

Building Public Health Infrastructure in Indian Country

YEAR 2 PROGRESS REPORT

Public Health Infrastructure Program



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Acknowledgements

This report was made possible with the collective effort of the 12 Tribal Epidemiology Centers, the Centers for Disease Control and Prevention, and Area partners and organizations.

Acronyms

AASTEC	Albuquerque Area Southwest	ITCA	Inter Tribal Council of Arizona, Inc.
	Tribal Epidemiology Center		Tribal Epidemiology Center
AIAN	American Indian and Alaska Native	NEC	Navajo Epidemiology Center
ANEC	Alaska Native Epidemiology Center	NCC	Network Coordinating Center
ANTHC	Alaska Native Tribal Health Consortium	NWTEC	Northwest Tribal Epidemiology Center
APRs	Annual Performance Reports	OKTEC	Oklahoma Area Tribal Epidemiology Center
BRFSS	Behavioral Risk Factor Surveillance System	PMs	Performance measures
CHAs	Community Health Assessments	RMTEC	Rocky Mountain Tribal Epidemiology Center
CDC	Centers for Disease Control and Prevention	TA	Technical assistance
CTEC	California Tribal Epidemiology Center	TECPHI	Tribal Epidemiology Centers Public Health
CoP	Community of Practice		Infrastructure Program
DHHS	Department of Health and Human Services	TECs	Tribal Epidemiology Centers
DSAs	Data sharing agreements	T/TO/UIOs	Tribes, Tribal organizations,
EPG	Evaluation Practice Group		and urban Indian organizations
GLITEC	Great Lakes Inter-Tribal Epidemiology Center	USET	United South and Eastern Tribes, Inc.
GPTEC	Great Plains Tribal Epidemiology Center		Tribal Epidemiology Center
IHS	Indian Health Service	UIHI	Urban Indian Health Institute

Executive Summary

The following report shares stories of achievement and growth of the 12 Tribal Epidemiology Centers (TECs) and the Network Coordinating Center (NCC) since the inception of Tribal Epidemiology Centers Public Health Infrastructure (TECPHI) Program in 2017. Both TECs and the NCC have increased internal capacity and strengthened infrastructure in all program objectives during Year 2, including: workforce development, collaboration, communication and outreach, technical assistance, and sustainability.

Please note that this report does not reflect the full breadth and depth of work the TECs do each day to serve their partners and regions.

The TECPHI Program

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

The TECPHI Program is designed to increase internal TEC capacity and infrastructure to reduce chronic disease risk factors and disparities in health outcomes.

TECPHI Program Evaluation Approach

The national TECPHI Program Evaluation Plan was developed in Year 1 as a result of collaboration between the TECs, the TECPHI NCC, and CDC. There is one overarching question which has guided the TECPHI program evaluation:

TECPHI Program Key Strategies

Strengthening public health capacity and infrastructure

Implementing activities to improve effectiveness of health promotion and disease prevention

Engaging in sustainability activities

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

This overarching question along with four specific evaluation questions and eight performance measures are used to evaluate the TECPHI Program's progress. They guide the TECPHI Program and highlight its main purpose, which is to increase capacity and strengthen infrastructure.

TECPHI Program Year 2 Progress

Key findings are categorized by 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 data describes progress made in each of the eight performance measures detailed in the TECPHI Program Evaluation Plan. The performance measures quantitatively monitor the evaluation questions.

Evaluation Questions

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

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?

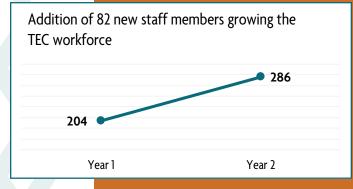
To what extent have partnerships between TECs and Area partners and organizations been enhanced or established as a result of TECPHI funding?

To what extent has awareness of the services and expertise offered by TECs increased as a result of TECPHI activities?

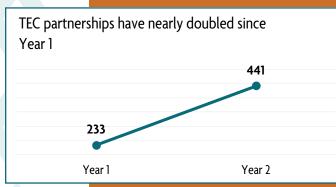
To what extent has technical assistance been delivered by TECs to Area partners and organizations to develop capacity in the use of data for surveillance and epidemiology and health priority setting as a result of TECPHI funding?

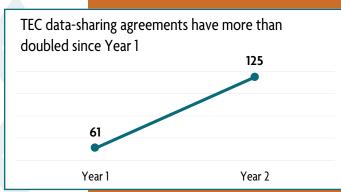
Program Objectives	Key Findings
Growing and Building the TEC Workforce	 82 new staff across all TECs ~ 3-fold growth in staffing for UIHI and GLITEC 113 TEC staff supported by TECPHI funding, representing 40% of total staff 31% AIAN TEC staff > 50% of staff hold degrees related to public health ~ 15 new epidemiologists hired 33 interns supported by 8 TECs > 169 technical training opportunities 3,700 individuals trained with at least 32% AIAN individuals > 1,900 staff from Tribes, Tribal organizations, and urban Indian organizations (T/TO/UIOs) trained
Developing Partnerships and Increasing Collaborations	 441 new or expanded partnerships and almost half were established with T/TO/UIOs 8 TECs established 31 subawards with T/TO/UIOs 125 new or expanded data sharing agreements (DSAs) ~ 72 DSAs were established T/TO/UIOs 79 new and/or expanded access to datasets 12 participated in NCC activities
Improving Communication and Outreach	 TEC Journal Supplement published in the Journal of Public Health Management and Practice > 266 publications, including 53 health status fact sheets and 18 peer reviewed publications ~ 180,000 new and returning visitors accessed TEC websites > 78,000 reported downloads of TEC publications 187 registered users on TECConnect.org 13 Success Stories posted to Tribalepicenters.org "What is a Tribal Epidemiology Center?" video was produced
Enhancing Technical Assistance and Support to Tribes, Tribal Organizations, and Urban Indian Organizations	 > 1,031 TA requests fulfilled 5 TECs are actively supporting Community Health Assessment and Profiling (CHAs) for T/TO/UIOs ~ 75% of the TA requests were fulfilled for T/TO/UIOs
Planning for Sustainability	 107 grants applied for, 93 were awarded, the majority of which were federal grants 49 additional grants supported and developed for T/TO/UIOs TECs applied/supported fewer grants in Year 2, but applications were for larger amounts of funding or funding continuation TECs offered many grant writing trainings 6 TECs and the NCC conducted strategic and/or sustainability planning sessions ~ 60 grant opportunities were shared on TribalEpiCenters.org and TEC Connect 12 TEC Directors and other TEC staff participated in a TEC Strategic Planning Session

Performance Measures

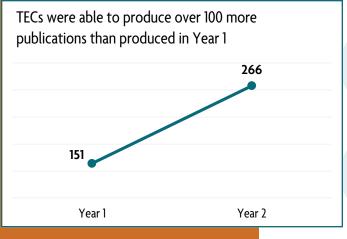




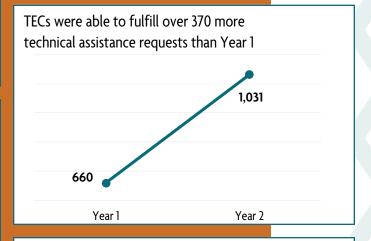




The performance measures quantitatively monitor the evaluation questions.







Although TECs applied for fewer grants, TECs are working on awards received during Year 1 or working with larger amounts of funding.

170

149

Year 1 Year 2

Conclusion

Year 2 saw enormous growth for TECs as they experienced many achievements in working to build Tribal public health capacity, infrastructure, and the sustainability of all programs. TECs contributed to significant gains across every program area, most notably in workforce development and technical assistance response capacity.

TECs made progress on strategies and activities and, despite challenges, worked to meet the goals of the TECPHI Program. The TECs and the TECPHI Program will grow and evolve throughout the funding period to aid T/TO/UIOs in addressing chronic disease prevention and other health priorities. To demonstrate the TECPHI Program's impact on community health and wellness in Indian Country, progress outcomes – along with photos and stories from awardees – will be shared annually.



What is a TEC?

Tribal Epidemiology Centers (TECs) collect and disseminate data, improve disease surveillance, strengthen public health capacity, and assist in disease prevention and control for Tribes, Tribal organizations, and urban Indian organizations (T/TO/UIOs). The TECs work in partnership with T/TO/UIOs and other partners to improve the health and well-being of Tribal members. This is done by offering culturally-competent approaches that work toward eliminating health disparities and achieving health equity for AIAN populations.

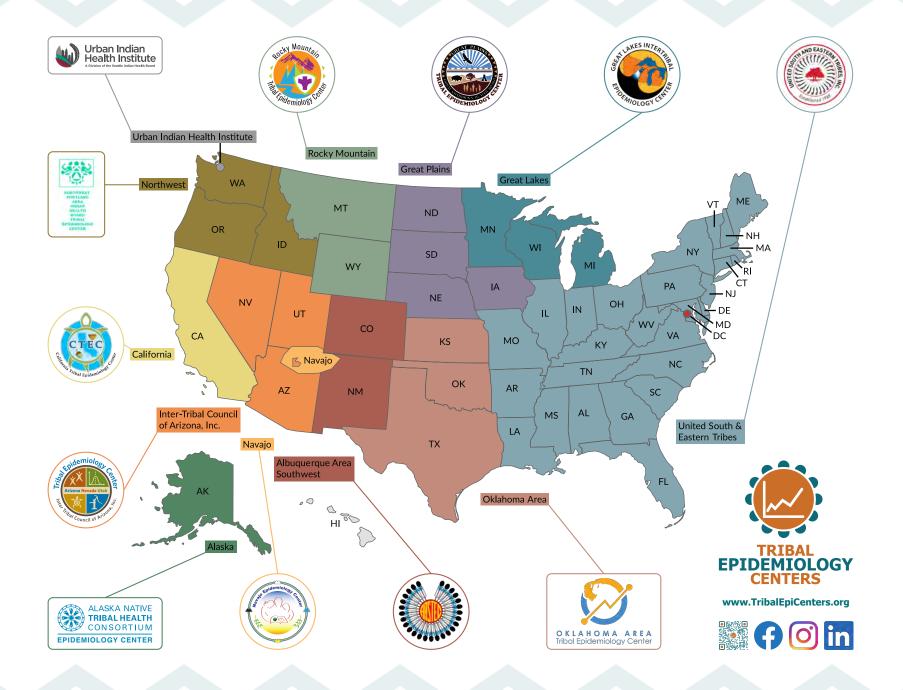
TECs strive to fulfill their mission of improving the health of AIAN people by performing seven core functions:

- 1. Collecting data;
- 2. Evaluating data and programs;
- 3. Identifying health priorities;
- 4. Making recommendations for health service needs;
- 5. Making recommendations for improving health care delivery systems;
- 6. Providing epidemiologic technical assistance, and;
- 7. Providing disease surveillance.

In 1996, four TECs were established under the Indian Health Care Improvement Act (IHCIA). Today, 12 TECs serve AIAN people across all 12 Indian Health Service (IHS) Areas and one serving urban AIAN people nationwide. The reauthorization of the IHCIA in 2010 acknowledged TECs as public health authorities which directs the Department of Health and Human Services (DHHS) to grant each TEC access to AIAN data, data sets, monitoring systems, delivery systems, and other protected health information (PHI).



AASTEC approaches their TECPHI project as an opportunity to be a bridge to partners that may be physically divided; partner Tribes and available resources, the funder and the Tribal nations in the area, and between the current reality and hopeful future.



Background

The Alaska Native Tribal Health Consortium's (ANTHC) Alaska Native Epidemiology Center (ANEC) is serving as the Network Coordinating Center (NCC) for the TECPHI Program. The purpose of the NCC is to support the 12 TECs in building infrastructure and capacity. The NCC is responsible for collecting data and stories from the TECs to monitor progress and share the accomplishments of the TECPHI Program.

This report shares stories of achievement and growth of the 12 TECs and the NCC since the inception of TECPHI Program in 2017. Both TECs and the NCC have increased internal capacity and strengthened infrastructure in all Program Objectives during Year 2:

- Workforce Development
- Collaboration
- Communication and Outreach
- Technical Assistance
- Sustainability



way for TEC staff to network and

tell others what we do.

The TECPHI Program

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

The TECPHI Program is a comprehensive funding opportunity designed to increase internal TEC capacity and infrastructure to reduce chronic diseases risk factors and disparities in health outcomes. Services provided by TECs are developed for and with the T/TO/UIOs they serve with the goal of improving the overall health for AIAN people nationwide.

All 12 TECs and the Network Coordinating Center (NCC) are funded under the TECPHI Program. Although each of the TECs' projects are unique, three key strategies guide their activities:

- 1. Strengthening public health capacity and infrastructure;
- 2. Implementing activities to improve effectiveness of health promotion and disease prevention, and;
- 3. Engaging in sustainability activities.

CAPACITY, INFRASTRUCTURE, AND SUSTAINABILITY? Definitions are tailored to the TECPHI Programmer.

WHAT IS PUBLIC HEALTH

Definitions are tailored to the TECPHI Program and describe TEC work in a Tribal health context. The definitions are a starting point and will evolve as TECs and the NCC make headway on the anticipated outcomes of the TECPHI Program.

Public Health Capacity

The ability to respond to ongoing AIAN public health needs by performing seven core public health functions listed on page 8.

Public Health Infrastructure

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

- A workforce trained in public health core competencies;
- Information and data systems to rapidly analyze, assess, and communicate information;
- A response to public health needs that are culturally relevant, and;
- An established plan to sustain program efforts once funding has ended.

Sustainability

The ability of a public health program to:

- Continuously respond to needs of Area partners and organizations;
- Be valued by those they serve, and;
- Maintain a focus consistent with its goals and objectives.



National and local health conferences provide great outreach opportunities to spread awareness of the services offered by CTEC and the other TECs.

Telling the TECPHI Story

Program Evaluation Approach

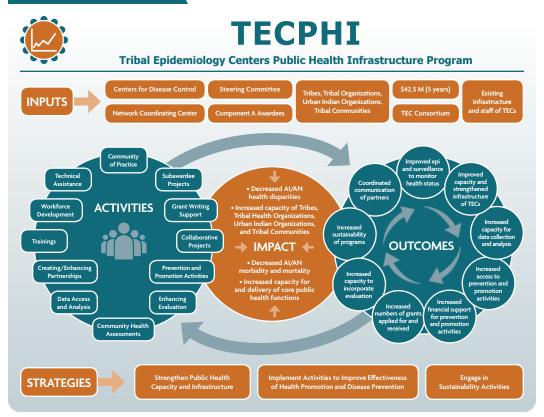
The NCC has been responsible for developing a national evaluation approach to monitor progress and accomplishments in achieving the expected outcomes of the TECPHI Program.

At the inception of the program, the NCC conducted a formative evaluation consisting of 31 key informant interviews to examine past evaluation efforts by TECs nationally and understand expectations for the evaluation of the TECPHI Program. Key informants wanted clear and concise communication related to the evaluation approach, a straightforward evaluation and performance measurement plan, and a low burden means of submitting data. They also requested that evaluation data be consistently collected from all TECs and demonstrate individual and collective success.

In Year 1, the NCC convened the TECPHI Evaluation Practice Group (EPG) that included representatives from all TECs. The EPG's collaborative effort resulted in the creation of the national TECPHI Program Evaluation Plan and was approved by the TECPHI Steering Committee in April 2018 and the CDC in May 2018.

The plan includes the TECPHI Program logic model that was collaboratively developed by the EPG. The logic model is a roadmap depicting the partners and assets contributing to the program, the variety of activities TECs will undertake, and anticipated outcomes for the program. The logic model communicates the intent of the evaluation approach. The evaluation data will be used to adjust activities as needed to best serve the TECs and the AIAN people they serve, plus meet the intended TECPHI program goals of building TEC capacity and infrastructure in a meaningful and sustainable way.

TECPHI Logic Model



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

One overarching and four specific evaluation questions, along with eight performance measures, are used to evaluate the TECPHI Program's progress. The overarching evaluation question "What can TECs do now that they could not do before?" guides the TECPHI Program and highlights its main purpose, which is to increase capacity and strengthen infrastructure and sustainability of the TECs.

As new data, understandings, and changing contexts emerge, updates of baselines, goals, ideals, and anticipated progress may occur over time. The TECPHI Program Evaluation Plan is a living document and is meant to be flexible and modifiable to reflect the evolving needs of the TECPHI Program. It is meant to support the TECs in telling their own stories and describing their work in the way most useful to themselves, their partners, and the communities and people they serve.

Program Objectives	Evaluation Question	Performance Measure(s)
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?	Number of TEC staffNumber of trainings provided or supported by TECs at least in part by TECPHI funding
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?	 Number of new or expanded partnerships supported at least in part by TECPHI funding Number of new or expanded data sharing agreements (DSAs) established at least in part by TECPHI funding
Improving Communication and Outreach	To what extent has awareness of the services and expertise offered by TECs increased as a result of TECPHI activities?	 Number of publications produced with support at least in part by TECPHI funding Number of users of TEC websites
Enhancing Technical Assistance and Support to Tribes, Tribal Organizations, and Urban Indian Organizations	To what extent has technical assistance 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?	– Number of technical assistance (TA) requests fulfilled at least in part by TECPHI funding
Planning for Sustainability	*All Evaluation Questions	 Number of grant opportunities applied for or supported by TECs

Building TEC Evaluation Capacity

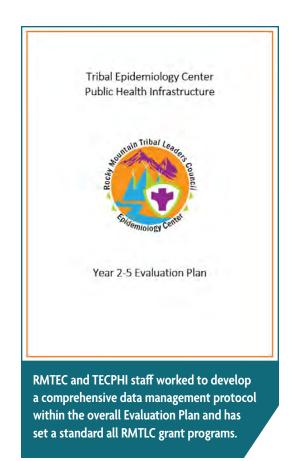
In December 2018, AASTEC hosted an Evaluation Workshop led by the CDC Program Evaluator. The purpose of the workshop was to discuss Indigenous approaches to evaluation, and ways to integrate those approaches into comprehensive evaluation plans.

Topics of discussion included Indigenous evaluation methods, qualitative approaches to program evaluation, metaphoric project images and logic models, strengths based approaches to communication, and storytelling as a method of collecting data. Program Managers and Program Evaluators from all 12 TECs participated in the workshop.

This workshop provided an opportunity for participants to share ideas of how to make the 5-year plans unique to each TEC and their projects. It was emphasized that the evaluation plans should provide flexibility in how TECs choose to track progress over time, while also identifying gaps in both monitoring and project management to adjust work as needed.

The final comprehensive evaluation plans shared stories of the TECs, and the vision of how TECPHI funding would be used to help meet the needs of the TECs and expand their capacity, infrastructure, and sustainability. TECs were successful in incorporating Indigenous methods and qualitative approaches of evaluation into the comprehensive plans.

After attending the workshop, TECs mentioned an increased ability to monitor work and progress, ensuring their evaluation plans are tracking and monitoring what they should. By increasing the evaluation capacity of TECs, they are better able to support T/TO/UIOs with evaluation related technical assistance.



TECPHI Year 2 Progress Report Data Sources

The Year 2 Progress Report demonstrates TECPHI Program advancements using data and information from six sources:

- 1. TECPHI performance measure data;
- 2. TECPHI photo narrative project submissions;
- 3. FY2019 Annual Performance Reports (APRs) submitted to the CDC in April 2019;
- 4. TEC Years 2-5 Evaluation Plans;
- 5. TECPHI Interim Evaluation Reports, and;
- 6. NCC Process/Implementation Evaluation Report.

Year 1 (baseline) and Year 2 performance measure data are included in this report. Photo narrative submissions represent work completed during Year 2.

Described on pg. 14, TECs created comprehensive evaluation plans describing specific objectives, outcomes, and measures to assess their TECPHI projects. The Year 2-5 Evaluation Plans include the story of the TECs' goals and vision for their projects, the evaluation questions to be answered, as well as the expected long-term, intermediate, and short-term outcomes.

The APRs are one of the annual required reporting documents submitted to the CDC. The reports describe activities and progress awardees made on TECPHI project work plans from April 1, 2018 to March 31, 2019.

TECPHI Interim Evaluation Reports were submitted to the CDC and reflect findings from the first two years of the individual TEC projects. The interim evaluation reports are concise documents sharing basic information and highlights of work over the past two years.



The NCC used a REDCap survey to make data collection and analysis more efficient and less burdensome for TEC staff.

TECPHI National Evaluation Data Entry Survey

Please complete the following survey to submit your TECPHI performance measure (PM) and photo narrative evaluation data. The reporting period includes work completed over the entire grant year, September 30, 2017 - September 29, 2018, and is being collected from each Component A Awardee (CAA) and the Network Coordinating Center (NCC) with a submission due date of December 29, 2018.

For more information about the national TECPHI Program Evaluation Plan, you can access the plan on TEC Connect at https://tecconnect.org/docs/tecphi-program-evaluation-plan-2-2-2/.

You may only enter a number with NO commas or decimals (e.g. 15000) in the box next to each PM and you may skip any PM that does not apply.

A comment box is provided at the end of each PM section to describe your results in more detail, as needed. Responses can be brief (e.g. a few sentences or a bulleted list). The comment box will expand as needed, but it may be helpful to prepare PM responses on a Word document and copy and paste into REDCap. Please include any information related to the PM we may need to understand your results. You may leave the comment box blank if no additional detail is needed to explain your results for the PM.

At the end of the survey, two photo narrative submission opportunities are provided for each evaluation question, but only one submission is expected. Please let the NCC know if you would like to submit more than two photo narratives for an evaluation question.

TECPHI performance measure data and photo narrative project submissions were collected using a REDCap survey instrument. Each TEC was emailed a unique link to submit data, so all submissions remained confidential.

Once downloaded into an Excel spreadsheet from the REDCap survey, performance measure data were analyzed using descriptive statistics. All other documents (i.e. APRs, evaluation plans, etc.) were reviewed and analyzed using content analysis. Stories, examples of successes, challenges, themes, etc. were collected form narrative data and organized by performance measure, evaluation question, or theme to share the story of TECPHI over the past year.

At the end of Year 2, the NCC conducted a process and implementation evaluation to understand the perspectives of the TECs and the CDC on the launch and the implementation of the NCC. The results of the reflection project will inform the NCC's approach to planning future work and activities to better support the Network.

The data presented in this report describe the performance measures detailed in the TECPHI Program Evaluation Plan and are intended to be used to demonstrate progress, guide program implementation, and inform future activities. Data and findings in the following sections are organized around the five TECPHI Program Objectives listed in the table on pg. 13: Growing and Building the TEC Workforce; Developing Partnerships and



Increasing Collaborations; Improving Communication and Outreach; Enhancing Technical Assistance and Support to Tribes, Tribal Organizations, and Urban Indian Organizations; and, Planning for Sustainability.

Graphs are included in each section depicting progress made demonstrated using performance measure data from Year 1 and Year 2. Each of the sections highlight 1-2 TEC photo narrative submissions of related evaluation questions.

*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 will continue to work with TECs to develop innovative approaches to share accomplishments.

Showing and Telling

The TECs and the NCC participate in a photo narrative project (a process similar to PhotoVoice). A brief narrative and 1-2 photos are submitted each year that reflects upon experiences related to the evaluation questions. The photo narrative illustrates interim answers to the TECPHI evaluation questions regarding changes of capacity, infrastructure, and sustainability. Additionally, the photos help the TECs and the NCC "fill gaps" and provide context to performance measure data that may not have been represented with the reported numerical data.

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.

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 (Tribal Evaluation Workgroup, 2013, p.2).

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 (LaFrance and Nichols, 2009).

LaFrance, J., & Nichols, R. (2009). *Indigenous* evaluation framework: Telling our story in our place and time. Alexandria, VA: American Indian Higher Education Consortium (AIHEC).

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.



In collaboration with UIHI, RMTEC offered an Indigenous Evaluation Training where attendees learned to tell a story with the data, decolonize data, create visual representations of data findings, and structure evaluation and data dissemination in a way that is meaningful to their communities.

Growing and 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 have been hiring new staff, supporting professional development, and providing trainings to the T/TO/UIO workforce on a range of topics to build core public health competencies. Other activities include supporting interns and student practicum placements, and contracting with subject matter experts.

Key Findings

- Increase of 82 staff across all TECs;
- UIHI and GLITEC have almost tripled in size;
- TECPHI funding supported 113 TEC staff representing 40% of total staff;
- 31% of TEC staff are AIAN individuals;
- Over 50% of TEC staff have a degree related to public health;
- Approximately 15 new epidemiologists have been hired at the TECs;
- 8 TECs supported 33 interns;
- Over 169 technical training opportunities for T/TO/UIOs were provided or supported by TECs;
- 3,700 individuals trained and least 32% were AIAN individuals, and;
- Over 1,900 staff from T/TO/UIOs trained.



Year 2 Was a Year of Growth

New funding opportunities, projects, and interest in TEC services have increased the need for TEC staffing with appropriate expertise and skill. As a result, TECs have nearly doubled staff numbers since the end of 2017. All TECs retained highly qualified staff ensuring consistent leadership in delivering programmatic activities.

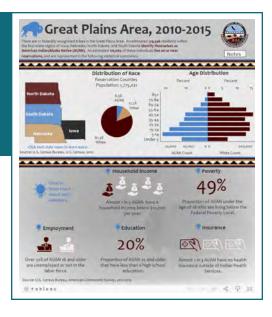
Several TECs have developed robust internship and student programs. For example, CTEC supported two Summer Research Assistants at host Indian Health Programs, UIHI supported four full-time summer public health interns, and OKTEC hired an intern to support their Native Oral Health Network activities.

Likewise, the NCC has supported the collective TEC workforce development. In Year 2, the NCC became an affiliate of the Public Health Foundation's (PHF) TRAIN web-based training system and worked with the PHF to develop three TEC-specific learning plans accessible to all TEC staff. The system allows TECs to track staff professional development and fill training gaps. In addition to the training opportunities provided by the NCC and TECs, other staff professional development included conference attendance and support in working towards professional degrees.

TECs have increased public health capacity in their regions by offering a breadth of in-person and virtual training opportunities. Some examples include:

- CTEC and OKTEC sponsored annual multi-sector training events for their regions;
- GPTEC hosted a third-annual Community Health Profiling training about accessing, processing, and compiling data into community health profiles;
- ITCA held an Epidemiology Training and a Health Promotion Disease
 Prevention Training made available to all Tucson/Phoenix IHS area Tribes;
- NWTEC presented three Health Data Literacy Trainings and a Communications Strategies Training, and;
- UIHI hosted a Data Story Workshop to show different strategies to deliver relevant and culturally adapted info that can be customized for AIAN datasets.

GPTEC hired a
Data Products
Manager to publish
interactive and
updatable data
dashboards using
Tableau.



Challenges and Looking Ahead

Though staffing improvements have been observed, all TECs have reported challenges with recruiting and hiring qualified staff, particularly epidemiologists and biostatisticians. Staff turn-over, internal hiring processes, or contracting resulted in delays in project activities like website development and providing technical assistance.

The number of AIAN participants trained is "estimated" because several TECs did not track the race/ethnicity of training participants. In Year 3, five TECs reported they will be adjusting surveys to include questions to capture the race/ethnicity of training participants.

Moving forward, offering as many training opportunities to T/TO/UIOs and the AIAN public health workforce remains a key strategy to improve public health capacity and infrastructure both internally and with external partners. TECs will continue to expand training activities during Year 3.



UIHI now has 30 full time employees; double the number of staff prior to TECPHI funding.

Developing Partnerships and Increasing Collaborations

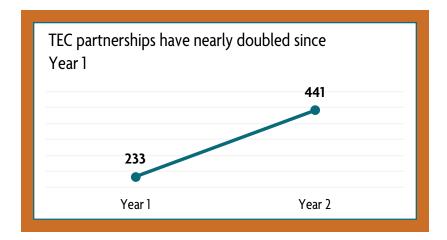
Effective partnerships and collaborations are essential to TEC program sustainability and expand opportunities for data sharing, increased communication, and collaboration around best practices. These aspects allow for broad base support of program implementation and helps TECs to understand community needs, further allowing response and adaptation to health priorities. The connections made among TECs, T/TO/UIOs, and other sectors have led to enhanced services and the ability to leverage resources.

Presently, all TECs are working towards new and/or expanding current data sharing agreements (DSAs) to improve monitoring of health status with T/TO/UIOs. In tandem, TECs are enhancing data management systems to improve data collection, public health surveillance, quality assurance, and accessibility of data by T/TO/UIOs.

Key Findings

- TECs reported 441 new or expanded partnerships and almost half were established with T/TO/UIOs;
- Eight TECs established 31 subawards with T/TO/UIOs;
- TECs established 125 new or expanded DSAs;

- Approximately 72 DSAs were established T/TO/UIOs;
- TECs achieved access to 79 new and/or expanded datasets, and;
- All TECs participated in NCC activities (e.g., CoPs, Steering Committee).



Working Together Across Indian Country

TECs are collaborating with partners to facilitate knowledge-sharing, problem-solving, and communication. TEC partnerships are varied. TECs reported establishing partnerships with T/TO/UIOs, state and county health departments, other health organizations, other sectors, as well as with other TECs. Partnerships could be formalized with a contractual agreement for specific services, or be a more informal relationship.

Several TECs have organized multi-sector groups to work on health priorities and data initiatives collaboratively. Examples of recently established working groups include:

- AASTEC Tribal Data Users Workgroup Meetings including 10 IHS Albuquerque Area T/TO/UIOs;
- ITCA coordinated a Public Health Working Group attended by all 8 of their subawardees:
- OKTEC coordinated a public health CoP for Tribes to communicate about barriers related public health accreditation, and;
- UIHI hosted a CoP with subawardees so they could discuss best practices, share supporting documents, and other ideas.

Eight TECs are using the subawardee model to increase Tribal public health capacity and infrastructure among T/TO/UIOs. Subawards range from mini-grants to larger, long-term projects. The 31 subawardee projects across TECs include conducting community health assessments (CHAs), assembling and enhancing coalitions, developing strategic plans for health promotion disease prevention activities, improving data quality, receiving targeted technical assistance and training, and working on community-led public health projects. In general, TECs conduct annual site visits and initiate regular calls with their subawardees.

TECs doubled their number of established DSAs from Year 1 to Year 2 and developed management systems and policies to ensure data security. TECs updated Tribal disease registries, created linkages with state and hospital data systems, oversampled the AIAN population in various population health surveys, expanded surveillance, gained access to the IHS EpiDataMart, identified data gaps, and developed new databases to complement existing data systems.



CTEC developed partnerships with three different Tribal health organizations to conduct Community Health Assessments.

Specific data-related initiatives include:

- CTEC completed an oversampling project for the California Health Interview Survey 2018 with a total of 1.103 adult interviews.
- NWTEC completed linkages with nine Idaho, Oregon, and Washington state datasets.
- OKTEC accessed data from four Kansas Tribes to create Community Health Profiles for the first time.

Based on connections made by Community of Practice (CoP) members, TEC staff participated in two joint presentations at the 2019 NIHB Tribal Public Health Summit. Staff from ANEC. GLITEC, and UIHI presented an overview about TECs and described the variety of work TECs do for their T/TO/ UIOs to approximately 53 conference attendees. ANEC, CTEC, and ITCA hosted a health promotion roundtable and interacted with approximately 60 conference attendees.

The NCC has maintained three subject specific CoP groups (i.e. program managers, evaluation, and data) that meet quarterly. One success to highlight, is that a new communitydriven CoP was initiated, coordinated, and facilitated by an OKTEC staff. This Racial Misclassification CoP met two times with an average of 22 participants from 10 TECs and included staff from NCUIH at the second meeting.



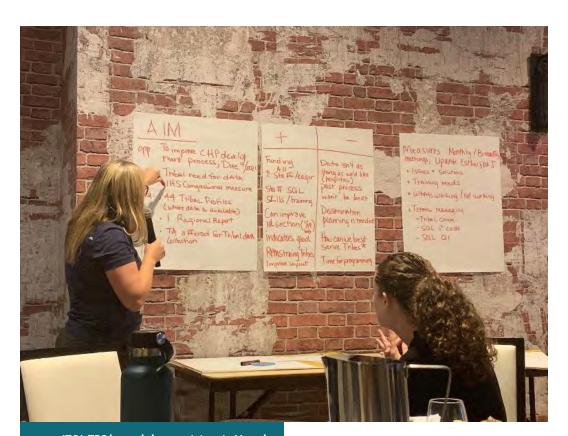
Native photography team to take photos of Native families on a reservation and urban community in the Bemidji Area to ensure that materials reflect the communities.

Challenges and Looking Ahead

Geographic and scheduling challenges impacted T/TO/UIO participation in initiatives and work groups. Also, delays in establishing an application process for subawardees, contracting, and prior approvals were mentioned as hindering participation.

Barriers to data access and sharing included lack of IHS EpiDataMart datasets, limited resources/staffing for data analysis, and delays establishing data sharing agreements due to organizational negotiations.

Despite challenges and delays, all TECs continue to seek new and innovative approaches to establish new partners, maintain connections, and increase access to data sources, such as: increasing travel funds for more in-person opportunities, issuing multiple rounds of subawards, developing strategic plans with subawardees, attending a variety of community events, and advocating with federal agencies.



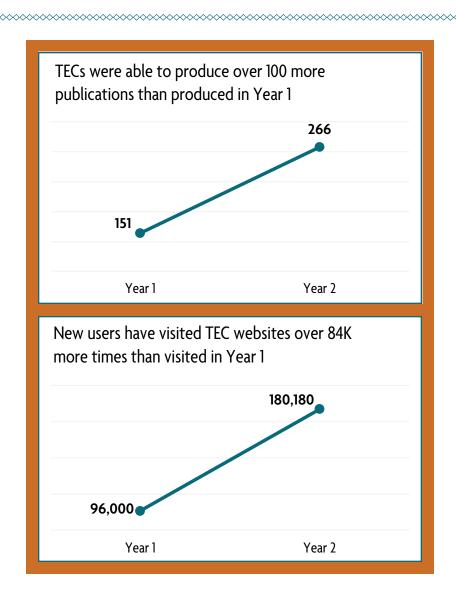
ITCA TEC hosted three trainings in Nevada which included a session on strategic planning for opioids, quality improvement, and work groups for subawardees.

Improving Communication and Outreach

TECs have been working to improve data dissemination and communications with external audiences. They are enhancing methods for public health messaging with new approaches for data visualization. TECs have used a variety of publications that increase awareness of health status to communicate progress on public health initiatives, and expand web and online presence to increase availability and reach of resources.

Key Findings

- All TEC collaborative project to publish the TEC Journal Supplement with the Journal of Public Health Management and Practice;
- TECs produced at least 266 publications including 53 health status fact sheets and 18 peer reviewed publications;
- An estimated 180,000 new and returning visitors accessed TEC websites with over 78,000 reported downloads of TEC publications;
- "What is a Tribal Epidemiology Center?" video project produced;
- 187 registered users on **TECConnect.org**, and;
- 13 Success Stories posted to <u>TribalEpiCenters.org</u>.



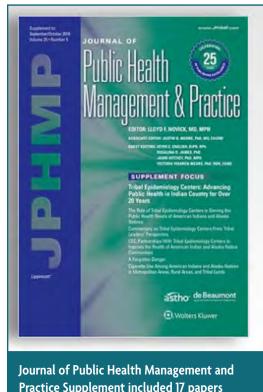
Engaging TEC Audiences

Representing an expansive collaborative effort among all 12 TECs in Year 2, the TEC Journal Supplement was published with the Journal of Public Health Management and Practice (JPHMP). Coordinated by the NCC, the supplement was published September 2019 and featured 14 peer reviewed articles, 2 commentaries, and 1 editorial from 10 TECs, Tribal leadership, and the CDC. An additional 6 posts are featured on the journal's supplementary website, JPHMP Direct.

In partnership with the Southern Plains Tribal Health Board Creative Team, the NCC coordinated the creation of the "What is a Tribal Epidemiology Center?" video. Eleven TEC staff were interviewed to communicate the important role of TECs to a variety of audiences. This production will be shared with partners, on TEC websites, and social media. The video can be seen here: https://www.youtube.com/watch?v=BFBgNwEbbxk

TECs are also enhancing methods of data visualization and dissemination. At least two TECs have integrated dashboards onto their websites, making data communication more efficient and visually engaging for the public. Other TECs and the NCC have sponsored data visualization and infographic trainings to increase staff's capacity to enhance data products and improve messaging.

TECs have doubled the numbers of new and returning visitors to their websites and reported a 500% increase of downloads of TEC publications. Maintained by the NCC, TribalEpiCenters.org has doubled



Journal of Public Health Management and Practice Supplement included 17 papers submitted by TEC staff and represents the first peer-reviewed publication highlighting TEC-only work.

the number of unique visitors which increases visibility, reach, and dissemination of publications and information about the TECs.

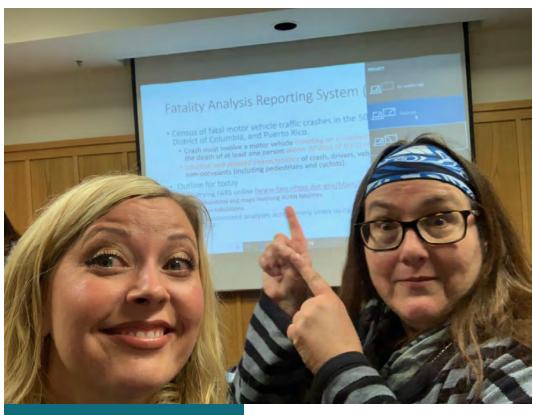
TEC Connect, launched in 2018 as a private, interactive communication web-based platform for TEC staff. The number of registered users and member groups has doubled during Year 2. To enhance user engagement, the NCC launched a mobile app for TEC Connect in September 2019.

The NCC coordinated other activities to increase outreach, collaboration, and communication. For instance, sponsoring exhibits at four national conferences, disseminating a monthly TECPHI e-news to the Network, and the developing of the TEC Brochure to provide a brief overview and contact information for all 12 TECs.

Challenges and Looking Forward

Some TECs reported not having reliable methods for tracking users and/or document downloads on their websites. TECs are in the process of making changes and enhancing their websites to allow better web analytics, include tracking of usage and document downloads, and two TECs have identified a need for dedicated staff to improve communications and outreach. Two TECs mentioned delays with publications due to lengthy Tribal review or IRB processes.

Engagement on TEC Connect has been a challenge, though there have been bright spots this past year including the initiation of the Racial Misclassification CoP through a TEC Connect forum and an increase in conversations in TEC Connect forums. The NCC will continue to explore methods to encourage greater engagement on the platform.



With expanded staff capacity, NWTEC has been able to increase the visibility of projects and services.

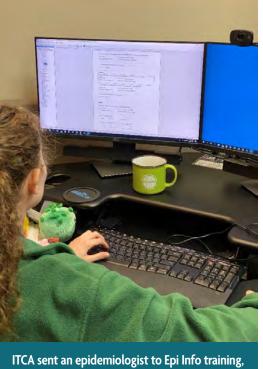
Enhancing Technical Assistance and Support

As one of the seven core functions, technical assistance (TA) provision is a significant contribution TECs make to improve the health and well-being of Tribal community members and supporting partners. TECs provide TA to T/TO/UIOs and often respond to state and federal requests.

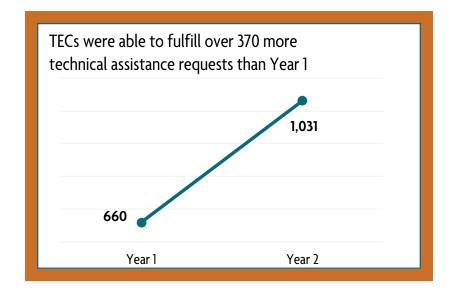
TA is defined broadly as the exchange and/or the provision of a variety of services and resources that include, data access and collection, program development, grant writing, evaluation, identification of health priority areas, and conducting site visits.

Key Findings

- Over 1,031 TA requests were fulfilled by TECs;
- Almost 75% of the TA requests were fulfilled for T/TO/UIOs, and;
- Five TECs are actively supporting Community Health Assessment and Profiling (CHAs) for T/TO/UIOs.



ITCA sent an epidemiologist to Epi Info training, and because of the training, a request for technical assistance by a TECPHI subawardee Tribe was able to be fulfilled.



Becoming THE Service Provider of Choice

All TECs have been working to increase their capacity to respond to TA. Activities include enhancing mechanisms that track TA and to which organizations, contracting with subawardees to assess TA needs, and deploying surveys to follow up with organizations regarding TA provision. Some TECs have made the process for requesting TA more accessible to external audiences by adding TA requests forms to their websites.

Five TECs responded to TA requests for developing CHAs or provided training to Tribal staff on how to access, process, and compile data into CHAs. Example activities included:

- ANEC created a 1-hour webinar sharing information on how to respectfully conduct CHAs in Alaska Native communities. Topics included building relationships, planning the assessment, analyzing the information collected, and using assessment results to strategize changes to improve community health;
- GLITEC created a draft cancer report template for Michigan, Wisconsin, and Minnesota states;
- ITCA provided targeted and tailored TA to each of their eight subawardees to identify public health capacity priorities, design, data collection tools, and implement surveillance systems for local data collection, and;
- UIHI created a checklist and survey so partner sites can provide feedback on their CHAs.

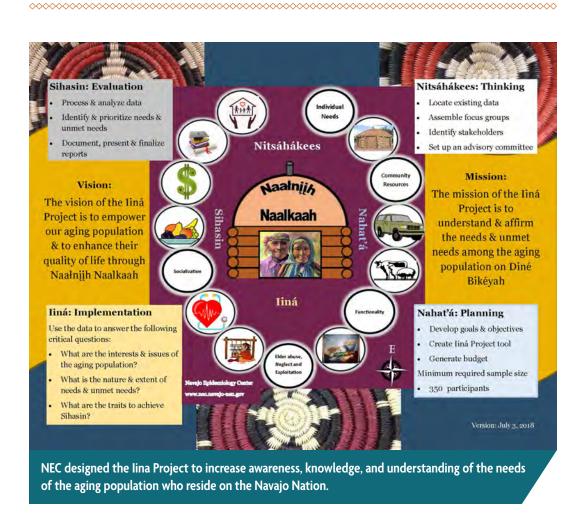
TECs also created a variety of toolkits, assessments, and guidance documents to support T/TO/UIOs. For example, GPTEC, OKTEC, and USET developed tools to identify T/TO/UIO health status objectives, support needed to achieve public health accreditation, and TA needed to meet those objectives.



Challenges and Looking Forward

TECs have struggled with how to track, categorize, quantify, and qualify TA. Some challenges mentioned by TECs in fulfilling TA requests included making TA responses consistent, ensuring appropriate follow-up, tailoring TA responses to the needs of the T/TO/UIOs and subawardees, and delays in developing TA tracking systems.

Additionally, each TEC defines TA and TA provision differently making tracking TA challenging on a national level. How TECs monitor TA provision has been a topic of discussion at many Evaluation CoP meetings.



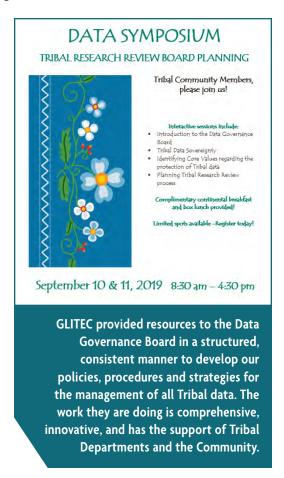
Planning for Sustainability

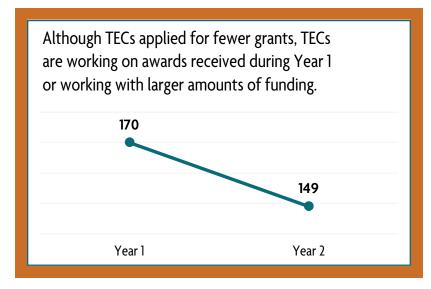
A key strategy of the TECPHI Program is engaging in activities that build and plan for sustainability. TEC sustainability is improved with an increased capacity to secure and manage funding. Other aspects of sustainability include growth in partnerships, staff, and communications which are monitored by the other seven TECPHI performance measures.

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.

Key Findings

- TECs applied for 107 grants and were awarded 93, the majority of which were federal grants;
- TECs supported T/TO/UIO in developing 49 additional grants;
- TECs applied/supported fewer grants in Year 2, but for larger amounts of funding or funding was continued from previous years;
- TECs offered many grant writing trainings;
- Approximately 60 grant opportunities were shared on TribalEpiCenters.org and TEC Connect;
- All 12 TEC Directors and other TEC staff participated in a TEC Strategic Planning Session, and;
- Six TECs and the NCC conducted strategic and/or sustainability planning sessions.





A Roadmap for the Future

TECs were extremely successful in applying for grants with an 87% success rate. While a majority of the funding awarded was federal, several TECs received funding from states, non-profits, and other sources. Although the numbers of grant opportunities applied for or supported is lower than Year 1, TECs applied for larger funding opportunities. Additionally, TEC leadership has been mindful in balancing funding, staff capacity, growth, and sustainability.

Many TECs shared funding opportunities with Area partners and organizations via their websites, emails, or listservs. The NCC posted over 60 grant opportunities on <u>Tribalepicenters.org</u>. TECs provided TA to Area partners and organizations in developing 49 additional grants. Some examples of support provided include supplying data for statements of need, providing technical review, and developing evaluation plans.

Additionally, seven TECs provided grant writing or grants management training to T/TO/UIOs and the NCC sponsored an in-person grants management training. The training was attended by 21 TEC staff from 11 TECs. This is the third in a series of grants management training opportunities provided to TEC staff.



USET had the capacity to apply for and be awarded its first SAMHSA grant, which resulted in the addition of six new staff positions and partnerships with two Tribal Nations.

Strategic planning is one part of improving and planning for sustainability. The NCC coordinated a webinar titled "Introduction to Program Sustainability" attended by all 12 TECs. The training provided an overview of the various components needed to plan for sustainability: environmental support, communications, funding, partnership, program adaptation, evaluation, organizational capacity, and strategic planning.

While many TECs and the NCC have engaged in strategic planning activities on an individual level during Year 2, all 12 TECs joined together in March 2019 to discuss long-term goals and determine a strategic direction. Coordinated and funded by the NCC, the TEC Directors and other TEC staff engaged in a variety of activities and thoughtful discussion. The resulting TEC Strategic Plan includes a list of strategic actions with definitive next steps that will guide future TEC work beyond any funding source.

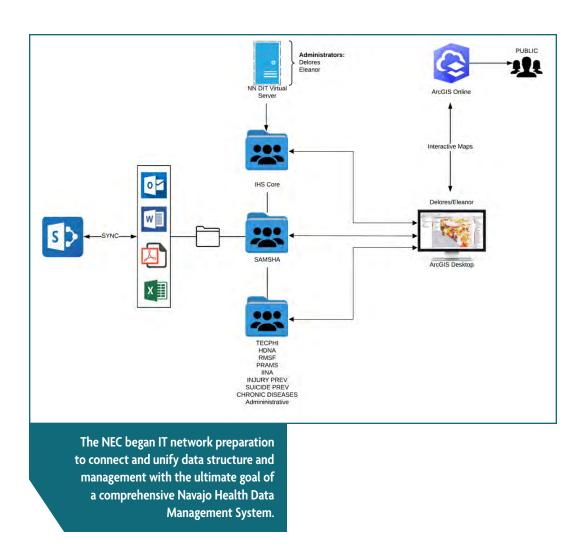


ANEC has focused on increasing its outreach to Alaska's regional Tribal Health Organizations through technical assistance and held its annual Scientific Advisory Council meeting for key stakeholders to come together, discuss projects, and support ANEC's strategic planning.

Challenges and Looking Forward

TECs have experienced a year of growth in both funding and staff. Some TECs have struggled with managing the rapid growth of their workforce. TEC leadership has been engaging in thoughtful discussions about managing organizational growth, maintaining and expanding funding, retaining and housing staff, and ensuring team cohesiveness.

TECs incorporated sustainability planning activities in Year 2, which will continue into Year 3. TECs will be monitoring and implementing Strategic Plans, continuing to support professional development, working on strategies to increase student engagement, and exploring non-traditional funding opportunities.



Support from our Federal Partners

As the funder, roles of the CDC include establishing the overall TECPHI program vision and objectives, and overseeing program performance and business management matters.

TECPHI awardees have appreciated the consistent support and communication from the CDC. The monthly meetings have provided opportunities to address challenges and barriers as they arise and have enhanced the collaborative nature of the award. TECPHI awardees have also appreciated the ability to use Expanded Authority with unspent budgets to continue activities and work from one year to the next. Additionally, shorter turn-around times from budget revision submittals to approvals have been a valuable and efficient improvement.



AASTEC is enhancing partnership networks by connecting those they serve and building trusting relationships.

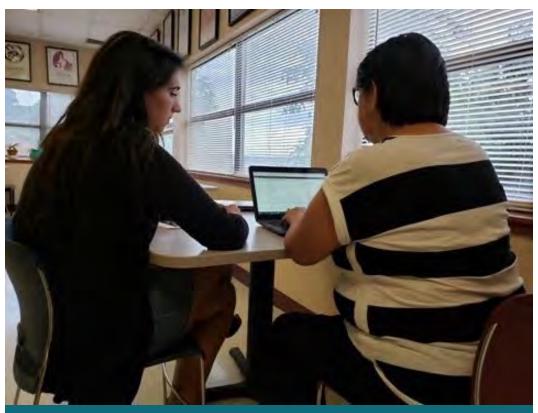
Challenges and Looking Forward

Some TECs were delayed in establishing contracts or spending funds due to the necessity of submitting budget revisions or contractor approvals. While the CDC budget approval process has greatly improved, TEC's expressed confusion related to the information CDC needed for budget requests and reporting.

Some TECs were challenged by the internal review and board processes. The CDC could support the TECs more fully by recognizing some reporting, hiring, and budgeting deadlines may not be met due to organizational policies and structures.

Specific requests for technical assistance from the CDC included:

- Providing review of various TEC created tools and resources;
- Identifying subject matter experts for TA requests;
- Organizing multi-sector workgroups;
- Identifying qualified candidates for staff vacancies;
- Growing public health capacity and training programs;
- Providing resources for surveillance systems;
- Participating in local training and conference events, and;
- Developing Tribal Public Health Infrastructure definitions and how to better support Tribes in these areas.



UIHI held a community day of action at the Seattle Indian Health Board in which community members were invited to come share a meal and get assistance with entering a missing Native loved one's information into NamUS, a federal missing and unidentified persons database.

NCC: Looking Back to Move Forward

The NCC supports the 12 TECs in building infrastructure, capacity, and planning for sustainability. In collaboration with the TECs and the CDC, the NCC provides overall coordination, logistics, communication, and TA to the Network of partners.

At the end of Year 2, the NCC conducted a process/implementation evaluation to understand the perspective of the TECs and the CDC regarding the launch and implementation of the NCC. The evaluation included 14 key informant interviews (KIIs) to gather feedback about support and services provided by the NCC and a survey to collect suggestions for improving the CoPs.

Key informants included TEC Directors, Program Managers, Program Evaluators, and CDC Project Officers. The CoP surveys were sent to any TEC staff who had attended at least one CoP meeting in the past two years.

KIIs appreciated the NCC's comprehensive modes of communication, the inclusion of qualitative approaches to evaluation and programmatic work, and the variety of trainings. Several mentioned the grants management and program sustainability trainings were especially valuable.



ANEC has focused on data presentation improvement and tests the presentations with different audiences to ensure data is useful to Alaska Native people.

Challenges and Looking Forward

While the NCC has been useful in improving communication and collaborations among the Network, there are several opportunities to offer better, and more comprehensive support including:

- Improving organization on TEC Connect and providing more clarity on its function;
- Providing more direction and communication on TEC Connect;
- Gathering more information on TEC-specific training needs;
- Providing support and guidance regarding CDC expectations (e.g., budgets, goals, evaluation);
- Facilitating more direct TEC to TEC opportunities, and;
- Supporting opportunities that are more informal to facilitate teambuilding and networking.

The CoP surveys asked for feedback on a variety of meeting features for each of the three topic specific groups (i.e. Data, Evaluation, and Program Management):

- 1. Attendance;
- 2. Frequency of meetings;
- 3. Topics of interest;
- 4. Utility of meetings;
- Challenges to attending/ contributing;
- 6. Interest in facilitating, and;
- 7. Ideas for topics.





USET TECPHI and Communications staff partnered to get feedback on communication preferences of Tribal citizens. The results have been groundbreaking to help tailor culturally-safe communication products.

The majority of the participants felt the meeting frequency was "just right" and were "moderately," "very," or "extremely" useful with one participant stating that "CoPs are a useful way to connect."

When asked about challenges or barriers impacting participants' CoP experience, meeting schedules were mentioned as the most frequent barrier to participation. Other challenges mentioned included:

- Audio challenges;
- Lack of audio/visual equipment;
- Lack of privacy;
- Relevance of topic to work;
- Lack expertise in topic, and;
- High variability in participant competencies and TEC activities.

Final feedback and ideas from participants to improve the CoP meeting experience included:

- Looking forward to improving skills;
- Participants need to prepare in advance;
- Share slides;
- Use for discussing reporting requirements, asking questions, and;
- Involve funders to discuss challenges, solutions, and opportunities to learn from Tribes.

The results have provided guidance to the NCC's planning approach, future work, and activities to better support the Network. Since this information has been gathered, the NCC has begun addressing needs shared by the TECs.

Conclusions

Year 2 continued to be a year of enormous growth for TECs. TECs experienced many achievements in planning and implementing activities to build Tribal public health capacity, infrastructure, and begin planning for the future and the sustainability of programs. TECs have accomplished significant gains across all program areas; most notably in workforce development and the capacity to respond to technical assistance requests.

Despite some challenges, all TECs made progress on strategies, activities, and meeting the goals of the TECPHI Program. The TECs, and the TECPHI Program, will continue to evolve and grow over the course of the funding period to support T/TO/UIOs to address chronic disease prevention and other health priorities. Progress, outcomes, photos and stories from awardees will be reported and shared on an annual basis to demonstrate the impact of the TECPHI program on improving overall health and wellness in Indian Country.



The OKTEC WATCH Public Health Specialist is handing the Cheyenne and Arapaho Head Start program curriculum, lesson plans, and materials.

