaskans 2030, and expanded the data and evaluation services offered to this important partnership between the Alaska Native Tribal Health Consortium and the State of Alaska.



CTEC staff attended community outreach events to raise awareness and promote its available TA and training services. Through these face-to-face interactions, CTEC connected with the public in a way that encourages participation in CTEC projects and surveys.

^{**} See pages 13-19 for more information on TEC COVID-19 response activities.

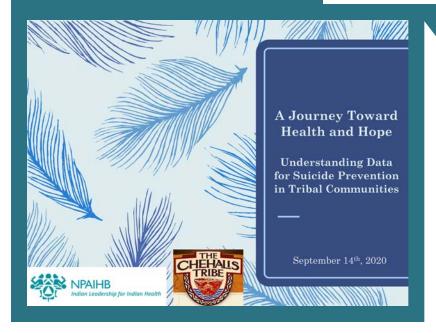
Many TECs provided TA to Tribal partners and sub-awardees, and pre-pandemic, several TECs were able to conduct site visits and offer in-person TA and consultation:

- CTEC staff provided TA and training for sub-awardees to increase program and staff capacity with specific trainings related to chronic disease prevention and program evaluation.
- ITCA provided tailored TA to Tribes to identify public health capacity priorities, design, data collection tools, and implement surveillance systems for local data collection.
- NWTEC continued work with a Tribe on a pilot suicide surveillance project and assisted them with strategic planning activities, identified suicide-related indicators, and developed inventories of existing local data sources.

NWTEC expanded delivery of TA to Tribes for using data for health priority setting. In this example, NWTEC provided TA to a Tribe in Washington on using data to identify priorities for suicide prevention activities.

TECs and the NCC also enhanced mechanisms to define and track TA requests:

- GLITEC and GPTEC reported their TA tracking system established in Year 2 has improved their ability to track and respond to TA requests.
- OKTEC improved their system for processing TA requests by implementing an automated web-based process that assigns staff based on area of expertise. This created a more efficient approach to fulfilling TA requests in a timely manner.
- UIHI updated and simplified their Data Request and TA database to better capture accurate information and increase usability for all UIHI staff members.
- The NCC conducted a literature review and created an overview document to help TEC staff better clarify definitions, tracking, categorization, and qualification of TA provision for T/TO/UIOs.



Challenges

Some TECs reported their capacity to respond was limited due to lack of staffing and an inability to access needed supplies and other materials that were in short supply locally. Despite this, TECs were still able to provide a wide range of COVID-19 TA, with 1/3 of all fulfilled TA instances in Year 3 being COVID-19 related requests.

TECs have struggled with how to track, categorize, quantify, and qualify TA, however; progress has been made. Other challenges mentioned included consistency in TA responses, ensuring appropriate follow-up, tailoring TA responses to the T/TO/UIOs and sub-awardees, and delays in developing tracking systems.



CTEC aims to improve TA services they offer to area partners and organizations to increase their capacity to use data for surveillance, epidemiology, and identifying health priorities. This photo shares how a group of CTEC epidemiologists worked to create a data portal using Tableau.



GPTEC was able to fill the long-vacant Data Coordinating Unit Director & Lead Epidemiologist position, bringing a wealth of expertise in epidemiology and public health informatics to T/TO/UIOs. As a result, four data acquisition projects with partners were successfully completed during Year 3.



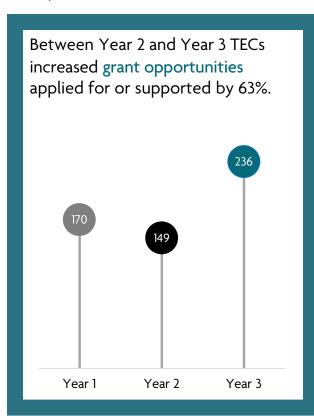
Planning for Sustainability

Securing and managing funding is key for program stability. Strategic planning is also an important aspect of improving sustainability. An effective strategic plan documents and establishes the direction of future work and identifies long-term goals of the program. Other contributors to include having established partnerships, staff, and communications.

Year 3 Key Findings:

Number of grant opportunities applied for or supported by TECs.

- >230 total grants applied for or supported
- **58%** of the grants provided funding to support TEC activities
- >84% of the grants applied for and awarded were federal grants, many of which supported COVID-19 response efforts.
- 7 TECs and the NCC offered grant writing and management trainings
- 9 TECs have formulated and/or monitored a Strategic Plan
- 10 TECs have participated in and/or provided Strategic Planning training to T/TO/UIOs
- 7 TECs have formulated and/or monitored a Sustainability Plan
- 6 TECs have participated in and/ or provided Sustainability Planning training to T/TO/UIOs

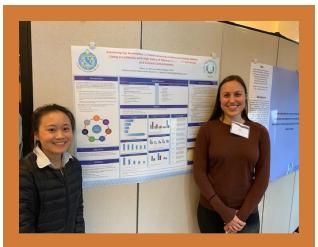


In Year 3, ANEC, CTEC, USET, AASTEC, OKTEC, UIHI and GPTEC hosted trainings and workshops relating to grant writing or grants management with titles such as, "Tribal Grant Writing" and "Best Practices for Managing Grant Programs During a Pandemic." In addition to the trainings offered, many of the TECs provided information about funding opportunities via email newsletters, websites, or social media. The NCC posted a total of 50 funding announcements to Tribalepicenters.com over the past year.

TECs applied for almost 140 grants this past year with nearly 100% of them being awarded. The majority of those awarded were from federal funding opportunities. Several TECs responded to grant opportunities for their T/TO/UIOs. Funding largely went to support COVID-19 response activities and was provided by the CDC and IHS.

TECs also provided TA for grant applications or management and support could include writing for or distribution of funds:

- GPTEC funded the accreditation process for a Tribal healthcare system and responded to eight data requests associated with grant-writing.
- OKTEC provided data to incorporate in several grant applications, and assisted with the interpretation and data visualization.
- RMTEC dispersed three sub-awards to Tribal communities. Staff provided additional support to specific priority health initiatives including strategic planning for a newly established Tribal health system and other community projects.
- USET provided sub-award opportunities through six federal grants and awarded four Tribes funds to support cancer prevention projects.



CTEC conducted a Tribally focused Behavior Risk Factor Survey (BRFS) for AIAN adults and youths residing in California. The data can be used by Tribes, Tribal and urban Indian health programs, Tribal organizations, and state and federal agencies for advocacy and policymaking purposes.

Action planning was also used to identify areas to improve program sustainability. The NCC funded virtual 1-on-1 Sustainability Assessment and Planning Program TA opportunities for each TEC facilitated by the Center for Public Health Systems Science at Washington University in St. Louis. The assessments helped TECs to learn about the various components of sustainability and work with their partners to develop action plans to align efforts for long-term success.

The Southern Plains Tribal Health Board (SPTHB) and Oklahoma City Indian Clinic (OKCIC) partnered to create a coalition empowering healthcare professionals to complete LEAN Six Sigma Green Belt Certification designed to improve healthcare processes overall.

In year 2, the NCC coordinated an in-person follow-up to the TEC Strategic Planning session held at the end of 2019. During this planning session, the TEC Directors refined, consolidated and approved strategic objectives, adjusted timelines, and assigned TEC staff to carry out action items. The NCC has made progress on strategic objectives related to improving communication and outreach, fostering inter-TEC collaborations, and student engagement activities despite the impacts of the COVID-19 pandemic.

The NCC regularly updates the TEC Directors on TEC Strategic Plan related activities and initiatives. The NCC has supported activities like creating opportunities for inter-TEC relationship building, the reformulation of the TEC communications and marketing plan, and supporting TEC recruitment efforts.



Since the beginning of the TECPHI Program, nine TECs moved forward in strategic planning activities, participated in trainings related to strategic planning, and supported their parent organizations and T/TO/UIOs in a variety of strategic planning processes:

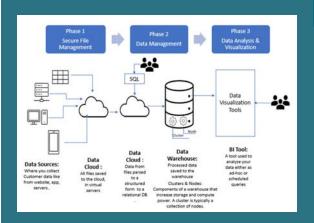
- AASTEC, GLITEC, and RMTEC provided strategic planning opportunities for T/TO/UIOs and staff have facilitated elements of strategic planning as requested by communities.
- ANEC worked with a Strategic Planning facilitator and invited their Scientific Advisory Council to participate in the process to develop ANEC's 5-year Strategic Plan.
- ITCA and eight sub-awardees created implementation, data dissemination, and workforce development plans to be implemented in Year 4.
- USET conducted a Gap Analysis
 with an external evaluating
 company, investigating how the TEC
 operationalizes the seven core functions
 as well as employee needs. The resulting
 Gap Analysis Report will be instrumental
 as USET undergoes strategic planning.



ITCA invited Strategic Planning subject matter experts to provide trainings for the opioid supplement sub-awardees.

Challenges

Similar to other areas, COVID-19 has impacted TEC ability to address work plans and strategic plans. Many TECs and their sub-awardees reported challenges in spending Year 3 funds due to activities being cancelled, difficulties recruiting and hiring, or travel restrictions.



GLITEC began the process of creating an integrated data management platform that will enable a secure and reliable end-to-end solution for data retrieval, data storage, data access, data analysis and visualization for all authorized users.

NWTEC has maintained and expanded its partnerships and built relationships with Native researchers in academic settings. In the past year, NWTEC staff collaborated with the Oregon Health & Science University's Wy'East program; a pathway program to support AIAN students pursuing careers in medicine.



Support from our Federal Partners

TECPHI Program awardees appreciated the consistent support and communication from the CDC, especially while TECs balanced routine services and COVID-19 response work. Monthly meetings with the CDC provided opportunities to address challenges and barriers as they arose, as well as enhanced the collaborative nature of the award. These regular meetings enabled the CDC to connect TECs and organizations engaged in similar projects and facilitate connections with subject matter experts.

The CDC's implementation of Expanded Authority allowed TECs to undertake activities and expenditures without the need for prior agency approval and has been well received. As a result, TECs were able to provide TA and services quickly and with better efficiency. Finally, short turnaround times between submitted budget revisions, other requests, and final approvals have been a valuable improvement.

The Navajo Nation requested additional assistance from the CDC to support response to COVID-19. CDC has deployed five CDC Response Teams to assist the NEC in data management and epidemiology assistance.



In Closing

Despite the disruption of the COVID-19 pandemic, all TECs made progress on strategies, activities, and have met the goals of the TECPHI Program. TECs have accomplished significant gains across all Program areas; most notably in workforce development and the capacity to respond to TA requests.

In addition to TECPHI Program specific work, TECs stepped in to fill needs, provide services, support partners, educate the public, and advocate for their T/TO/UIOs during the COVID-19 pandemic. TECs demonstrated their "agility and flexibility" during the crisis in serving their communities, and continue to grow.

The TECs, and the TECPHI Program, will continue to evolve over the course of the funding period in addressing chronic disease prevention and other health priorities. Progress, outcomes, photos and stories from TECs will be reported and shared on an annual basis, demonstrating the impact of the Program on improving overall health and wellness in Indian Country.

The 12 TEC Directors signed a thank you letter expressing appreciation of congressional support advocating for the CDC to provide TECs access to data. Data access has been particularly critical and time-sensitive during the COVID-19 pandemic. TECs historically speak with one voice to gain better access to resources and data for those they serve.



TRIBAL EPIDEMIOLOGY CENTERS

Public Health Infrastructure (TECPHI) Program



PROGRESS REPORT

Year 3