



# TRIBAL EPIDEMIOLOGY CENTERS

Public Health Infrastructure (TECPHI) Program

## Year 4 & 5 PROGRESS REPORT

Addressing Public Health in Indian Country



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## Acronyms

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
CTEC	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
TEC-C	Tribal Epidemiology Centers Consortium
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

# 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 five 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 Alaska Native Epidemiology Center (ANEC) serves as the NCC for the TECPHI Program and provides central TECPHI Program organization, facilitates collaborative projects and communication, and implements the national TECPHI Program Evaluation Plan.

The purpose of the TECPHI Program is to enhance the Tribal public health infrastructure serving American Indian and Alaska Native (AIAN) communities and organizations. The TECPHI Program funds activities at the TECs and the NCC and are guided by the following three key strategies\*:



\*Graphic courtesy of Dr. Syreeta Skelton-Wilson, ICF International

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

Public health capacity, infrastructure, and sustainability have been described in the literature, but had not been defined or described for TECs or in the Tribal health context. Definitions were tailored to the TECPHI Program and relate to TEC public health work in a Tribal health context. The following definitions were initially drafted after a literature review of current established definitions and have been reviewed and further refined on an annual basis to reflect how the TECPHI Program has evolved over the past five years.

### 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.

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### References:

1. Baker Jr, E. L., Potter, M. A., Jones, D. L., Mercer, S. L., Cioffi, J. P., Green, L. W., ... & Fleming, D. W. (2005). The public health infrastructure and our nation's health. *Annu. Rev. Public Health*, 26, 303-318.
2. Baker Jr, E. L., & Koplan, J. P. (2002). Strengthening the nation's public health infrastructure: historic challenge, unprecedented opportunity. *Health Affairs*, 21(6), 15-27.
3. Meyer, A. M., Davis, M., & Mays, G. P. (2012). Defining organizational capacity for public health services and systems research. *Journal of Public Health Management and Practice*, 18(6), 535-544.

## 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 AIAN Peoples, Tribes, Tribal organizations, and urban Indian organizations (T/TO/UIOs). 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 analysis, create data dissemination products, and provide data surveillance and epidemiologic services. Each TEC is uniquely positioned in their respective service areas to provide technical assistance in these public health activities to T/TO/UIOs. Today, 12 TECs serve AIAN people and T/TO/UIOs in each of the 12 Indian Health Services (IHS) Areas, with one serving urban AIAN Peoples across the nation.

This report highlights stories of achievement of the 12 TECs for the last two years of the TECPHI Program. The data, stories, and successes were made possible with CDC funding and shares the work of the TECs and how they serve their T/TO/UIO partners every day. To learn more about each of the TEC's TECPHI Program projects, please refer to the [Tribal Epidemiology Centers Public Health Infrastructure Program Brochure](#). The 12 TECs and corresponding IHS Areas (Figure 1) featured throughout in this report are:

- Albuquerque Area Southwest Tribal Epidemiology Center (AASTEC)
- Alaska Native Epidemiology Center (ANEC)
- California Tribal Epidemiology Center (CTEC)
- Inter-Tribal Council of Arizona, Inc. Tribal Epidemiology Center (ITCA)
- Great Lakes Inter Tribal Council Tribal Epidemiology Center (GLITEC)
- Great Plains Tribal Epidemiology Center (GPTEC)
- Navajo Epidemiology Center (NEC)
- Northwest Tribal Epidemiology Center (NWTEC)
- Oklahoma Tribal Epidemiology Center (OKTEC)
- Rocky Mountain Tribal Epidemiology Center (RMTEC)
- United South and Eastern Tribes Tribal Epidemiology Center (USET)
- Urban Indian Health Institute (UIHI)

## 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.**

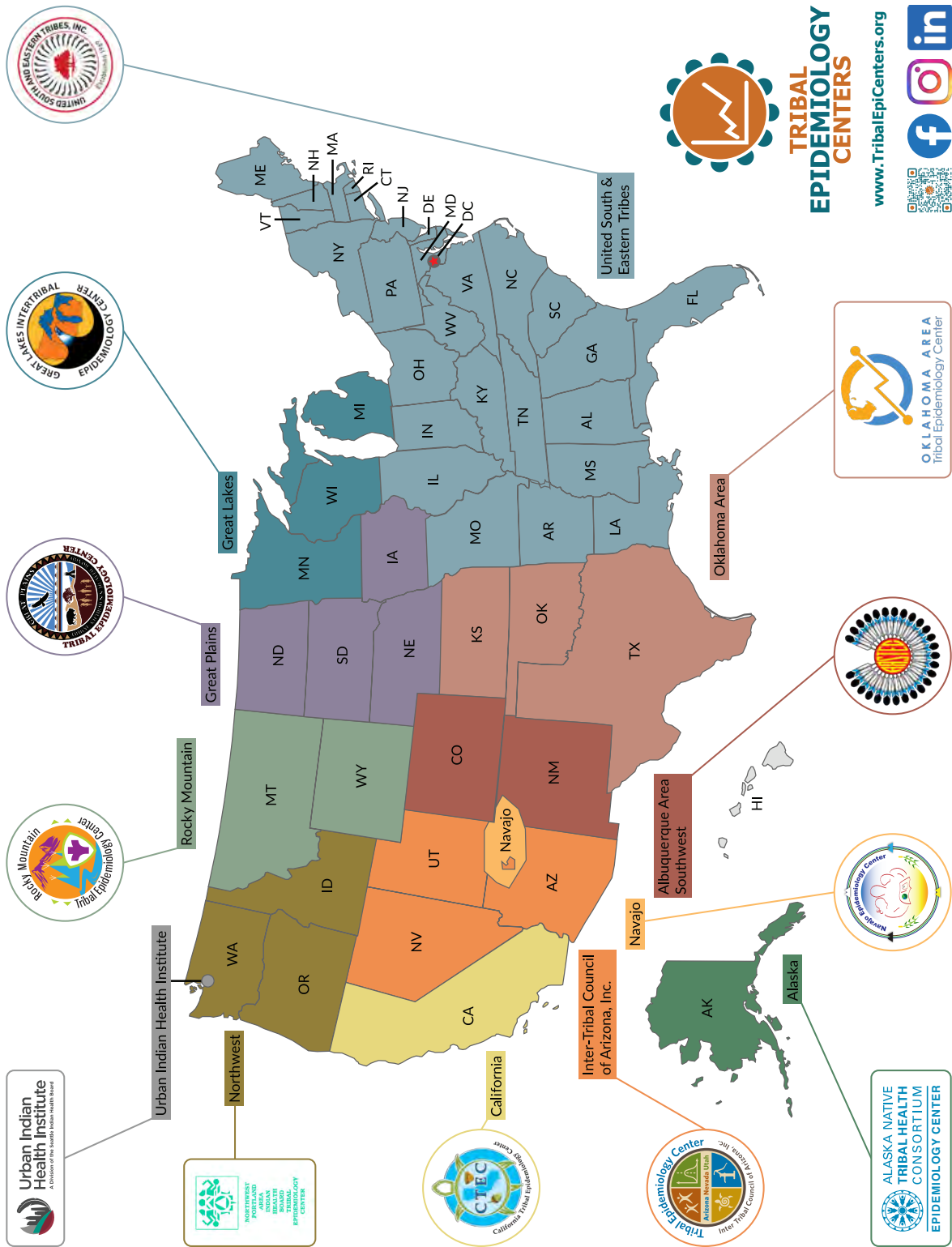
The TECs share the mission of improving AIAN health by identifying health risks, strengthening public health capacity, and developing solutions for disease prevention and control. Per the IHCIA, TECs perform the following seven core functions with respect to the applicable service area\*:

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.

The TECs work in partnership with T/TO/UIOs and others towards this mission. TECs operationalize the seven core functions in different ways based on priorities and needs of the AIAN people and the T/TO/UIOs they serve, Tribal and urban Indian leadership, funding sources, and access to valid and reliable data.

**\*Title 25-Indians, Chapter 18-Indian Health Care, Subchapter II-Health Services, U.S. Code § 1621m – Epidemiology Centers**

Figure 1. The 12 TECs and the Areas served.



## TECs and the COVID-19 Pandemic: A Special Note

In the final two years of the program, TECs demonstrated incredible resilience, adaptation, and flexibility in continuing to shift staff time and TEC resources to meet COVID-19 pandemic response needs while simultaneously completing TECPHI Program work plans. While many of these shifts in work priorities began in March, 2020 with the onset of the pandemic, the years covered in this report represent the unanticipated adaptation and normalization that the continued duration of the pandemic required. TECs had to innovate, particularly in the areas of evaluation, outreach and communication, and technical assistance. Despite the disruption that occurred during the pandemic, TECs experienced significant growth, and some of the changes that were required to meet immediate response needs have evolved into long-term positive impacts. These include the ability to reach broader audiences through virtual trainings, improvements to websites, and capacity and skills to develop and release factsheets, reports, and other publications. These themes and threads of achievement will be evident throughout the entire report.

### Year 4: Resilience in the face of adversity and adapting to a virtual world

In Year 4, the COVID-19 pandemic continued to be a worldwide public health emergency. Because of this, the work of TECs, their parent organizations, and T/TO/UIOs they serve continued to be impacted, but in this funding year the TECs were able to move beyond emergency response and adapt to the “new normal.” TECs continued to play an important role in COVID-19 response, including participating and facilitating many of the same response efforts as they had since the beginning of the pandemic, such as case investigation, contact tracing, data analysis, etc. TECs reported that 42% of their staff continued to support these activities in Year 4. However, resources were also put towards adapting work plans and activities to meet the current conditions, in particular shifting activities to virtual settings that had been historically held in person, such as conferences, trainings, and meetings. While in Year 3 TECs demonstrated their ability to build capacity, infrastructure, and sustainability by quickly pivoting to meet changing needs, in Year 4 the TECs demonstrated adaptability and continued resilience by leveraging communication and outreach tools such as social media, websites, having greater online presence, and virtual training opportunities. The success of these adaptations is evidenced by the huge increases in outreach with publications, trainings, and technical assistance.

## Year 5: Normalization of COVID-19 and adaptations are here to stay

TECs continued to participate in COVID-19 response efforts in Year 5 and staff time was diverted away from usual programmatic TEC activities, though to a lesser extent than the previous two years. “The most common areas of continued efforts and noted by 11 TECs, were in developing and distributing factsheets, resources, and public health messaging.” Other areas of effort that remained priorities were data collection, data entry, and reporting, maintaining COVID-19 data dashboards, and sharing COVID-19 situation reports (10 TECs). It became clear, that despite the COVID-19 pandemic waning in many respects, some of the adaptations would be maintained, such as virtual meetings, trainings and conferences, more remote employees, and a reduction of work-related travel.

A few positive impacts that have resulted from COVID-19 response work is that TECs were able to reach more attendees with virtual trainings, increasing capacity not just of TEC staff, but also the staff of T/TO/UIOs that they serve. Other activities, such as increased use of social media to drive website traffic, has been effective at increasing reach and getting resources out to communities.



As COVID-19 numbers began to subside, RMTEC employed a hybrid approach of in-person and virtual meetings, tailoring its response to meet the needs of the Tribes. RMTEC continued to meet regularly monthly with each Tribal community and conducted several in-person site visits to deliver supplies and participate in meetings.

# Where did we come from, where are we now?

## Workforce Development and Training Survey 2018-2022

In 2018, the NCC distributed a Workforce Development and Training Needs Assessment survey. The goal of this survey was to understand current skills within established public health domains and identify the areas of greatest need for professional development. Since that initial survey in 2018, the NCC has held many in-person and virtual workshops, webinars, and other trainings for TEC staff. In February of 2022, the NCC implemented a follow-up survey to assess and better understand how skills had improved or remained the same over the funding period. For both surveys, all 12 TECs were represented by at least one staff member response with a total of 82 staff responding in 2018 and 91 responding in 2022. Of staff who responded, the top three job roles of the respondents were the same across both surveys (Epidemiologist/Statistician/Analyst, Program Manager, and Other).

Overall, the self-reported level of skill and level of need for trainings did not change significantly from 2018 to 2022. However, one outcome of the survey stood out. In 2018 respondents self-reported Analytical/Assessment, Program Planning, Communication, and Leadership and Systems Thinking as top priorities for skills development across public health domain areas. In contrast, in 2022 when asked which public health domain TEC staff felt they excelled in, respondents identified the areas of high training needs in 2018 as the areas of excellence - Communication, Analytical/Assessment, and Program Planning.

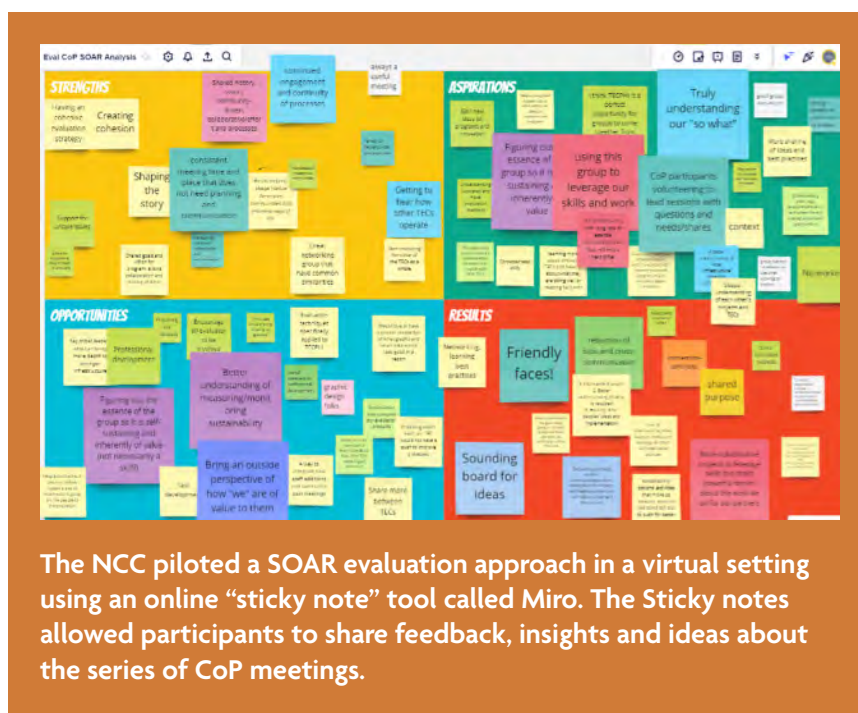
Other useful insights gathered from the survey was applicability of NCC-sponsored trainings to programmatic work and what modalities of training were most valuable to TEC staff. All the training opportunities were marked highly useful by the majority of respondents who had participated in the trainings, with Management Concepts: Managing Federal Grants, the Certified in Public Health (CPH) Exam review course, and Introduction to Excel Pivot Tables receiving the highest reviews. In-person trainings were the preferred mode of training and had the highest rated responses in both 2018 and 2022.

## The Evolution of TECPHI Communities of Practice

NCC was responsible for establishing a communities of practice (CoP) approach for the TECPHI Program. Based on data collected in a formative evaluation completed in the first year, recipients wanted the following: the CoPs to be a place of peer learning and problem solving; not duplicate other meetings; be limited in the number and type of people attending; establish a clear reason for attendance; and add value to participants' work. The NCC has hosted 62 topic-specific CoP groups (Program Manager, Evaluation, and Data) who met virtually one time every three months.

The ultimate goal for the NCC was to create a value-added space where colleagues could become good learning partners and could share "what kept them up at night" or "what they were struggling with." While not every meeting has offered profound insight to attendees or solved problems for all challenges, the dedicated time and space has become an integral part of the TECPHI Program routine and time for colleagues and friend to connect each month. The meetings have been useful for project planning, TEC announcements, sharing ideas, and introducing new staff. In lieu of meeting in person at regular intervals, the time on Zoom was well-spent seeing friendly faces and building relationships across TECs.

In the final year of TECPHI Program, the NCC conducted a series of Strengths, Opportunities, Aspirations, and Results (SOAR) analyses with each of the CoP groups. The SOAR analysis is a tool for working as a group to create a vision for the future. Using an online collaborative tool via Zoom, CoP attendees were able to use sticky notes to provide answers to the series of questions for the SOAR analysis of the CoP. Participation in all three SOAR analyses was high, and participants reported that they appreciated the anonymity of writing sticky notes versus unmuting to speak, as well as the option to stay off camera.



Overall, the goal of the activity was to reflect on whether the time in the CoP meetings was well-spent as a collective and to celebrate past accomplishments. The NCC also wanted the CoP attendees to think about what would keep them coming back to the meetings if funding ended and if there were no funding requirements attached.

CoP Group	Strengths	Opportunities	Aspirations	Results
<b>Evaluation</b>	<ul style="list-style-type: none"> <li>• Cohesion, shared vision &amp; goals</li> <li>• Peer learning</li> <li>• Telling the TEC story</li> </ul>	<ul style="list-style-type: none"> <li>• More active involvement</li> <li>• Developing TEC-specific evaluation approaches</li> </ul>	<ul style="list-style-type: none"> <li>• A self-perpetuating CoP</li> <li>• Developing/working on projects together</li> </ul>	<ul style="list-style-type: none"> <li>• Get new ideas</li> <li>• Sense of being “in it together”</li> </ul>
<b>Data</b>	<ul style="list-style-type: none"> <li>• Diverse, real world experience, including local/Indigenous methods</li> </ul>	<ul style="list-style-type: none"> <li>• Include more people;</li> <li>• “Get into the weeds”</li> <li>• Share experiences</li> </ul>	<ul style="list-style-type: none"> <li>• Increased awareness of TEC work;</li> <li>• Share successes &amp; address challenges</li> </ul>	<ul style="list-style-type: none"> <li>• Shared learning and knowledge</li> <li>• Good opportunity for networking</li> </ul>
<b>Program Manager</b>	<ul style="list-style-type: none"> <li>• Community of support, collaboration, and sharing</li> </ul>	<ul style="list-style-type: none"> <li>• Group planning; Training opportunities</li> <li>• More opportunities to share</li> </ul>	<ul style="list-style-type: none"> <li>• More cross-collaboration</li> <li>• A chance to get together face-to-face</li> </ul>	<ul style="list-style-type: none"> <li>• Opportunities for training</li> <li>• A sense of togetherness</li> </ul>

Questions were framed in a way so all attendees could participate, regardless of how many meetings they had attended over the past 5 years. After the series of SOAR analyses, the NCC identified themes in each of the areas and shared results back with all the groups.

A few themes were consistent across the three TECPHI Program CoP groups: desire for more opportunities for sharing across the TEC staff, appreciation of the benefits of a routine meeting time and dedicated space to come together and learn from colleagues, and the pre-scheduled regular meeting times have provided a sense of togetherness for TEC staff. These insights are important as TECs consider the sustainability of the programmatic work funded by the TECPHI Program.

### **TEC-C CoP: The evolution of a naturally occurring CoP**

TEC leadership experienced the establishment and evolution of their own CoP in the last two years of the TECPHI Program. The Tribal Epidemiology Centers Consortium (TEC-C), a loose organization made up of the 12 TEC Directors, began meeting on a weekly basis at the beginning of the COVID-19 pandemic. Initially coordinated for a need to share what was happening across Areas during the COVID-19 pandemic, meetings evolved from the immediate need to discuss emergency response to a more collaborative time of sharing and working on projects applicable to all TECs.

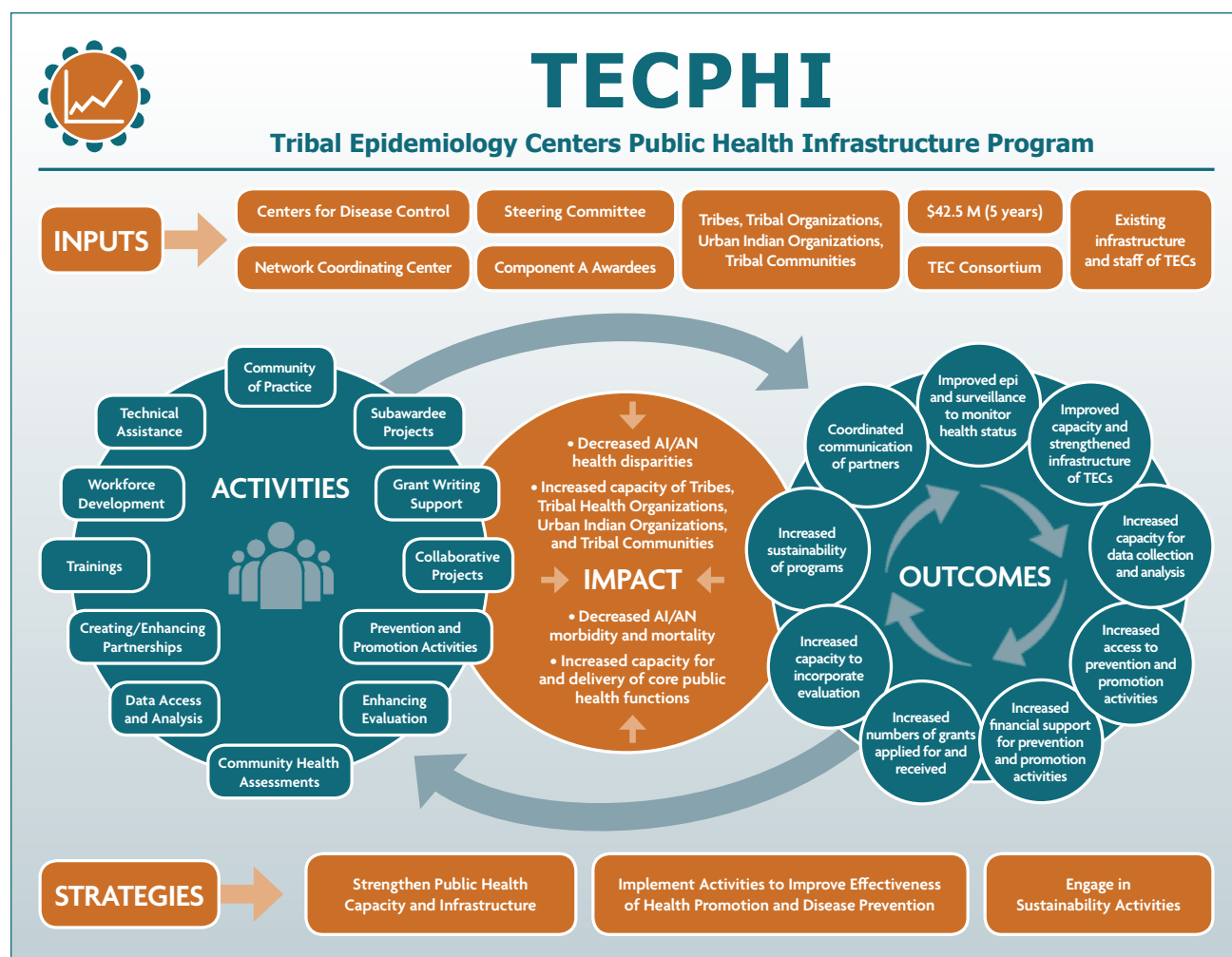
The TEC-C continues to meet biweekly to discuss variety of topics, and it is a dedicated space where current and potential partners attend to seek advice and provide information to the group. The TEC-C CoP met 57 times, with an average of 10 TECs represented at each TEC-C CoP. They met with 128 individual partners from 28 different organizations since the end of March, 2020. Common themes for discussion and collaborative projects have been around data, data access, data quality, and Tribal public health authority which have resulted in positive impacts for the entirety of the TEC Network.

# TECPHI Program Evaluation Plan


The NCC initiated the development of the national TECPHI Program Evaluation Plan during the first year. The NCC convened the TECPHI Program Evaluation Work Group with representatives from each TEC to help draft the evaluation plan using themes gathered during 31 recipient interviews. The comprehensive plan included a logic model, one overarching and four additional evaluation questions, eight corresponding performance measures, and qualitative data components.

The TECPHI Program Logic Model (Figure 2) communicates the intent of the evaluation approach. It acts as a roadmap describing TEC and partner contributions, activities, and anticipated outcomes of the program.

**Figure 2.** TECPHI Program Logic Model



Evaluation data collected monitors progress in building TEC capacity and infrastructure. The national TECPHI Program Evaluation Plan is dynamic and designed to incorporate new data, updated of goals, and anticipated progress occurred over time as changing contexts emerge. Through annual review, the plan and data collection shifted to allow TECs the flexibility to describe their work that is up to date and reflective of current events and describe work and progress that is most useful to their organization and partners. For example, COVID-19 subcategories were added to each performance measure in Year 4 to gather information related to continued response activities, as well as a question to assess how many TEC staff have initiated or completed the Management Concepts Grants Management Certificate. In Year 5, reflective questions were added for each performance measure area to glean some of the insight and story that is generally captured through the annual, narrative reports due to the CDC, which were not required in the final year.



**SPIP Evaluation Meeting**  
**Reno-Sparks Indian Colony**  
**Inter Tribal Council of Arizona**

Date:	06/13/2022
Time:	2:00PM-3:00PM MST
Location:	Zoom
Attendees:	<input type="checkbox"/> Peter Woodringjuc <input type="checkbox"/> Pinujnhoven <input type="checkbox"/> Stephanie Bustillo <input type="checkbox"/> Derek Hart <input type="checkbox"/> Os

- Scope of work
  - Technical assistance
  - Evaluation plan creation
  - Carrying out evaluation
- Reno Involvement
  - Monthly health advisory board
  - MSPH Coalition
  - NV Urban Indian, Igc.
- Key Dates
  - Reno due dates
  - IHS due dates
- Reporting
  - ITCA reporting
  - IHS reporting
- Future meetings
  - Frequency

**ITCA TECPHI team has increased their capacity to evaluate and assist in evaluation planning and supported an area Tribe in developing and evaluation plan to monitor program implementation and 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 demonstrate how dedicated funding for the TECs directly impacted increases in capacity, infrastructure, and sustainability of TECs and the T/TO/UIOs they serve. Four other evaluation questions and corresponding data from eight performance measures (PM) 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	Grants and Funding 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 participated in a photo narrative project (a process similar to PhotoVoice). Brief narratives and 1-2 photos shared experiences that speak to the evaluation questions. Approximately five photos and narratives were submitted by each TEC and the NCC each year. These photos help the TECs and the NCC “fill the white space” behind the components of the TECPHI Program Logic Model and provide context to the quantitative PM data. Photos with brief, truncated narratives are featured throughout the Progress Report to illustrate the PMs, evaluation questions, or theme of the report section.



UIHI staff were invited to spend time viewing the art created by the Year 5 cohort of interns and reflect on the question, “What can UIHI do now that we couldn’t before?” and “If these are the seeds of an Indigenous public health workforce, what will the tree be like?”

## 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.<sup>1</sup>

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.<sup>2</sup>

<sup>1</sup> 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.

<sup>2</sup> 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.*

## The Ripple Effect of the TECPHI Program

In addition to the annual photo narrative, additional qualitative projects were collected from the TECs and the NCC in Years 4 & 5:

- A project highlighting any one of the eight main TECPHI Program performance measures. The projects could describe any program activity completed during the course of the TECPHI Program (Year 4).
- A project conceptualized each year to reflect emergent work or themes not captured or addressed in other TECPHI Program evaluation data (Years 4 & 5).

The qualitative project guidelines and approaches used for data collection were left open and TECs could decide the best way to share activities and outcomes (e.g. key informant interviews, digital storytelling, variety of artistic and visualization techniques, etc.). TECs could feature activities from any of the five years of the program or highlight projects not necessarily directly funded by the TECPHI Program as there were differences in how each TEC operationalized their projects. The TECPHI Program enhanced TEC capacity and infrastructure in a variety of unexpected ways that have not been captured by the standard evaluation data collection. The qualitative projects submitted by the TECs and the NCC share those stories.

The following provides a brief overview of the projects and TEC and NCC submissions. All TEC and NCC qualitative project submissions can be found in the separate [TECPHI Program Years 4 & 5 Qualitative Projects Reports](#).

### Year 4 Qualitative Projects

#### TECPHI Program Performance Measure Qualitative Project

In Year 4, the TECs and the NCC submitted two qualitative projects. The first project provided additional context to one of the eight TECPHI Program performance measures. The TECs and the NCC were free to choose which performance measure to highlight (See [TECPHI Years 4 & 5 Qualitative Projects Report](#)). All TECs and the NCC completed this project.

#### TECPHI Program Capacity & Infrastructure Qualitative Projects

The second project was conceptualized as a direct result of the TECPHI Program Reflection Project described later in this report. The data clearly indicated that improving TEC capacity and infrastructure resulted in increasing or improving public health capacity and infrastructure of the T/TO/UIOs the TECs serve. In many cases, the “ripple effect” of TEC work and progress enhanced opportunities for T/TO/UIOs to build baselines, foundations, and systems to grow and build their own public health capacity. The project highlights the unanticipated outcomes that have not been captured elsewhere.

Five TECs and the NCC were able to complete this supplemental project, and the diversity of topics covered speaks to the vast impact the TECPHI Program has had beyond the initial program stated goals. **CTEC** shared a project where they partnered with AIAN media and graphic designers from across the state to create posters for a #COVIDVaccineSavesLives ad campaign. **ANEC** reported on the strategic planning work they have undertaken that will span beyond the five years of the funding cycle and seeks to align all programs under the EpiCenter with the greater Alaska Native Tribal Health Consortium Strategic Plan. **UIHI** encouraged TECPHI staff to reflect on the ripple effect of the TECPHI Program which resulted in a visual collage project with a compilation of images shared by staff elicited by theme, similar to self-published “zines” which can be printed in booklet form. **OKTEC** created messaging and radio scripts that promote healthy living during the pandemic. **RMTEC** initiated CoP trainings on five different topics including building culturally centered programs, establishing and strengthening organizational values, and other common organizational and programmatic themes. Meetings were designed to be both informational and interactive to engage staff members, promote collaboration, and build organizational capacity at all levels. **RMTEC** reported that they have also been effective at breaking down silos between different programs and creating avenues for new and exciting discussions. And last, the **NCC** highlighted feedback from attendees on the workforce development and organizational value of the Certified in Public Health (CPH) Exam Review Course with Emory University.

**NATIONAL NATIVE HIV DAY**  
Zero is Possible Together: Innovation + Awareness

**WHAT IS HIV?**  
HIV (human immunodeficiency virus) is a virus that attacks the body's immune system by damaging the white blood cells that help your body fight infections.

**PREVENTION**  
**Pre-Exposure Prophylaxis (PrEP)**  

- Prevention used by people who are HIV-negative and at high risk for being exposed to HIV through sexual contact or injection drug use
- Ready, Set, PrEP is a nationwide program that makes PrEP medications available at **NO COST** to individuals who qualify and lack prescription drug coverage.

**HIV TESTING: KNOW YOUR STATUS AND GET A TEST**  
**Rapid Self Test:**

- Oral fluid test (i.e. OraQuick)
- Done in a private location
- Can produce results in 20 minutes

**Mail-In Self-Test:**

- Specimen collection kit to collect blood from a fingerstick
- Sample is sent to a lab for testing and results provided by a health care provider.

**USET builds capacity at the Tribal Nation level by offering educational materials to reduce the stigma around HIV, promote screening, and increase clinician's knowledge of treating patients with HIV/HCV/STIs.**

## Year 5 Qualitative Project

### “What can TECs do now that they couldn’t do before?” Qualitative Project

The Year 5 project shares culminating achievements of the TECPHI Program. **What can TECs do now that they couldn’t do before the TECPHI Program?** has been the guiding question for the entirety of the TECPHI Program and TECs have grown in ways not anticipated five years ago. The TECs were also asked to think about the sustainability of program outcomes - now that the TECs can do these things, what is the potential impact to better address health issues, disparities, and inequities?

Seven TECs and the NCC completed the Year 5 supplemental qualitative project. **ANEC** provided a narrative summary highlighting projects that have been completed, challenges faced, and what the future might look like. The goal was to demonstrate how ANEC has changed over the funding period both due to internal desire for continual improvement and external pressures. **CTEC** highlighted key activities that enhanced TEC, Tribe, and Tribal organizations’ public health emergency preparedness and response. **ITCA** shared different ways TECPHI funding was utilized each year to establish and maximize partnerships with other TECs, Tribes, Tribal organizations, State and Federal Partners, and more. They also provided some lessons learned for future funding. **OKTEC** reported on how they have focused on increasing internal capacity and infrastructure to perform essential public health services in Kansas, Oklahoma, and Texas T/TO/UIOs. **RMTEC** shared about the Tribal Health Subcommittee and its role as an important forum for Tribal Leaders and Tribal Health Directors to better understand Tribal health priorities and more. **UIHI** stated “We can deliver all 10 essential public health services, adapted to the unique cultural and geographical needs of the urban Indian population across the country!” **USET** shared the success of their behavioral health focused Indian Country ECHO that includes participants from across the entire United States. And the **NCC** reflected on the ability to support workforce professional development for TEC staff.

## TECPHI Program Progress Report Evaluation Data and Data Sources

The quantitative and qualitative data presented in this report are intended to share TECPHI Program progress. Because the data were collected from the last two years of the program, the report is also a reflection on how much the TECs have expanded across a wide breath of activities as well as providing opportunities to shift and improve services moving forward. The data in the report also provides insight on the sustainability of various components of the program. This Year 4 & 5 Progress Report draws on data and information from the following sources:

Evaluation Data	Description	Data Analysis
1. Performance Measures	Quantitative and brief narrative data was collected from all TECs and the NCC on 8 main performance measures and 43 corresponding sub-measures. Data was collected all five years and used to monitor TECPHI Program progress.	Data was downloaded annually into Excel spreadsheets and analyzed using descriptive statistics.
2. Photo Narratives	The TECs and the NCC have submitted about 320 photos with narratives describing experiences or offering responses to each of the evaluation questions. Photos and narratives were collected all five years and serve to illustrate the performance measures, evaluation questions, or theme of various progress report sections.	Photo narratives and qualitative projects were reviewed and analyzed using content analysis to identify themes and examples of successes and challenges to share the story of the TECPHI Program.  Photo narratives and qualitative projects have been shared in separate reports. They can be found at <a href="http://Tribalepicenters.org">Tribalepicenters.org</a> .
3. Year 3 & 4 Qualitative Projects	TECs and the NCC submitted a total of 26 qualitative projects in years 3 and 4. The qualitative projects have provided additional story and context for one of the 8 performance measures.	
4. COVID-19 Qualitative Projects	TECs and the NCC submitted a total of 8 COVID-19 qualitative projects in Year 3. The COVID-19 qualitative projects provide additional story and context of TEC experiences during the COVID-19 pandemic.	
5. Capacity and Infrastructure Qualitative Projects	TECs and the NCC submitted a total of 7 capacity and infrastructure projects in Year 4. The projects share stories about how increasing and improving the capacity and infrastructure of the TECs and also with the T/TO/UIO the TECs serve.	
6. "What can TECs do now that they could not do before?" Qualitative Projects	TECs and the NCC submitted a total of 8 "What can TECs do now that they could not do before?" projects in Year 5. As <i>the</i> guiding question for the entirety of the TECPHI Program, the projects share individual growth and outcomes for each TEC.	

7. Annual Performance Reports (APRs)	TECs and the NCC submitted a total of 52 APRs in Years 1-4. The APRs are required annual reporting documents submitted to the CDC. The reports described activities and progress TECs and the NCC made on proposed work plans in each of the first four years of the TECPHI Program.	APRs and evaluation reports were reviewed and analyzed using content analysis. Stories, examples of successes, challenges, themes, etc. were collected from narrative data and organized by performance measure, evaluation question, or theme to share the story of the TECPHI Program.
8. TECPHI Program Interim and Final Evaluation Reports	TECs and the NCC submitted a total of 39 Interim Evaluation Reports to the CDC in Years 2-4 and 13 Final Evaluation Reports in Year 5. These reports were concise documents sharing basic information, highlights of work completed, and progress made answering evaluation questions from individual TEC projects.	

# 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 eight TECPHI Program performance measures (PMs). Additional indicators related to the PMs have been included to further illustrate TEC progress and growth.

This report is unlike previous TECPHI Program Progress Reports because it combines data for Years 4 & 5. Due to reporting timelines, this report is unlike previous TECPHI Program Progress Reports because it combines data for 1.75 years (all of Year 4 data and three-quarters of Year 5 data). Because Year 5 data represents only a partial year of measurement and outcomes, caution is warranted when interpreting the data trends for this reason (see sidebar Special Note).

## Special Note: Years 4 & 5 data, charts, and trend lines

The following tables share the actual reported data from Year 4 and the partial data collected for Year 5. Things to consider when reviewing data and charts:

1. Where appropriate, the tables and charts include estimated numbers and projected trend lines for Year 5 had an entire year's worth of data been reported by the TECs and the NCC.
2. Estimated numbers and trend lines were calculating by multiplying the Year 4 actuals by 1.33 and assumes that the last quarter of the year will perform equally to each of the prior 3 quarters of the year.
3. The estimated numbers for Year 5, where shown, are in a lighter colored bubble.
4. Year 3 data is indicated by a black bubble and serves as a marker for the onset of the COVID-19 pandemic.

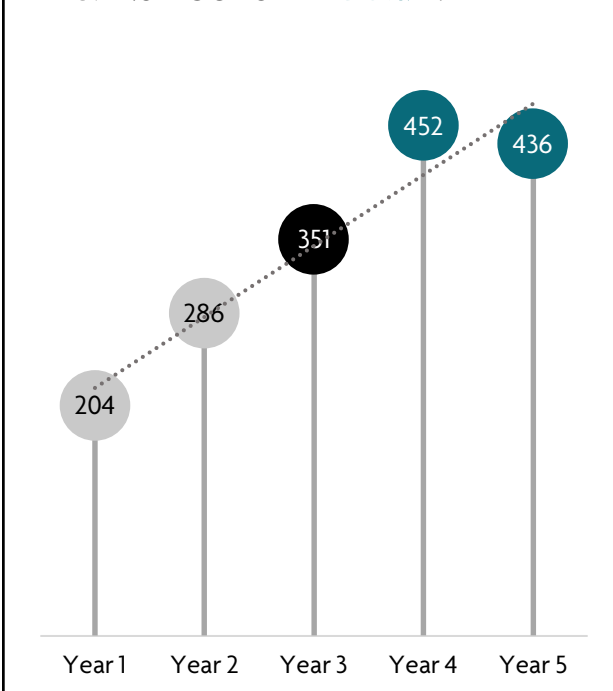
## Growing & Building a Public Health Workforce

A well-staffed and competent public health workforce is a key component to improving TEC capacity, infrastructure, and sustainability. All TECs continued to hire 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 continue to develop skills needed to support COVID-19 related work and meet technical assistance needs of T/TO/UIOs. Other activities during Years 4 & 5 included supporting interns and contracting with subject matter experts to provide additional capacity to meet increased programmatic workloads and to bridge staffing needs.

### Key Findings:

Number of TEC staff	Year 4 No. (% of Total)	Year 5 (partial) No. (% of Total)
Total TEC staff	452	436
Staff supported by TECPHI funding	123 (27%)	135 (31%)
Staff whom are American Indian and Alaska Native (AIAN) people	109 (24%)	160 (37%)
Staff who have a health-related degree	213 (47%)	214 (49%)
Contractors/Subject matter experts	187 (41%)	120 (28%)
Staff with CPH credentials	22	27
Interns	37	30
Number of TECs hosting interns	8	6

PM 8: Number of TEC staff.



Number of trainings provided or supported by TECs.	Year 4 No.	Year 5 (partial) No.	Year 5 (estimated) No.
Total technical training opportunities	564	297	395
Total number trained through a variety of virtual offerings	36,001	19,959	26,545

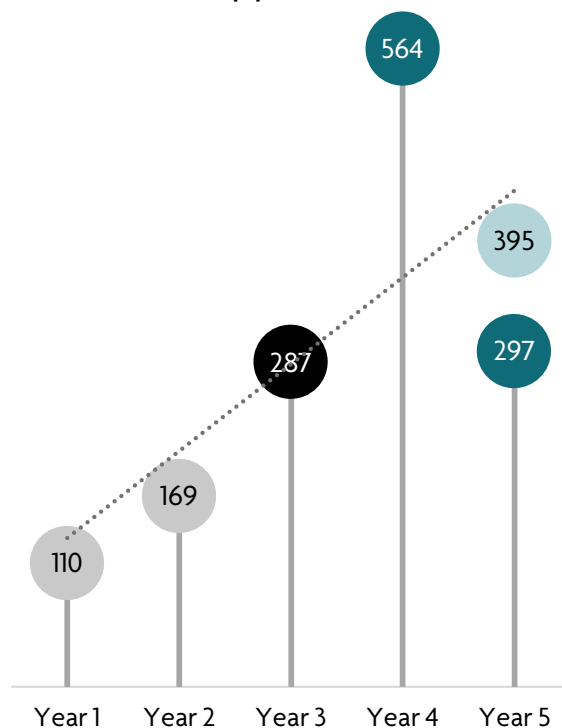
### TECs have grown in size

Between Year 3 and Year 4 TECs saw a 28% growth in overall staff size. In Year 5, the overall number of TEC staff appears to have decreased, but interestingly several TECs reported that reorganization within their parent organization has resulted in less TEC specific staff although overall staff at their organization has not decreased. One highlight is the 17% increase in the number of TEC staff with a masters or doctoral degree from Year 3. In Year 4, TECs reported 213 staff with a masters or doctoral level degree as their highest level of education, and in Year 5 that number held steady at 214.

### TEC staff were pulled into COVID-19 response work

As TECs continued to adapt to a second year of the COVID-19 pandemic in Year 4, the need to refocus staff time and hire to meet surge capacity associated with COVID-19 workload and programmatic demands increased. Almost half (42%) of TEC staff were working on COVID-19 related activities at any given time during this reporting period. For some TECs, like AASTEC, 100% of staff contributed at least some of their time to COVID-19 response work during the year, and UIHI reported that staff have spent more than 1,879 collective hours responding to the COVID-19 pandemic.

### PM 7: Number of trainings provided or supported.



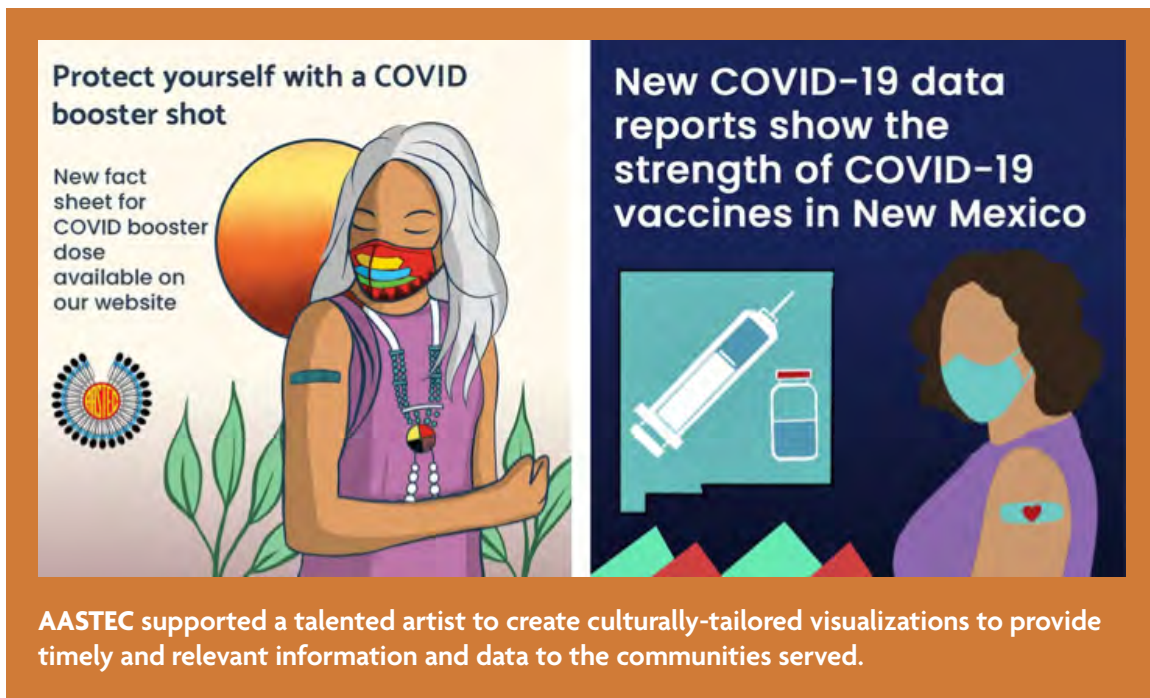
In Year 5, COVID-19 related work continued to impact staff capacity, and remained a consistent theme across all performance measure areas. Eight TECs reported that directed staff time and resources resulted in delays or suspension of typical job duties, which in turn resulted in postponed, delayed or cancelled activities or trainings.

TECs deployed several tools to address this demand on staff time to include investing in staff professional development to demonstrate continued investment in employees, increasing numbers of contractors and subject matter experts, and hiring interns to boost internal capacity.

### **TECs saw exponential growth of contractors, brought on more subject matter experts and interns**

Nine TECs used internship programs and hired 67 interns across the two years, four used CDC Foundation staff, and all TECs engaged contractors or subject matter experts to address staff vacancies and boost staff capacity. In Year 4, the TECs saw a 137% increase in contractors and subject matter experts from the prior year. Increasing the numbers of contractors resulted in an added bonus of supporting hiring efforts. AASTEC reported that since adding “a large number of contractors throughout the year to assist with COVID activities, five have since been hired on as AASTEC staff.”

In Year 5, interns and contractors continued to support not only COVID-19 work, but also other projects as TECs have worked to shift some staff time and resources back to other priority and programmatic areas.



## **While TECs have grown in overall staff throughout the pandemic, turnover and vacancies remain a challenge**

In Year 5, ANEC shared that “High turnover, fueled by the COVID-19 pandemic, has resulted in long durations of vacancies in key staff positions and losses of institutional knowledge which needs to be rebuilt.” This sentiment was a consistent theme across most TECs in Years 4 & 5. UIHI reported that “regular staff turnover and hiring continued to present a challenge in this reporting period,” GPTEC shared that “many GPTEC staff are new in their positions, and the role of TECPHI Program Coordinator remains vacant.” In particular, four TECs stated hiring epidemiologists and other data-focused staff has been a particular challenge.

Other challenges described relating to staffing were limited resources to attract staff such as competitive salaries and assistance with moving expenses and a competitive job market. NEC shared that they struggle with hiring due to administrative barriers and underqualified applicants. ITCA attributed recruitment challenges to “position requirements and limited resources to attract staff.” Similarly, RMTEC reported that the “cost of living is rising fast in Montana and Wyoming and wages are not corresponding to cost of living.” CTEC echoed the sentiment with recruiting challenges and added that “many competing agencies have transitioned to part-time or permanent telework while CRIHB has returned to the office,” a challenge that RMTEC is also facing.

## **TECs boosted professional development opportunities for staff**

Despite disrupted workflows, all 12 TECs participated in NCC activities, many of which were trainings. In Year 4, the NCC provided 40 trainings to TEC staff via open enrollment packages through Management Concepts, Data Creative, Encompass Learning Center, and more.

Forty-one TEC staff participated in the two NCC sponsored Certified in Public Health (CPH) Exam Review Course through Emory University in Years 4 & 5, resulting in 24 TEC staff from eight TECs passing the exam and receiving their CPH credentials. In total, the TECs have 27 staff with CPH versus only 3 certified staff at the beginning of the program.

Another highlight is that in Years 4 & 5, a total of 22 TEC staff initiated or completed the Management Concepts Grants Management Certificate Program due to trainings offered by the NCC or sponsored by the TEC. Completion of this certificate program demonstrates a high level of knowledge about federal grants management. Three TECs deployed workforce development or training needs assessment tools to assess TEC and T/TO/UIO staff training needs and gaps. ANEC shared that in Year 5 they continued “to professionally develop existing staff by offering trainings and supporting staff attendance at conferences and workshops.”

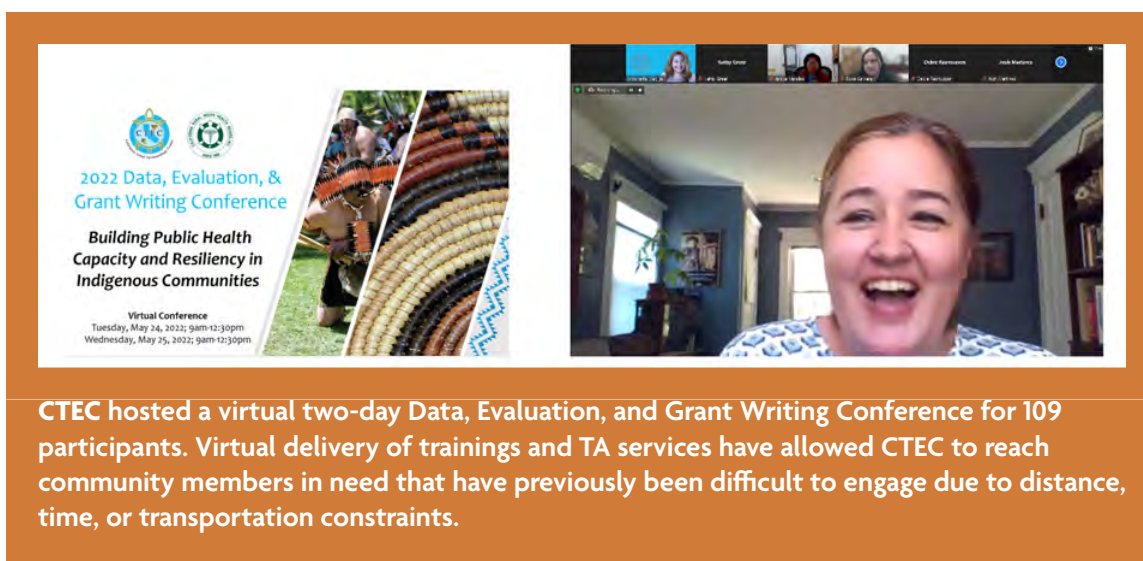
## **Trainings increased in Year 4 and decreased in Year 5**

In Year 4, the number of trainings provided by TECs and the NCC increased from the previous year by 96% to 564 trainings. This exponential increase is likely due to the high number (178) of COVID-specific informational sessions, webinars, and ECHO meetings that were provided by some TECs. In Year 5, trainings decreased by 30%, with 297 trainings at the end of the third quarter of the year, and an estimated total of 395 trainings by the end of the funding cycle. Despite this, several TECs reported that in Year 5 they were able to provide more trainings than the previous year, including OKTEC who reported “Twice as many trainings due to COVID-19 subsiding” and ANEC who “offered a record number of trainings to TEC staff, Alaska Tribal Health System (ATHS) staff, and AI/AN participants. In Year 5, the ANEC TECPHI Program has offered 14 trainings, more than double the previous high of six trainings in Year 4.” The following table lists the top trainings for each of the two years of reporting:

Top Trainings in Year 4		
Topic	Number of TECs* (*- indicates training was offered by the NCC)	Example Trainings
COVID-19 related	8	Contact tracing, vaccine hesitancy, immunization, etc.
Specific Health Topic	6	Opioid-related and tobacco cessation
Data Visualization	5	Stephanie Evergreen or other data visualization approach
Evaluation	5*	Program evaluation, qualitative data collection, survey development, etc.
Top Trainings in Year 5 (using partial data from end of Q3)		
Specific Health Topic	5	Pregnancy-related topics, opioid-related, tobacco cessation, chronic disease management, stroke prevention, and diabetes
Grants Management	8*	Federal Grants Management and open enrollment opportunities through Management Concepts
Grant Writing	7*	Grant writing skills (goals, objectives, and outcomes) and other trainings intended for beginner or intermediate grant writers
Public Health and Social Determinants of Health	7*	Advancing Health Equity, Vaccine hesitancy, Health Insurance/Health Care Delivery Systems, Injury Prevention, CPH Exam Review, and Public Health 101
Data Management	7*	Decolonizing data, addressing population specific data gaps, data equity, data quality, and data management using Excel
Evaluation	5*	Indigenous evaluation methods, Intro to public health program evaluation, designing quality survey questions, evaluation planning, evaluation 101, and open enrollment through the EnCompass Learning Center

### After a year of adaptation in Year 3, virtual trainings were a success

One of the biggest adaptations that TECs navigated during the pandemic was the reduction or elimination of in-person meetings and trainings. However, after the first year of pandemic interruptions, virtual trainings opportunities took off and seven TECs reported offering a variety of trainings virtually. ITCA shared that in Year 5 “Contractors and training providers were able to adapt and provide successful virtual/hybrid trainings environments for ITCA and Tribal partners,” and that “Over Years 4 and 5, ITCA TECPHI team was able to provide more trainings partially due to the expanded partnerships, additional staff, and online participation becoming more available.”



**CTEC hosted a virtual two-day Data, Evaluation, and Grant Writing Conference for 109 participants. Virtual delivery of trainings and TA services have allowed CTEC to reach community members in need that have previously been difficult to engage due to distance, time, or transportation constraints.**

For three TECs, virtual trainings were a strong tool in connecting and providing training opportunities to Tribal partners. In Year 4, AASTEC provided two trainings with a majority AIAN attendees, and ANEC “trained the highest number of AIAN individuals and Tribal organization staff members out of the five years of the ANEC TECPHI Program with over 90 participants self-reporting to be AIAN and over 320 reporting working at Tribal organizations.

### Several TECs described training challenges with limited travel, as well as the difficulty of navigating hybrid spaces

While many TECs have found a shift to virtual trainings to be a success, several TECs still faced barriers in these areas especially when using the hybrid approach and offering both virtual and in-person experiences during the same event. AASTEC reported that “training participation has been more limited when virtual,” OKTEC reported tech issues with virtual trainings, and USET shared that “it can be very difficult to provide the same kind of trainings experience for in-person and virtual attendees.”

## 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 data sharing agreements (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.

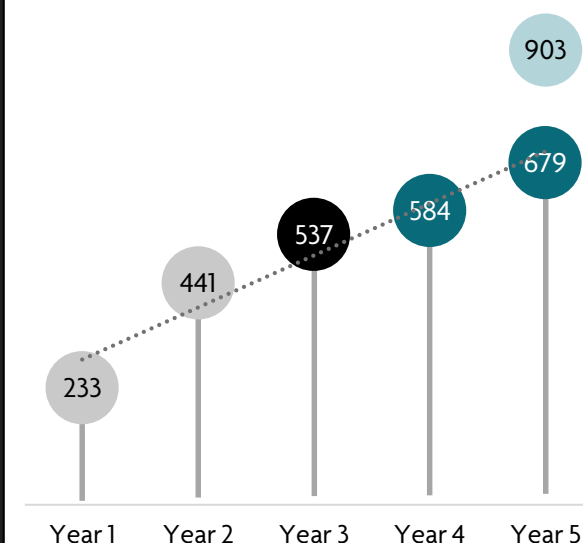
TECs made progress in expanding DSAs with T/TO/UIOs, counties, states, and federal partners which affords TECs an increased ability to support program implementation and community needs.

### Key Findings:

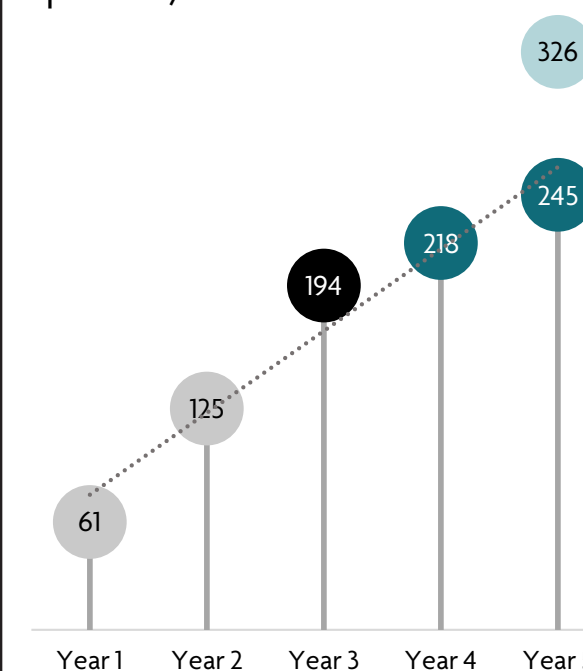
Number of new or expanded partnerships with TECs.	Year 4 No. (% of Total)	Year 5 (partial) No. (% of Total)	Year 5 (estimated) No. (% of Total)
Total new or expanded partnerships	584	679	903
New or expanded partnerships with Tribal or State Health Departments	334 (57%)	375 (55%)	499 (55%)
Number of TEC-to-TEC collaborations	79	72	72

Number of new or expanded DSAs with TECs	Year 4 No. (% of Total)	Year 5 (partial) No. (% of Total)	Year 5 (estimated) No. (% of Total)
Total new or expanded DSAs	218	245	326
Number of datasets accessed	193 (88%)	112 (46%)	149 (46%)

### PM 3: Number of new or expanded/modified partnerships.



### PM 4: Number of new or expanded/modified DSAs.



## Partnerships have been an area of consistent and continued growth

Throughout both Year 4 and Year 5, partnerships and DSAs saw continued growth, indicating how critical relationships have been throughout the COVID-19 pandemic, as well as access and sharing of data. From Year 3 to Year 4, the number of partnerships increased by 14% with the estimated number of new or expanded partnerships increasing to 903 (35%) from Year 4. DSAs saw steady growth of about 25 new or expanded agreements each year. For ITCA, building external and internal relationships is considered the greatest success of TECPHI funding.



GPTEC's public health liaison established or strengthened partnerships this past year, including with Tribal Health Directors, state Funeral Directors Associations, the South Dakota Urban Indian Health Institute, and Tribal research offices.

## Partnerships with T/TO/UIO made up the largest percentage during both years

In Years 4 & 5, approximately 50% of all partnerships were with T/TO/UIOs with some TECs reporting a majority of the new or expanded partnerships were with T/TO/UIOs included CTEC (Year 4), USET (Year 4), and AASTEC (Year 5). Relationship building with these partners ranged from monthly meetings, establishing sub-awards, particularly for COVID-19-related work, and making connections for data access and provision of data. Four TECs mentioned building DSAs as an important relationship building activity. About 60% of all DSAs were with T/TO/UIO partners. NWTEC shared that their "new DSA with a Tribe provided the framework for access to vaccination, enrollment, clinic enrollment, and employment data to support assessing vaccination coverage in the Tribe's enrolled, employed, and patient populations." GLITEC reported that **all** DSAs developed during Year 4 were with Tribes and urban Indian organizations and CTEC shared that they "enhanced all 35 DSAs with Tribes, Tribal organizations, and urban Indian organizations to include COVID-19 rate and vaccination-related data sharing."

## Many new or expanded partnerships were related to COVID-19

Much of the COVID-19 response work that TECs engaged in required robust relationships and collaborations with partners due to a variety of different reasons ranging from the need for data access, to provision of technical assistance, to conducting case investigations. Fifty-five of the 218 DSAs established in Year 4 were for COVID-19 related activities. Seven TECs in Year 4 and five in Year 5 continued to offer contact tracing or case investigation services to T/TO/UIOs.

Two TECs mentioned partnerships related to very specific and limited activities, like accessing vaccine or immunization data or for time-limited COVID-19 projects, but many connections were more broad and evolving. For example, GPTEC reported that “Many partnerships have expanded during COVID-19 response to support data sharing and provide technical assistance, and these continue to evolve into other collaborations as networks expand.” COVID-19 partnerships were also formed with state partners and T/TO/UIOs. GPTEC “entered into a formal agreement with the Department of Health and Human Services for access to COVID-19 case data provided through the HHS Protect System,” and USET reported “partnerships with T/TO/UIOs included data access partnerships for hospital discharge data, immunizations, COVID-19 data, and mortality data,” and AASTEC shared that “DSAs were formed with each of the communities in [our] area for [our] COVID response sub-awards.” Other partnerships for COVID-19 response work were developed with the CDC and academic institutions.

Despite the focus on COVID-19, partnerships and DSAs related to other health priorities were also important, including those to increase access to Tribal data and two TECs engaged in discussions to gain access to the National Notifiable Diseases Surveillance System. Two TECs noted their focus on developing partnerships to enhance data linkage projects.

### **TEC staff participation in workgroups emerged as a collaborative tool both locally and nationally**

TEC participation in workgroups, advisory groups, taskforces, and planning committees outside their TEC helped to strengthen relationships with state and national partners in both Years 4 & 5. Four TECs reported these types of collaborations and participated in multiple workgroups focused on specific topic areas. For example, NWTEC shared that staff participated in an Emergency Department Surveillance of Nonfatal Suicide Related Outcomes (Ed-SNSRO) workgroup with the Washington Department of Health, as well as in a perinatal HIV prevention taskforce. GLITEC became a member of the Wisconsin Epidemiology Network, and ITCA continued to participate in or were invited to join “multiple advisory/planning committees/meetings with ADHS and other organizations.”



**NWTEC has had success in building data sharing partnerships with Tribes, states, and federal agencies, and in building expertise and infrastructure focused on linkages to correct the misclassification of AIAN people in state surveillance systems.**

## TECs faced administrative barriers to accessing data

Administrative barriers to accessing data are a continuing challenge for TECs, and it was noted access to data specific to Tribes and service areas is an ongoing struggle. For example, ANEC reported that “current DSAs with the State of Alaska continued to be limited to each individual dataset, increasing the administrative burden of tracking and maintaining numerous DSAs.” Likewise, UIHI reported that “Adding new staff to DSAs for all of the needed datasets can be a challenge.” And that “Receiving additional, new data from the CDC for datasets already covered by DSAs...requires us to reapply for the dataset. The biggest challenge is that it is often difficult to receive communication from the CDC, so the process can take a long time.” GPTEC also shared that “Many GPTEC data sets lack the granularity to be able to provide reliable tribal-level data. Two other TECs referenced administrative challenges such as the lengthy and complex task of legal administration of agreements and the cost of establishing DSAs.

The COVID-19 pandemic also introduced new challenges, and although partnerships expanded during the past two years, it wasn’t always easy to maintain them. Three TECs shared that with competing priorities, it was challenging to determine roles and responsibilities among partners and staff and ensuring that building trust between partners was kept in the forefront. CTEC and ITCA reported that staff reassignments and/or high turnover resulted in limitations in staff capacity to build and maintain relationships. RMTEC also shared that remote work posed challenges from a coordination standpoint.

## Educating for greater data access

While not a significant theme in the Year 5 data, two TECs reported on efforts to increase education about TECs and legal status as Tribal public health authorities. GPTEC shared that “Education and advocacy relating to Tribe and TEC Public Health Authority have yielded accesses to expanded data and datasets,” and in a similar vein, RMTEC shared that education on TECs as public health authority helped to facilitate establishing new DSAs.

Three TECs also reported that DSAs and partnerships have been established or renewed that will lead to continued access to data moving forward beyond the grant. For example, OKTEC shared that they “Developed a good partnership with the Oklahoma Department of Health Services for future data sharing.” TECs recognized the importance of establishing and maintaining relationships and partnerships beyond immediate funding, a testimony to the sustained impact of the TECPHI grant.

## Actions needed to enhance TECs access to data

While not a direct result of the TECPHI Program, increased awareness of AIAN data challenges is an important outcome of the foundational and collaborative nature of the TECPHI Program work that began during the COVID-19 pandemic. The work has led to improved communication and understanding of the challenges TECs have experienced accessing data and issues of data quality with a wider audience. An example of this is the [U.S. Governmental Accountability Office \(GAO\) Report](#) published in March 2022.

Prompted by a Congressional request, the GAO examined factors affecting the TECs’ access to epidemiological data. The GAO interviewed Directors of, or Director-appointed designee, from each of the 12 TECs and officials from the CDC and IHS and performed a document review. As a result of the publically released findings and recommendations, multiple HHS agencies have contacted the TECs to discuss steps needed to clarify policies and procedures related to accessing and improving the quality of the data.

## Improving Communication & Outreach

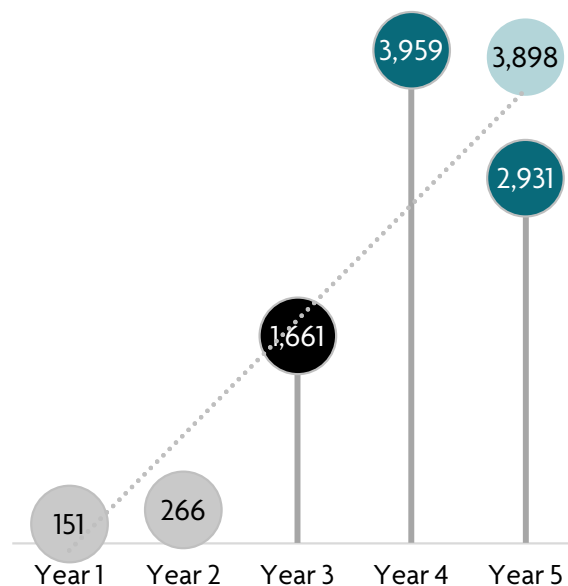
TECs have been working to improve data dissemination and communication with external audiences by increasing presence and reach on social media platforms, sharing information on [Tribalepicenters.org](http://Tribalepicenters.org), individual websites, at speaking events, and conferences. During Years 4 & 5, TECs were able to leverage increased funding, contractors, partners, and temporary staff to increase outreach and impact using a variety of approaches including factsheets, dashboards, revamps to websites and more.

### Key Findings:

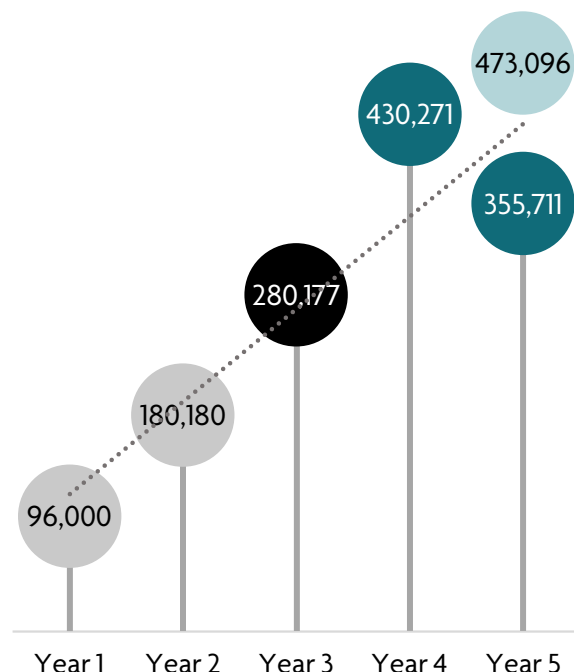
Number of publications produced by TECs.	Year 4 No. (% of Total)	Year 5 (partial) No. (% of Total)	Year 5 (estimated) No. (% of Total)
Total publications produced by TECs.	3,959	2,931	3,898
Number of health status factsheets	1,935 (49%)	1,137 (39%)	1,512 (39%)

Number of users of TECs websites.	Year 4 No. (% of Total)	Year 5 (partial) No. (% of Total)	Year 5 (estimated) No. (% of Total)
Total users of TEC websites	430,271	355,711	473,096
New and returning visitors to <a href="http://Tribalepicenters.org">Tribalepicenters.org</a>	12,592 (3%)	9,632 (3%)	12,811 (3%)
Downloads from <a href="http://Tribalepicenters.org">Tribalepicenters.org</a>	1,626	1,678	2,232
Registered users on <a href="http://TECConnect.org">TECConnect.org</a>	382	377	377

### PM 1: Number of publications.



### PM 6: Number of website users.



## The COVID-19 pandemic provided opportunities to increase and improve communication and outreach

One of the most significant findings from Year 4, is the exponential increase in the number of factsheets produced by the TECs with a 133.7% increase over Year 3. Factsheets represented about half of all publications produced in Year 4 and 1/3 of those produced in Year 5. Many of these factsheets, as well as other reports and publications that were produced in Year 4, represent work that TECs were doing to communicate information and data about the COVID-19 pandemic. Two TECs developed the factsheets to provide updates and information to communities, Tribes, and regions about vaccines, surveillance and reporting, and others created vaccine comparisons, emergency use authorization, and a variety of other topics. Factsheets and reports relating to the COVID-19 pandemic also included updates to COVID-19 dashboards on websites, sending out relevant alerts, and five TECs created communications around the pandemic were culturally relevant and tailored to their intended audiences.

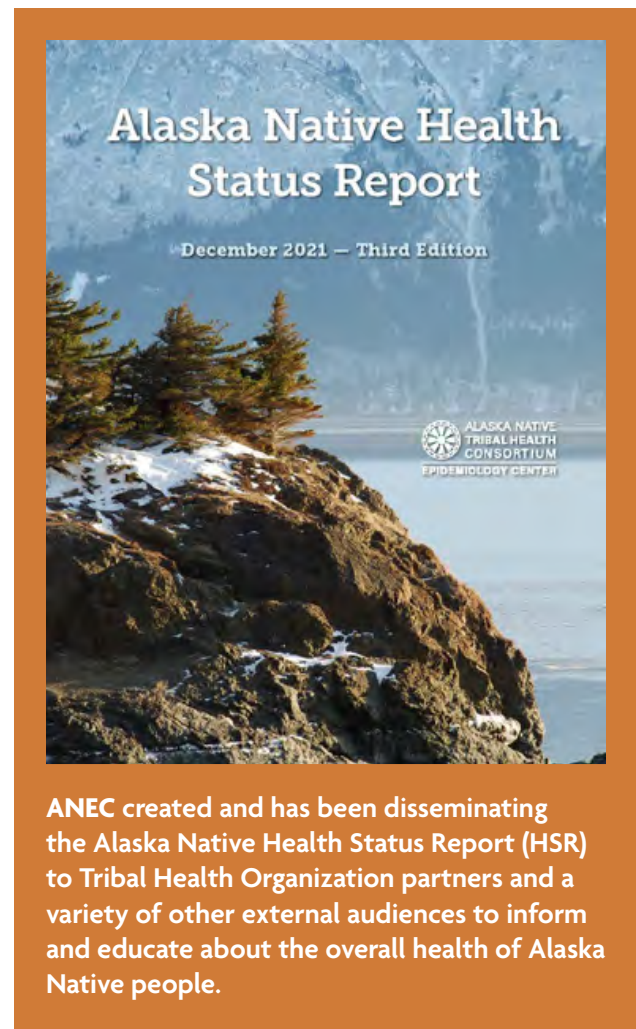
For five TECs in Year 5, updating audiences about COVID-19 remained a priority for TECs, particularly in the form of factsheets, situation reports, and culturally-appropriate communication materials. Some TECs reported that the continued focus on COVID-19 as a priority made it challenging to return to producing publications on other health topics. CTEC shared that “Staff attrition and COVID-19 reassignments limited the number of staff available to support, report, or publication development on other health priorities.”

## TECs produced significant reports on AIAN health and health status

Despite many staff hours and funding being diverted to respond to the COVID-19 pandemic, several TECs produced significant reports on AIAN health and health status in Year 4. This is particularly important considering how many TECs reported on activities being delayed due to the pandemic, as well as challenges with returning focus to other priority health topics in Year 5.

The following are a few examples:

- [Comprehensive Report on the Health of AIAN Elders \(GLITEC\)](#)
- [Severe Maternal Morbidity for American Indians and Alaska Natives in Arizona, Nevada, and Utah Maternal Age Surveillance Report \(ITCA\)](#)
- [5-Year AIAN Mortality Report: 1980-2018 and Alaska Native Health Status Report, 3rd Edition \(ANEC\)](#)



## TECs improved websites to increase utility

Several TECs contracted with outside vendors for website development and/or management, which addressed struggles with capacity experienced by other TECs in this area. CTEC reported that they “contracted with an outside vendor to manage the organizational website. This includes maintaining the COVID-19 webpage which hosts CTEC publications, flyers, surveillance reports, and public service announcements.” CTEC also embedded a TA request form directly on their website to streamline the process for partners to request assistance. Likewise, GPTEC and OKTEC reported that they transitioned to a new website platform. GPTEC “contracted with web developers to update and enhance organizational websites. User experience, customizations, and data collection/ analytics functions will be augmented,” and OKTEC switched to “a platform that allows us to track downloads in a better manner.” USET also began the process of transitioning to a new website platform. Two other TECs reported making improvements to existing websites. Additionally, the NCC maintains and continually updates the [Tribalepicenters.org](http://Tribalepicenters.org) website on behalf of all the TECs.

## Leveraged websites and social media to expand reach

In Years 4 & 5, seven TECs were able to leverage reach through websites and social media. Website and social media accounts are effective tools for sharing health information, resources, training, and TA opportunities. Five TECs shared that they continuously updated COVID-19 dashboards and resources on their websites resulting in increasing traffic. One highlight was UIHI who increased audience reach by increasing the number of websites they supported. They “maintained three growing COVID-19 webpages providing culturally attuned resources about illness, COVID-19 treatments, and COVID-19 vaccines” through Year 5.

From Year 3 to Year 4, website traffic saw its biggest increase with 53.6% across TECs. In Year 5, TECs reported continued success and impact from their websites, such as OKTEC who reported that their “website has become a strong source of seeking out good information for other organizations,” and AASTEC, who shared that they “continually receive positive feedback from partners regarding the imagery, and the increased interest in viewing and downloading the materials is evidence that the images resonate with our partners and the messages are needed.” The NCC reported approximately 1,600 downloads from [Tribalepicenters.org](http://Tribalepicenters.org) with “[Best Practices in American Indian and Alaska Native Public Health](#)” as one of the most popular downloads from the website. In order to connect information to the intended audiences, many TECs leveraged social media as a way to drive people to the resources available on their websites. NEC and RMTEC promoted their websites through social media to share reports to the public audience, UIHI shared that they “increased website visitation by promoting [our] resources on [our] social media channels,” and ANEC, and AASTEC also reported that social media was an effective tool for their outreach.



**OKTEC supported four Tribes to increase vaccine awareness and produced 16 radio ads with COVID-19 prevention and vaccine messaging airing on local Kansas radio stations, developed billboard messaging, and six corresponding info graphics to post on social media.**

## Updating content and tracking website analytics continues to be an area for improvement

One challenge mentioned by TECs was the dedicated staff time needed to update and maintain websites. Four TECs reported challenges in this area. In Year 4, ANEC reported that “The unexpected departure of the previous webmaster and the transition to a new administrator of the site presented many challenges. In Year 5, CTEC shared that “due to staff transition and a priority focus on COVID-19, it has been challenging to update the organizational website with other health priority information or project-specific resources” and RMTEC reported the need for an “in-house person to do updates to the website.”

Another challenge relates to the capabilities of some website platforms to adequately track website analytics throughout the year, with six TECs reporting this as a barrier. Four TECs reported that they are unable to track website-related metrics, NEC indicated that they need improvements to their website to be able to report on this performance measure, and UIHI shared that while they have been in the process of revamping their website, they have met delays with auditing content and contracting with a web developer that has resulted in barriers to tracking.

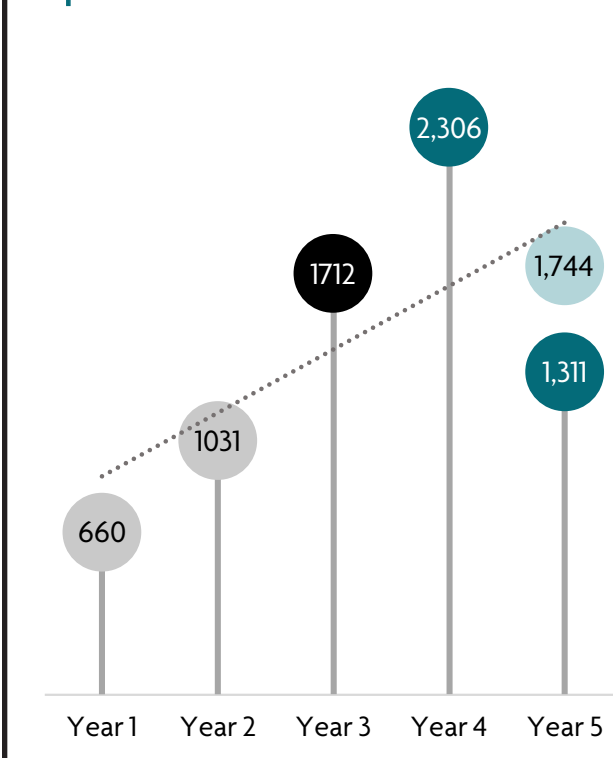
## Enhancing Technical Assistance & Support

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 in the form of contact tracing, development of fact sheets, situation reports, and identifying funding sources.

### Key Findings:

Number of TA requests fulfilled by TECs.	Year 4 No. (% of Total)	Year 5 (partial) No. (% of Total)	Year 5 (estimated) No. (% of Total)
Total TA requests fulfilled	2,306	1,311	1,744
TA requests fulfilled for T/TO/UIOs	1,578 (68%)	749 (57%)	996 (57%)
TA requests for presentations/presentation TA	131 (6%)	105 (8%)	140 (8%)

PM 5: Number of TA requests fulfilled.



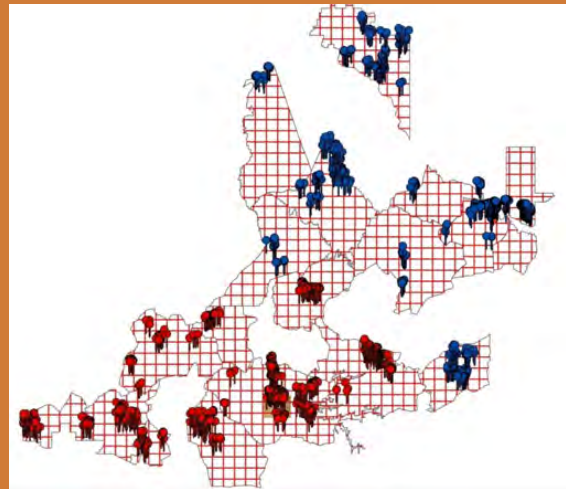
## COVID-19-related TA was a top focus in both Year 4 and Year 5

TA related to COVID-19 took many forms including performing quantitative analysis, providing information trainings, and presentations, offering assistance with policies and procedures, social media engagement, tracking both case counts and vaccination rates, and more. As mentioned, several TECs continued to provide contract tracing and case investigation services to T/TO/UIOs. Four TECs provided more intense response to TA requests by providing weekly (or more frequent) updates via updates to COVID-19 dashboards, weekly calls, daily situation reports, and Facebook Live events. While not all TECs reported responding to TA requests specific to COVID-19, those that did reported a significant proportion of TA requests fulfilled were tied to COVID-19 work. In Year 4, 56% of all TA requests were related to COVID-19. In some cases, these instances of TA were greater than the sum of all other types of TA combined, while for others they just represented a significant portion, like CTEC who reported that roughly a third of total requests fulfilled were COVID-19 related. One notable theme that emerged related to COVID-19 TA, was the request for information on the impact of the pandemic. OKTEC shared that “Organizations were looking for information on how the pandemic affected Tribes” and UIHI indicated that “many of the TA consultations were related to COVID-19 work in AIAN communities.”

In Year 5, much of the above continued to be consistent, but a notable difference is an increase for requests for data emerged. For example, AASTECC shared that “there was a high interest in COVID data requests” and NEC reported that data collection and data analysis were two of the most frequent requests. However, adequate data access remains a challenge for TECs. For example, CTEC shared that “Many TA requests are specific to data access for local-level health priorities for AIAN communities in CA. Locating data at the local or state or regional representative levels continues to be a challenge.”

## TA requests increased, and Tribes made up the largest consumers of TA

Across both years, T/TO/UIOs made up the largest category of consumers of TA services. In Year 4, 68% of TA requests fulfilled were for T/TO/UIOs, and in Year 5, 57% were. Three TECs indicated that requests for presentations on a variety of topics were one of the most notable changes over these years. According to UIHI, these requests included presentations, trainings, and media interviews. ANEC also reported that “TECPHI staff have provided valuable data analysis and presentations to Tribal organizations on local health data.”



NEC developed an ArcGIS-based mapping software with fine resolution to assist in guiding the Navajo Nation Health Survey team to the accurate house selected for data collection, reducing time needed in the field.

Of note, during a focus group reflecting on the TECPHI Program, TECs mentioned TA services can result in significant cost savings for the TECs. TECs often provide a wide array of public health services to T/TO/UIOs free of charge (e.g. program evaluation and data analysis), and TECs providing services is more cost effective and efficient because the T/TO/UIOs do not need to spend time and resources engaging with contractors.

### **New tools to track and new types of requests emerged for TA**

Four TECs shared that they had implemented new tools to assist with tracking TA requests and completion like implementing a TA tracking system using Smartsheet or to develop a tool in Microsoft Sharepoint.

Increased outreach through websites and social media, as well as through COVID-19 informational calls and training has resulted in increased knowledge of what TA is available and how and where partners can request assistance. CTEC “increased outreach and exposure to available TA services and training through COVID-19 calls.” GPTEC “continues to advertise and promote its services. Roughly half of the TA requests received by GPTEC are from new partners we have not worked with before,” and UIHI shared that “dissemination practices have increased [our] reach in Urban Indian Country and beyond. Developing effective media strategies and relationships has been a huge driver of these successes.” One success shared by OKTEC is that their “website is frequented enough that seekers know where to look and go in seeking technical assistance.” The TECs also received increased number of requests for presentations on a variety of topics with these types of requests representing about 10% of the TA requests on an annual basis.

### **Requests for TA increased, but staff capacity to respond became more limited**

In Year 4, TECs fulfilled 2,306 TA requests, a 34.7% increase over the previous year. Many TECs shared that the increase in demand coupled with challenges with staffing has led to challenges with ability to respond, track, and respond to TA requests. OKTEC shared that “Our presentation requests were great enough we had to turn some people down,” while GPTEC reported that “The demand for TA services has increased, and GPTEC has outgrown its existing TA request, tracking, and reporting systems. GPTEC is currently working with partners to identify and develop a new system.” Three also shared challenges related to TA management and tracking systems, and one spoke specifically to the burden of reporting on TA when staff have to manually go back through email and other sources to collect data.

As UIHI so aptly put it, another theme that arose is that “High staff turnover and other staffing issues presented challenges in responding to TA requests in a timely manner.” ANEC echoed this, sharing that “Turnover in long-time TECPHI staff led to loss of institutional knowledge of how requests were previously handled, which needed to be rebuilt over year 5.” Other challenges related to staff and responding to TA requests were coordination with remote staff, and the demand on staff hours to respond to other COVID-19 efforts that limited focus on other large-scale TA requests.

Due to the condensed reporting period in Year 5, some TA requests were still in process or outstanding at the end of the third quarter. GPTEC reported 20 requests outstanding and CTEC reported 11 that will be completed by the end of the project year.

## Planning for Sustainability

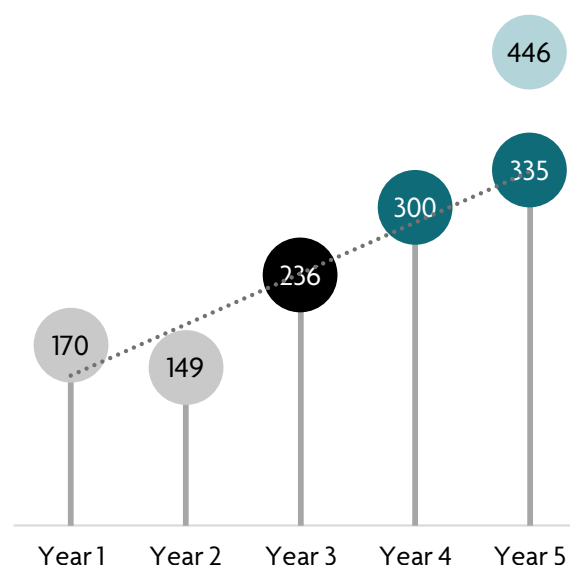
Securing and managing funding is key for program stability. Strategic and sustainability planning is also an important aspect of improving stable and long-term success. Effective strategic and sustainability plans document and establish the direction of future work and identifies long-term goals of the program. Other contributors include having established partnerships, staff, and communications which are captured in the other performance measures.

### Key Findings:

Number of <b>grant opportunities</b> applied for or supported by TECs.	Year 4 No. (% of Total)	Year 5 (partial) No. (% of Total)	Year 5 (estimated) No. (% of Total)
Total grants applied for or supported	300	335	446
Grants that provided funding to support TEC activities	124 (41%)	110 (33%)	146 (33%)
Grants applied for and awarded	91 (30%)	67 (20%)	89 (20%)
Number of TECs that offered grant management	3	9	9
Number of TECs that offered grant writing trainings	4	7	7

Other <b>sustainability indicators</b>	Year 4 No.	Year 5 (partial) No.	Year 5 (estimated) No.
TECs that have formulated and/or monitored a Strategic Plan	4	3	3
TECs that have participated in and/or provided Strategic Planning training to T/TO/UIOs	5	4	4
TECs that have formulated and/or monitored a Sustainability Plan	3	3	3
TECs that have participated in and/or provided Sustainability Planning training to T/TO/UIOs	7	7	7

PM 2: Number of **grant opportunities** applied for or supported.



### **Increase in demand from TECs for grant writing and other support**

Years 4 & 5 both saw increases in the number of grants TECs supported or applied for. This was also reflected in the number of TA requests fulfilled by TECs for grant writing. There was an increase in number of requests (increase from 25 in Year 3 to 39 in Year 4, and into Year 5, with a preliminary count of 38 and an estimated count of 50). In Year 4, the majority of grants TECs applied for were for federal funding opportunities for COVID-19 related work. For example, ITCA reported that of the five grants applied for, four of them were COVID-19-related federal grants. Other TECs shared that funds received for COVID-19 related work were distributed as sub-awards to T/TO/UIOs.

### **Demand for grant writing and management trainings was consistently high**

In Year 5, many TECs continued to see an increase in need for funding to support COVID-19 related work, but also to return focus on other health priorities and programmatic work for major sources of grant funding from the IHS and CDC. In Year 5, TECs reported the need for more staff capacity in applying for and managing grants. In response, eight TECs and the NCC offered trainings in grants management and seven in grant writing.

### **More grants applied to, but decreases in TEC funding**

In Year 5, TECs applied to or supported more grants than in any of the previous four years, however, overall grants funded to support typical, non-COVID related TEC activities was lower than in the previous two years. Some of this can be attributed to internal organizational changes experienced by some TECs. For example, grants that were historically housed within a TEC were moved to a different department at the same organization, but others, such as RMTEC, reported that “so many grant opportunities focused on COVID-19 that the TEC felt grants were lacking in other areas to address key health priorities.” Another important note is that during this timeframe, TECs learned that funding for the TECPHI Program would be decreased from levels during the first funding cycle of the cooperative agreement.

### **Sustainability looks different at the end of the 5-year funding cycle**

While strategic planning, training related to strategic planning, and sustainability planning did not make up a significant proportion of TEC work during Year 4 or Year 5, several TECs reported they engaged in a variety of these type of activities. Seven TECs engaged in strategic planning activities and/or participated in or provided sustainability training opportunities to T/TO/UIOs during both reporting years, with 3 of those TECs formulating formal sustainability plans.

Important to highlight and exciting news for the future of TECs and their T/TO/UIO partners, is that in the last quarter of Year 5, the CDC announced the release of the next iteration of the TECPHI Program funding opportunity. All TECs and the NCC submitted and were awarded for another five year grant cycle!

## Reflecting on the TECPHI Program

In Year 4 at the request of the CDC, the NCC organized two focus groups to gather input to help inform future TECPHI programming and inform other funding opportunities. The NCC organized focus groups with the TEC Directors and the TECPHI Program Managers- participants were asked to reflect on the overall impact of the program and how progress and successes could be better captured and shared out. Additionally, the CDC wanted to better understand how the TECPHI Program has contributed to increasing public health capacity and infrastructure of T/TO/UIO partners.

Overwhelmingly, participants appreciated the TECPHI Program, the close partnership with the CDC, and the flexibility of the funds and the programmability to shift programmatic work as appropriate. The scope of the TECPHI Program has shifted since its inception in 2017 and allowable activities expanded. Over time, the TECs could be more flexible with how funds were used and could think more broadly about activities and ways staff could be supported. The TECs' ability to use the TECPHI funds during the COVID-19 pandemic is especially illustrative of the broad application of the funds. The innovative program and funding opportunity administered by the CDC has helped to reduce programmatic silos by enhancing all TEC programs and activities. It has supported building staff capacity throughout the entire TEC, which, in turn, supports TEC infrastructure more broadly. The CDC provided TECPHI funding was essential to support and enhance the implementation of the TEC seven core functions and has increased the TECs ability to provide more comprehensive public health services to the T/TO/UIOs.

Common support and knowledge exchange that TECs provide T/TO/UIOs include technical assistance, trainings, data and grants management and support, and increased access to qualified staff. The services TECs provide can result in significant cost savings for T/TO/UIOs. TECs often provide a wide array of public health services to T/TO/UIOs free of charge, and having the TECs provide services is more efficient because the T/TO/UIOs do not need to spend time and resources engaging with contractors.

Although not an intentional outcome of the TECPHI Program, this opportunity has enabled the TECs to build the baseline, foundation, and systems for T/TO/UIOs to grow and build Tribal public health capacity. For example, both TEC and T/TO/UIO staff have benefited from the increased number of training opportunities. Since TECPHI funding has supported more staff, the TECs can be more responsive and improve quality and quantity of services provided. Although causality cannot be assumed, with more hands on, individualized support, there is increased probability of knowledge and skill transfer. Additionally, the TECs appreciated being able to provide tangible support to T/TO/UIOs with TECPHI funding in the form of sub-awards that directly support partner public health activities and staff.

The TECs have been working to improve communications and share more about TEC activities and the value the TECs offer to Tribal, local, county, state, and federal partners. However, the TECs consistently struggled with T/TO/UIOs and other potential partners knowing who they are and the services they provide. An additional challenge has been communicating the TECs' designation of public health authority and gaining access to the data they need for surveillance activities. Finally, the TECs wanted their purpose, value, services provided, and educating internal and external partners about the TEC designation as a public health authority to be communicated more widely by the CDC through a variety of messaging outlets.

## Conclusion

The TECPHI Program has made significant progress across all performance measures, as well in a variety of other unanticipated capacities. Although COVID-19 response continued to be a significant activity for TECs in the last two years of the program, their efforts to manage COVID-19 response and adjust to virtual, then hybrid in-person and virtual, services was successful. TECs were able to adapt their work plans and expand their skills and capacity to meet the immediate and ongoing needs of their T/TO/UIOs. Increases in TEC staffing, improved communication and dissemination, capacity to offer more technical assistance, increases in data access, analysis, and monitoring, training provision and workforce development, and building partnerships contributed to the overall success of the TECPHI Program and improved T/TO/UIO ability to identify health priorities and make decisions for community members. The improved capacity and infrastructure enabled TECs to meet COVID-19 response needs and engage in chronic disease prevention activities. The TECs ability to refine their processes and quickly build skills demonstrates their ability to be responsive and nimble to meet emergent needs and provide sustainable services to their T/TO/UIOs for future years- in short, the TECs exemplified to the guiding evaluation question “What can TECs do now that they could not do before?”

