

# Navajo Nation Contact Tracing Journey: Sharing Lessons Learned

National Indian Health Board Tribal Public Health Summit  
April 29, 2021

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# Objectives

- Identify strategies used in the Navajo Nation pandemic response to effectively limit COVID spread.
- Describe key lessons learned from the Navajo Nation experience with contact tracing during the pandemic.



25 MILES

UTAH

COLORADO

ARIZONA

NAVAJO NATION

NEW MEXICO

HOPI RESERVATION

Window Rock

Flagstaff





# *Checkpoints, Curfews, Airlifts: Virus Rips Through Navajo Nation*

The coronavirus is tearing across the largest Native American reservation in the United States. Facing a spike in deaths, Navajo officials are scrambling to respond.

CORONAVIRUS

# Coronavirus batters the Navajo Nation, and it's about to get worse

The fear of what's ahead is based on precedent. During the swine flu epidemic of 2009, Native Americans died at four to five times the rate of other Americans.



# Navajo Nation faces devastating loss from Covid-19 pandemic

By Megan Marples, CNN

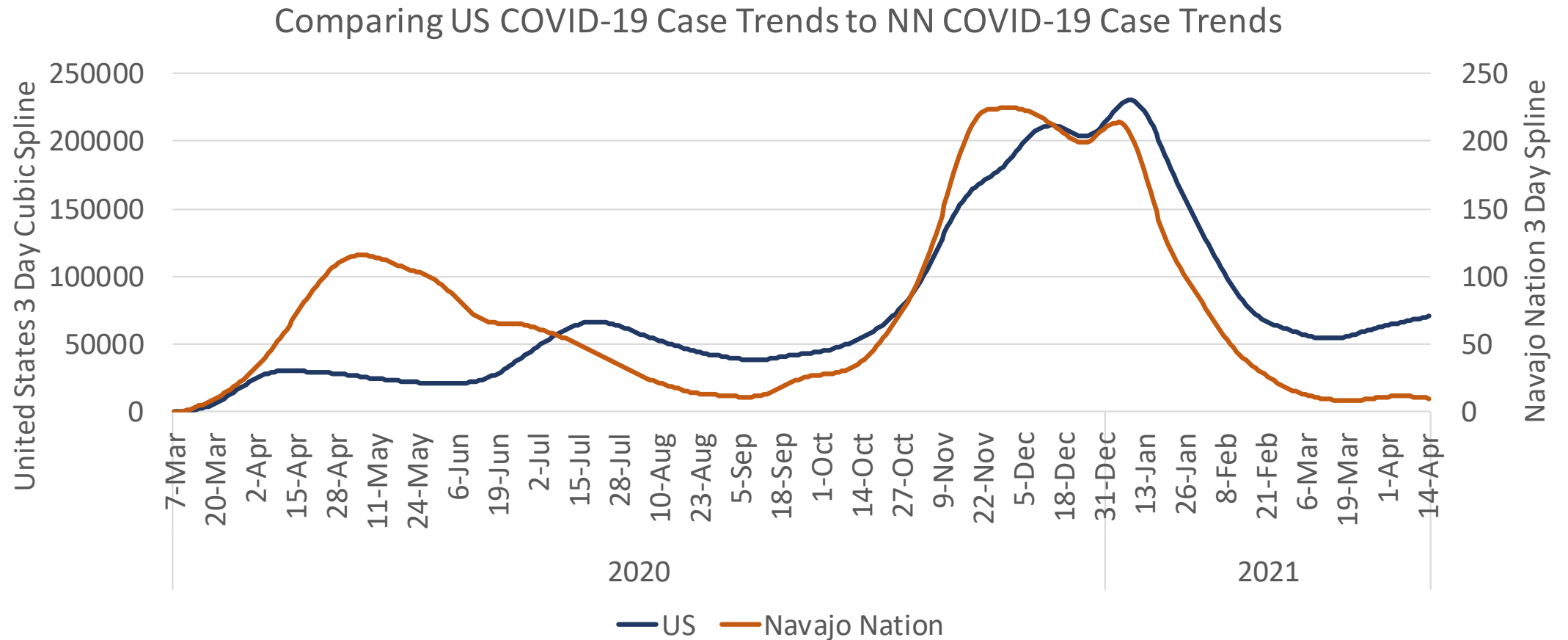
Updated 3:22 AM ET, Tue November 24, 2020



The Navajo Nation is in the middle of a three-week lockdown to prevent the spread of the coronavirus.

# Navajo Nation Cases compared to US

(Cases per 100,000 population (3 day cubic spline))



Courtesy of Navajo Nation Epidemiology Center

# Initial Challenges

- Needed to scale up rapidly and early – limited national guidance
- Different healthcare and public health organizations, federal agencies, states, counties
- Disparities in pre-existing public health capacity
- Unclear public health role in Incident Command System and Hospital Incident Command System
- Conditions for effective spread
  - Large extended families and crowded multigenerational homes
  - Lack of running water
  - Distance to testing and healthcare
  - Inability to telework

# Strengths and Assets

- Integrated public health and healthcare
  - 6 federal service units (Navajo and Albuquerque Areas)
  - 7 tribal health organizations
- Navajo Area epidemiology response
- Established tribal department of health and epidemiology center
- Pre-pandemic relationships and systems for outbreak investigation and epidemic response in place – just not at pandemic level capacity





# Strengths and Assets – Supportive Leaders

- Tribal leadership supportive of public health efforts
- Worked closely with public health on decisions and public communication
- Issued Public Health Emergency Orders to support community mitigation efforts
- FaceBook Town Halls



The Navajo Nation  
Office of the President and Vice President

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FOR IMMEDIATE RELEASE

April 6, 2021

**Navajo Nation confirms first case of the B.1.429 variant first identified in the state of California, health officials urge more residents to get vaccinated**

**WINDOW ROCK, Ariz.** – On Tuesday, Navajo Nation Department of Health Executive Director Dr.

**Navajo Nation enforces curfew as coronavirus cases near 150**



# Strengths and Assets – Key Non-Governmental Partners



And many more...

# Key Strategies Implemented

- Universal contact tracing platform - CommCare
- Widely accessible testing
- Flexible virtual contact tracing workforce
- Site support:
  - online training for contact tracing workforce
  - Standard operating procedures and guidance on implementation of national recommendations
  - Communities of Practice
- Supported isolation and quarantine
- Performance metrics including workforce target based on case load

# Contact Tracing Performance Metrics

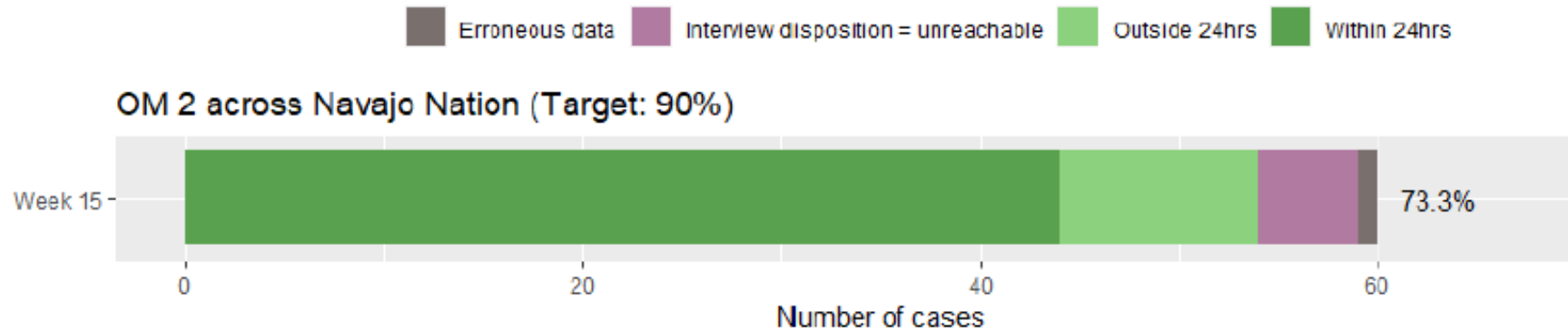
- Workforce Ratio –  $\geq 5$  contact tracers per average new daily case
- Case Investigation – 90% of case investigations started within 1 day
- Contact Notification – 90% of close contacts notified to quarantine within 1 day
- Test percent positivity -  $<5\%$  of tests positive
- Home support – referrals fulfilled within 3 days

# Public Health Workforce Ratio as Gating Metric

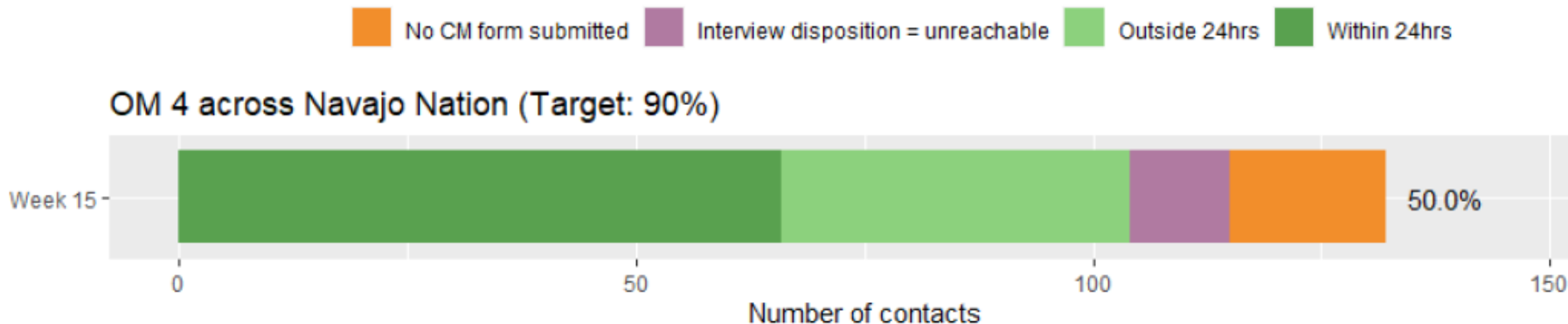
<b>Risk Level</b> Community Spread Disease Risk	<b>Level Purple:</b> Severe Outbreak Critical	<b>Level Red:</b> Extensive Very High	<b>Level Orange:</b> Substantial High	<b>Level Yellow:</b> Moderate Moderate	<b>Level Green:</b> Zero to Minimal Low
Cases					
Downward trajectory			Downward trajectory AND	Downward trajectory and no evidence of sustained rebound AND	Downward trajectory and no evidence of sustained rebound AND
Average new cases per 100000 population over 7 day period		≥100 cases per 100K	50-99 cases per 100K	10-49 cases per 100K	0-9 cases per 100K
Infection Rate (Rt)		>1.4	1.2-1.4	0.9-1.1	<0.9
Testing Capacity (Test Positivity over 7 days)		≥10%	8%-9.9%	5%-7.9%	<5%
Public Health Capacity		5 contact tracers/daily new case**	5 contact tracers/daily new case**	5 contact tracers/daily new case**	30 contact tracers/100,000 population**
Hospital Capacity Across Navajo Nation Facilities	Staffed Inpatient or ICU beds ≥90% and Functioning in Crises Care*	Staffed Inpatient or ICU beds 80%-89% and Functioning in Crises Care*	Staffed Inpatient and ICU beds <80%	Staffed Inpatient and ICU beds <75%	Staffed Inpatient and ICU beds <70%
Vaccine Data (% Vaccinated - supportive data)					
<b>Recommended Control Effort to Reduce Spread</b>	<b>Severe</b>	<b>Aggressive</b>	<b>Strong</b>	<b>Moderate</b>	<b>Baseline</b>

# Case and Contact Outcome Metrics

**Contacts: % of confirmed cases with investigation initiated within the same or next day of lab confirmation**



**Contacts: % of identified close contacts notified to quarantine within the same or next day of case investigation**



# Impact of Contact Tracing

Navajo IHS Service Unit participation in CDC Contact Tracing Assessment Project found:

- Contact tracing can have a ***notable impact*** on reducing *COVID-19 cases and hospitalizations*.
- Most impact achieved by ***reducing time to contact notification***.
- **COVID Tracer Advanced** – September 2020 and February 2021
  - Median days to case investigation – 1 day and 1 day
  - Median days to contact notification – 1 day and 1 day
  - Cases averted by contact tracing – 4,824 and 14,556
  - Hospitalizations averted by contact tracing – 119 and 358

<https://www.cdc.gov/coronavirus/2019-ncov/php/contact-tracing/COVIDTracerTools.html>

# Discussion question

How have you measured success with contact tracing?



# Sharing Navajo Experience:

- Workforce Monitoring
- Virtual Contact Tracing
- Community of Practice

National Indian Health Board

Tribal Public Health Summit

April 29, 2021

# Community Outreach & Patient Empowerment (COPE)

- We believe that the power to overturn long-standing, historical health inequalities lies inherently in Native communities themselves.
- Community-based non-profit organization
- Native-led board
- Partnership with Navajo Nation and NAIHS since 2009
- Based in Gallup, NM
- Programs across Navajo Nation



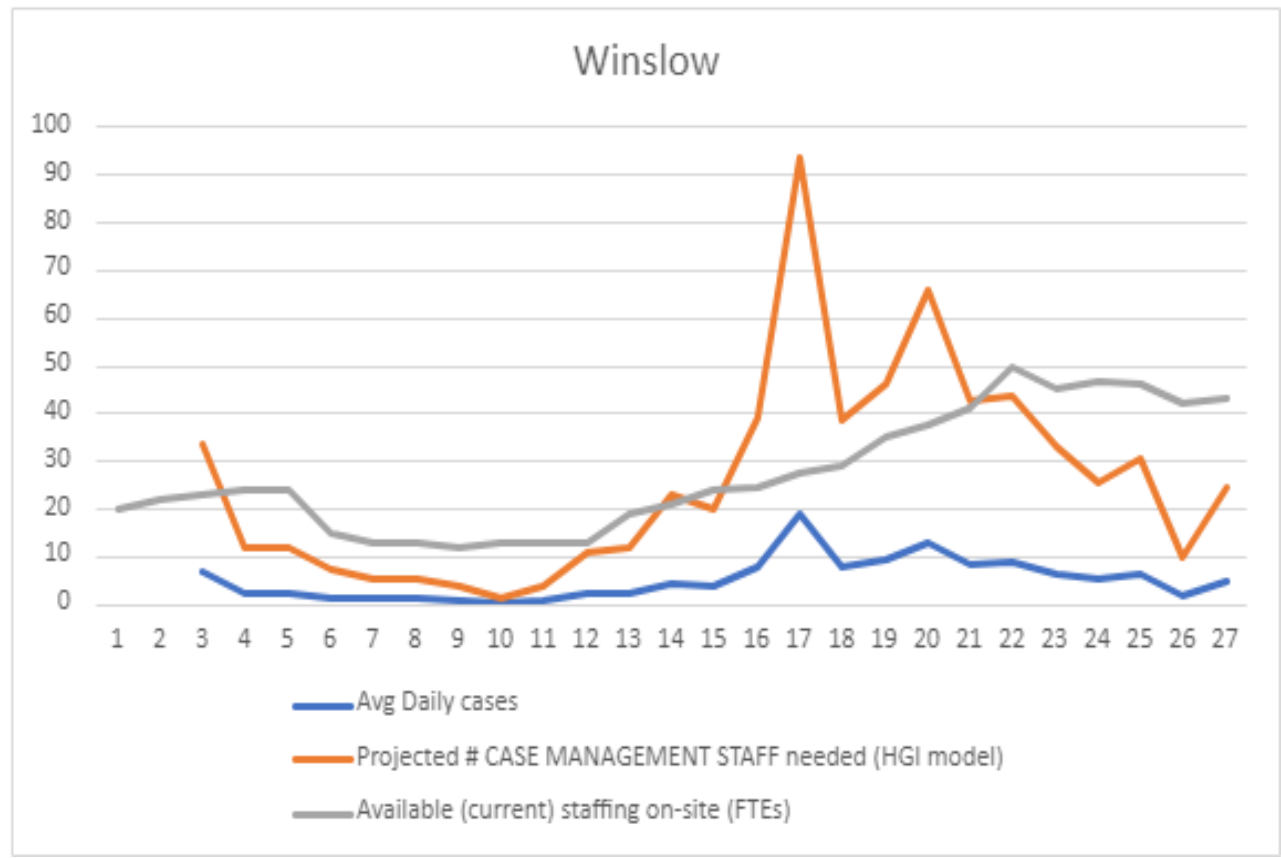
# Workforce

- Navajo Nation Gating Measure: Public health capacity – **Are there at least 5 Contact Tracers per Average Daily Case?**
- Weekly reporting of Contact Tracing workforce levels via shared Excel document

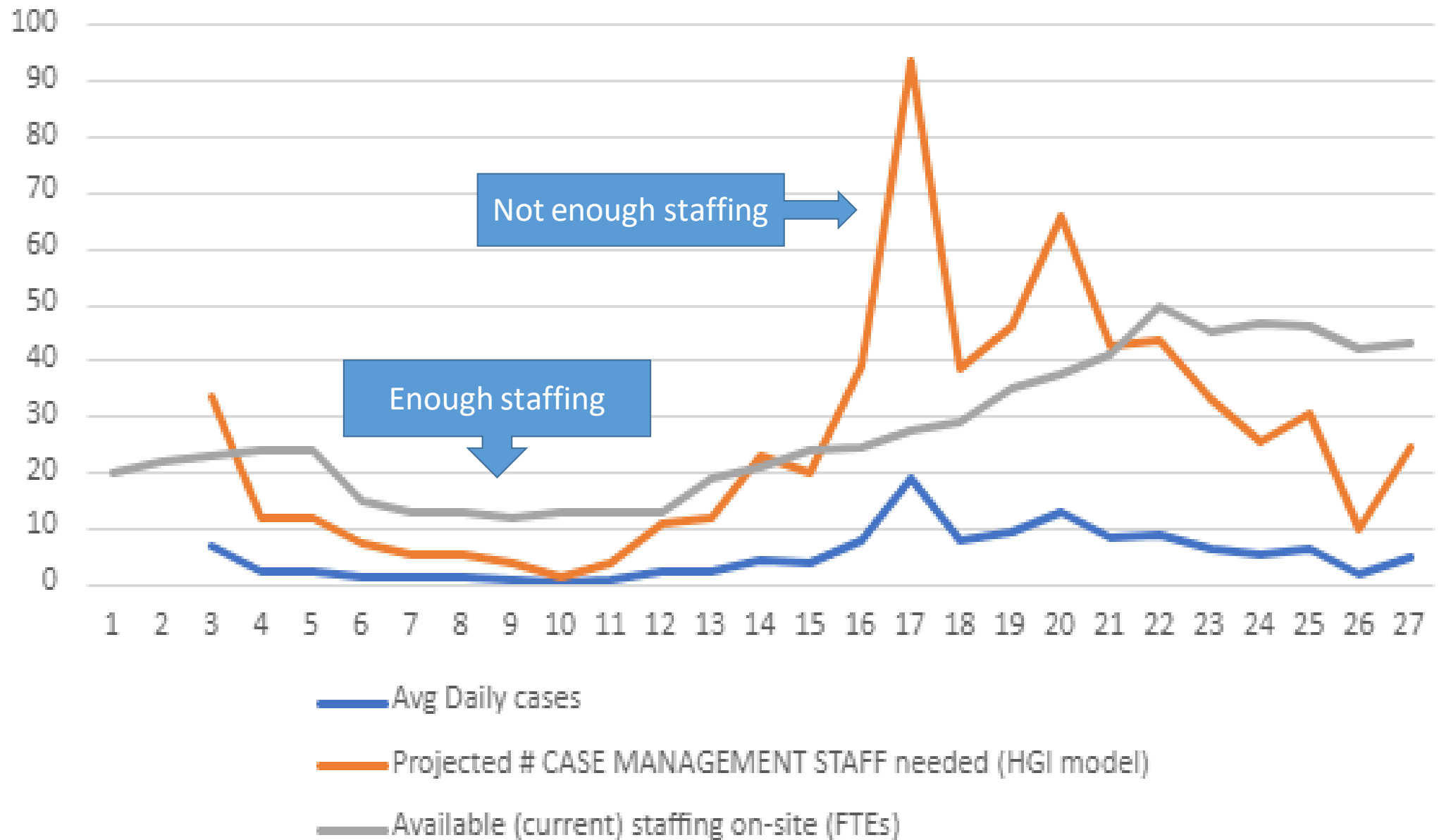
Sites report this

	# of PHNs x % time on COVID	# other staff x % time on COVID	# of CHRs x % time on COVID	Contact Tracing callers: # callers x % time on COVID
25-Nov	2	16	5	3.8

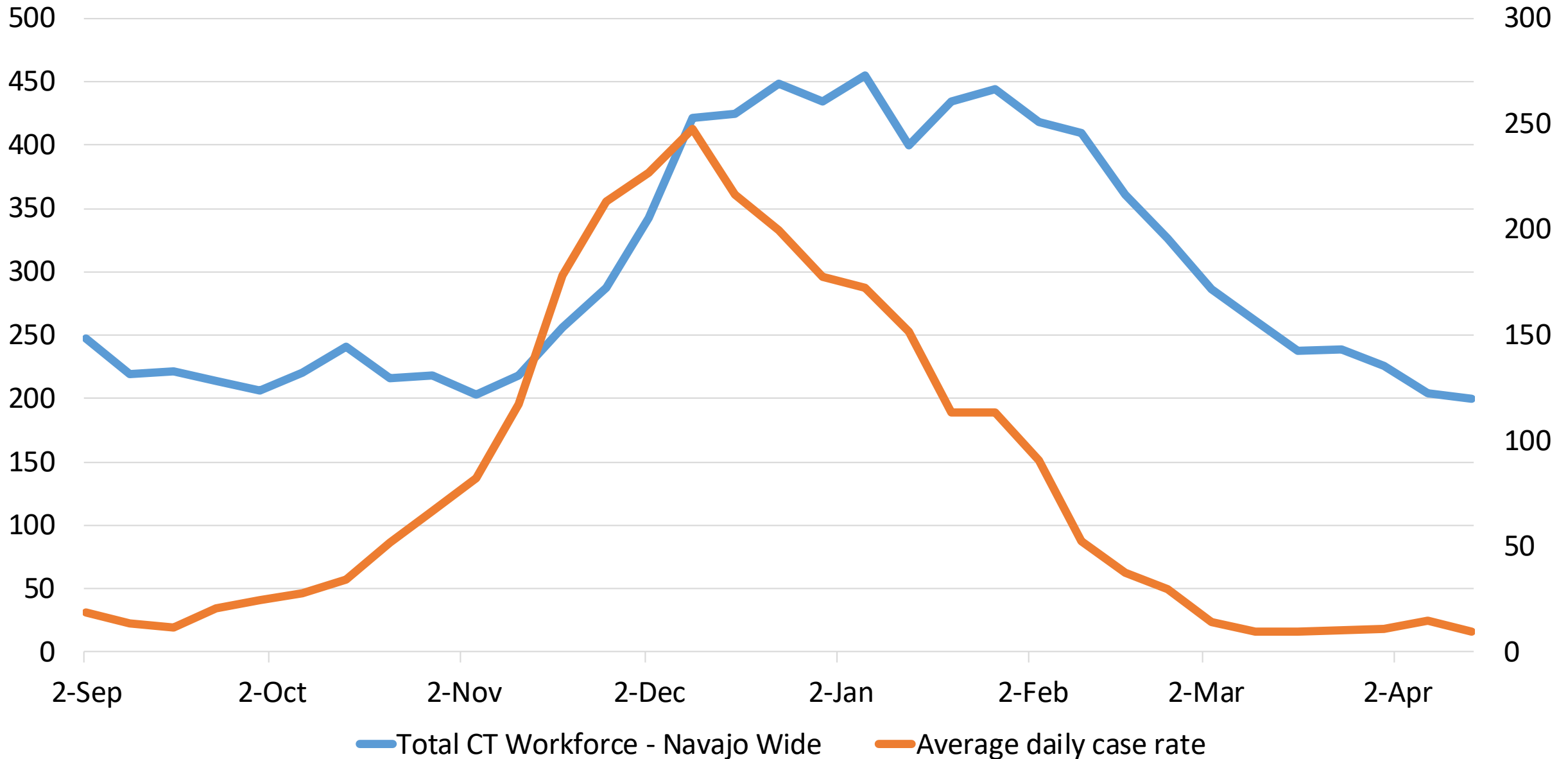
We monitor this



# Winslow

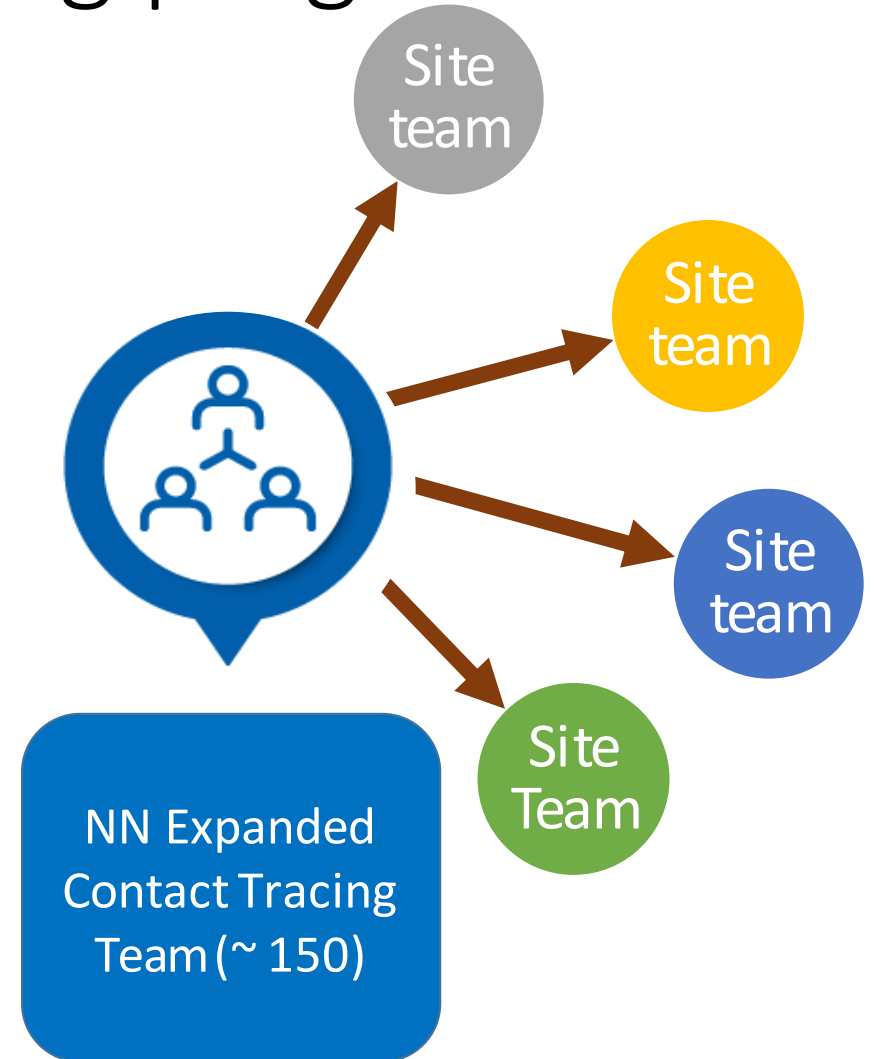


# Ratio of Contact Tracing Workforce to Average Daily Case Rate



# COPE Expanded Contact Tracing program

- Trained & certified CT workforce deployed virtually to understaffed sites
- Maximum VCT workforce: 150 CTs from 7 organizations
- Supporting 7 out of 13 Navajo sites
- Flexible deployment adapts to different site protocols
- Using CommCare (shared Contact Tracing platform)



# COPE Expanded Contact Tracing program

“I grew up on the Navajo Nation and **being able to help** in the middle of the pandemic has truly made me so grateful for this job and what I do on a daily basis”

– Contact Tracer



# Contact Tracing Community of Practice

- Weekly meetings since August 2020
- There is a Testing Community of Practice as well
- Joint meetings between Testing and Contact Tracing CoPs
- Brings together members of the 13 Tribal Health Organizations, leadership, and other support organizations
- Open agenda: The core purpose is to share successes, challenges, and questions, and to provide mutual support
- 40-60 attendees representing 7-8 Tribal Health Organizations



# Contact Tracing Community of Practice, ctd

Sharing practices – large and small:

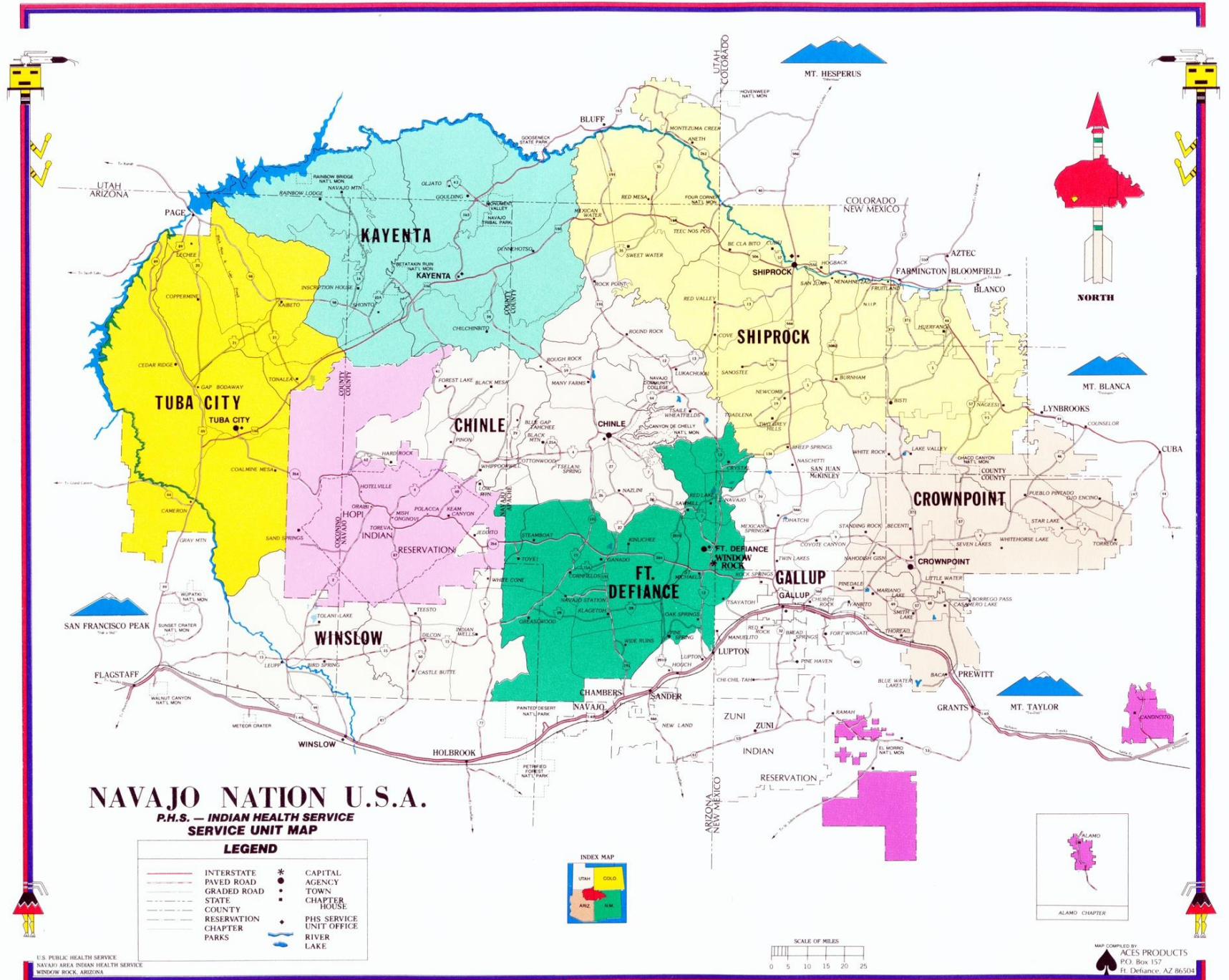
- How to run a Rapid Response Team
- “How do you say ‘long hauler’ in Navajo?”

## Discussion question

What methods did you use to share best practices with your partners in the response?

The image shows the exterior of a modern medical office building under a clear blue sky. The building features a mix of tan brickwork and large glass windows. A sign above the entrance reads "WIHCC Medical Office Building" with a bird logo. In the foreground, there is an outdoor seating area with metal benches and patio umbrellas. A tall antenna tower is visible in the background to the right.

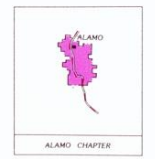
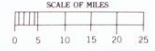
The Experience  
of  
Winslow Indian Health Care  
Center's  
Contact Tracing Team



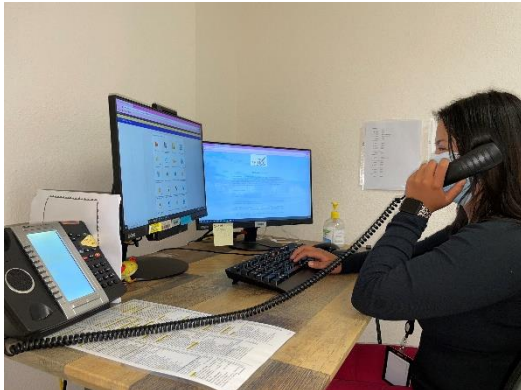
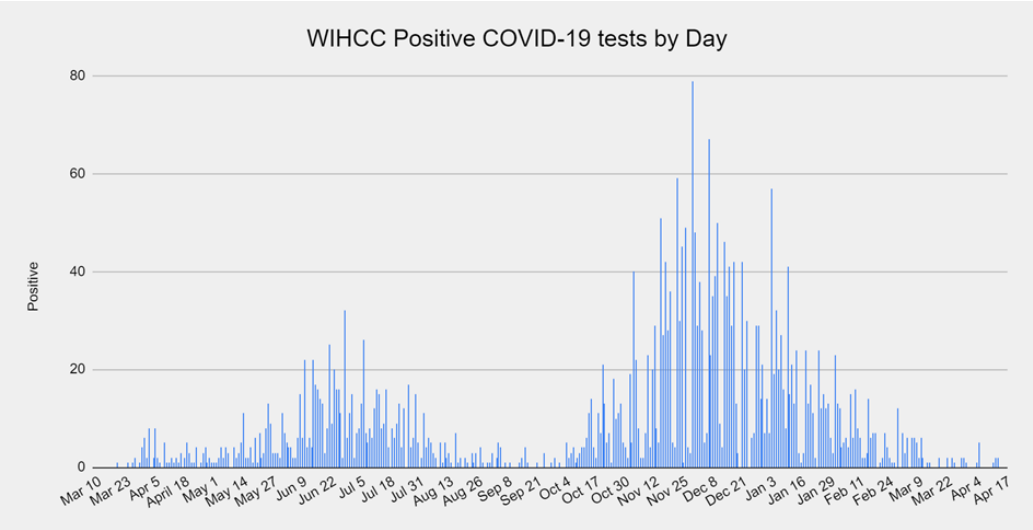
**NAVAJO NATION U.S.A.**  
**P.H.S. — INDIAN HEALTH SERVICE**  
**SERVICE UNIT MAP**

**LEGEND**

	INTERSTATE		CAPITAL
	PAVED ROAD		AGENCY
	GRADED ROAD		TOWN
	STATE		CHAPTER
	COUNTY		HOUSE
	RESERVATION		PHS SERVICE UNIT OFFICE
	CHAPTER		RIVER
	PARKS		LAKE



# The Experience of Contact Tracing - Team



# The Experience of Contact Tracers –Scaling Up

## Scaling Up

- Re-thinking the team structure-change from the norm
- Team expansion and streamlining
- Improving communication-information technology, meetings, motivational interviewing technique
- Transitioning to a computer based platform
- Moving from in person to telecommunication patient encounters
- Continual updates on CDC guidance

## Team Feedback

*Chaotic, Stressful (physically, emotionally, and mentally), uncertainty, not computer savvy, a lot of confusion, needed a lot of support, intimidated, re-assignment, overwhelming, a lot to take in, many trainings, daily huddles, worked long hours, constant changes, adapting quickly, emotional and heartbreaking, challenges surrounding reaching the right patient via a telephone call, moving forward with modern technology, motivational interviewing came into play, felt the stress of team leads, learned team work, trust, communication, ensure safety throughout work area, worked long hours, tested our passion for our jobs, faith was also tested, came together as a family, enforcements,...pulled into highly efficient COVID 19 case management team, flexibility, sadness, feeling of loss, listening to patients, fear, tearful listening to patients sharing their experience, honor life, each team member is valuable, educating patients and families, CHR access to PHN Share and EHR.*

# The Experience of Contact Tracer- Home Support

- “Very Important” ...”Paramount in the healing and recovery” ...”Provided relief” ...
- Isolation and Quarantine Needs Assessment:
  - ✓ Patients shared their home situation over the phone
  - ✓ Key challenge was phone connectivity issues
  - ✓ Many patients did not have a place to isolate effectively and did not have the resources needed to isolate at home
  - ✓ The supplies and education that was provided was very beneficial
  - ✓ Some patients came home from bordering towns to access home support resources
- Brought into perspective pre-existing social and economic challenges – multigenerational households, housing needs, access to potable water, fire wood, food, information technology, houses without plumbing and electricity, PPEs, etc.
- Brought partners together to identify, access, and provide the needed resources

## COVID-19 MITIGATION ACTIVITIES WITHIN THE WINSLOW SERVICE AREA

### MASS VACCINATION



### MASS TESTING



### COMMUNITY MASS EDUCATION



### FOOD DISTRIBUTION PROJECT



### FIRE WOOD PROJECT



### WATER PROJECT

**How often do you haul potable water per week?**

Frequency	Count
One	18
Two	27
Three	8
Four	8
Five	0
Six	0
Seven	8
Eight	0
Nine	0
Ten	0

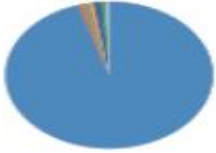
**On a scale of 1-10, (1 being the least and 10 being the most) What is your need of water?**

Scale	Count
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	40

**What season(s) do you experience having the most trouble accessing water?**

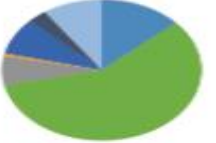
Season	Count
Spring	10
Summer	20
Fall	10
Winter	0

#### Where do you get your Medical care?



- WINSLOW
- NORTH Country
- Wichita Falls
- Physician's Office
- Night Medication
- Chronic Care
- Hospital Health Care

#### Where do you get COVID-19 information from?



- WINSLOW
- RTMCA
- Local Journal
- News papers
- Internet
- Word of Mouth
- Word of Mouth

### FACILITY PROJECT



### SCHOOL COLLABORATIONS



### HOUSING PROJECT





# The Experience of Contact Tracing- Leadership

## Leadership

- WIHCC Management Team, Board of Directors, Incident Command Team, and Team leads
- Navajo Nation Tribal leadership
- District 5 and 7 Grazing Districts leadership- Chapter officials and council delegates
- County Supervisors- Navajo and Coconino County

## Feedback on Contact tracing Support

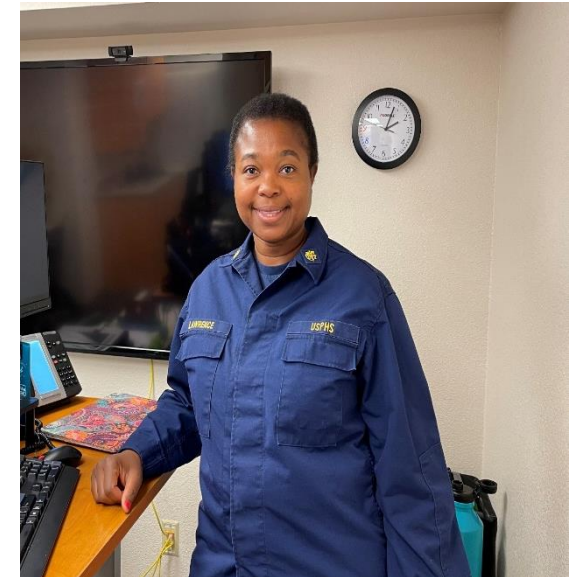
- “ Pandemic put those in leadership positions at all levels in unknown territory”
- “Communication was key to strategic planning and effective implementation”
- “ Leadership came together as ONE”
- “The Navajo Nation took the lead and WIHCC followed directives”
- Assisting in the front lines
- Being visible and participatory in procuring resources for our communities.

# The Experience of Contact Tracing- Leadership



# The Experience of Contact Tracing- Leadership

- Role- “challenging and rewarding”
- Transitioning – “much time developing training resources”
- Daily virtual huddles- “means of communication”..
- Home Support- “ invaluable assistance of the CHRIS”
- Success-”due to support of leadership, COPE leadership, and other service area leaderships”



# The Experience of Contact Tracing- Summary

## Team Oriented Approach

Supported by

- Change from a department approach to an organizational process and systems approach
- Information technology pivotal to an integrated approach to streamline information across teams, partners, and leadership
- Communication via telecommunication and virtual platforms reveals the significance of intentional communication
- A value for leadership that is supportive, exemplar, and active participation

## Discussion question

What are the highlights of your contact tracing team's experience during the pandemic?

# Lessons Learned

- Be prepared
- Directives only work if there is adequate support
- Nothing worthwhile is easy – especially when it comes to useful data
- Unified response team with effective communication is key

# Discussion question

What lessons did you learn from your pandemic experience?

# Next Steps

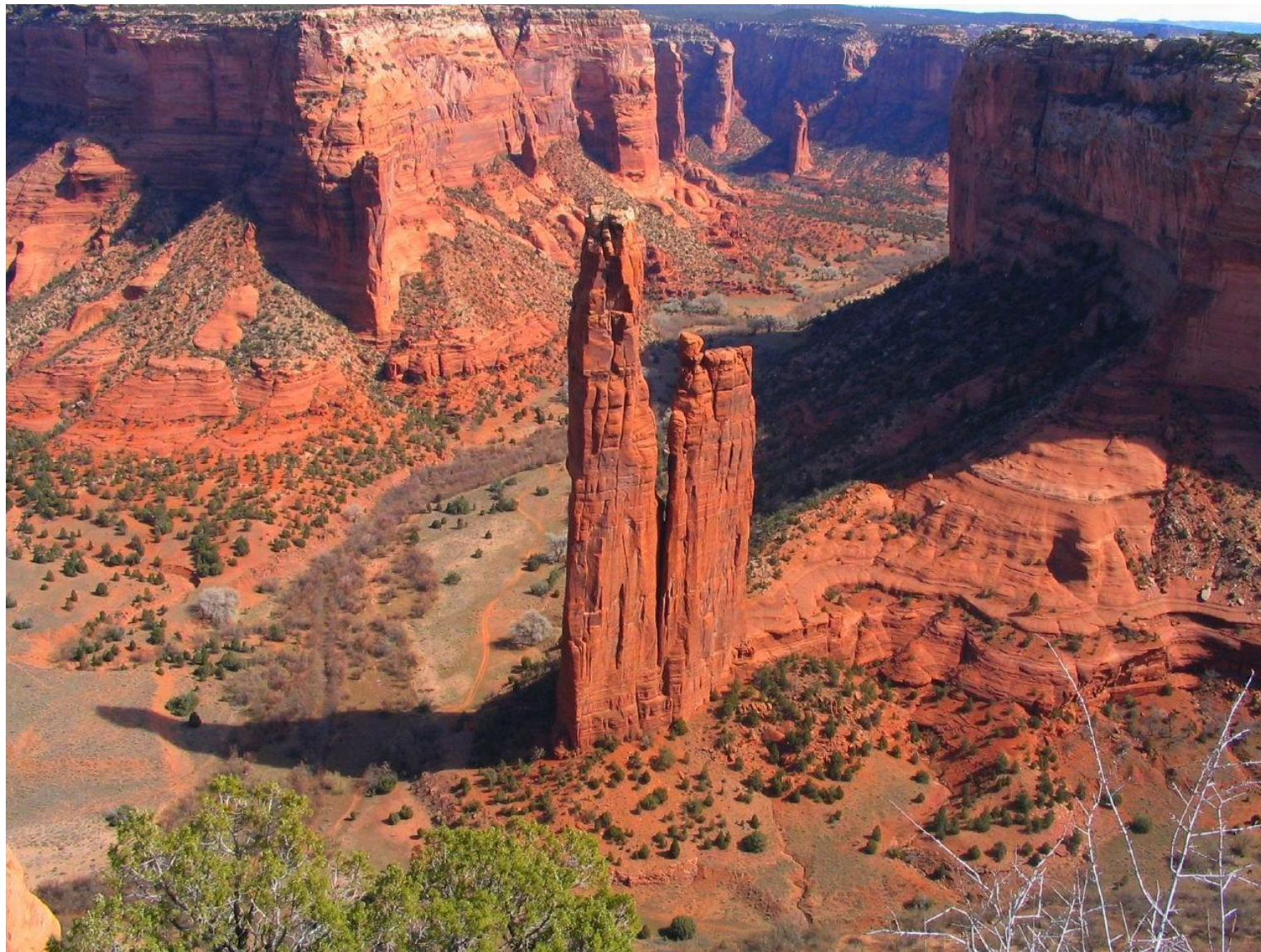
- Integrate core epidemic response capacity into existing programs
  - PHN and local epi response teams
  - COVID clinical consultant team
  - COVID CT Community of Practice (perhaps as Project ECHO)
- Maintain or establish population health programs at SU/THO level with capacity for epidemiology, surveillance, and analytics
- Maintain readiness through standard competencies in epidemic response and contact tracing across broad range of programs and organizations



# Discussion questions

What is your team's plan for transitioning to the "new normal"?

What will the "new normal" look like for you?



Ahé hee' - Thank you