



Emergency Medicine for Rural and Indigenous Communities Conference

September 15th - 17th, 2022

The Alaska Community Health Aide Program

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September 16, 2022



ALASKA NATIVE TRIBAL HEALTH CONSORTIUM

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FRONT LINE
INDIGENOUS PARTNERSHIP



HARVARD
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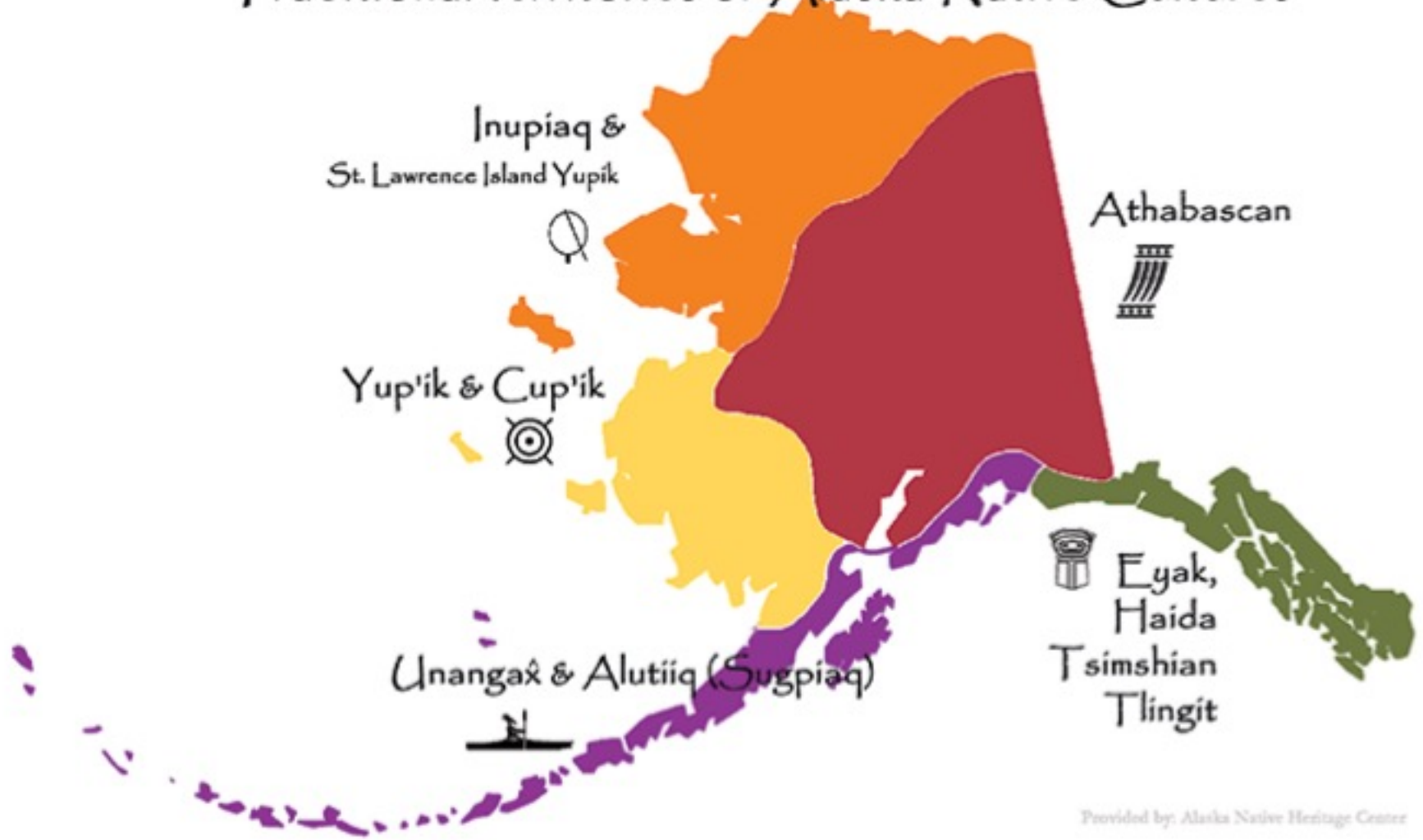


Mass General Brigham

The Alaska Community Health Aide Program



Traditional territories of Alaska Native Cultures



Demographics

- Approximately 20.3% of population AN/AI
 - Estimated 148,085 people
- Increase of about 5% from 2010-2020
- Over 1 out of 3 persons who use the Alaska Tribal Health System are under the age of 20.
- Largest population growth in 65-79 year age group (since 2015)
- Rural vs urban living is split 50/50
 - 42% increase in urban living since 1990

Alaska Native Health Status Report, December 2021-Third Edition, ANTHC Epidemiology Center
American Community Survey 2012-2016.



Mortality

Table 1a. Leading Causes of Death among Alaska Native People Compared to U.S. All Races, 2014-2018

Data Source: State of Alaska Department of Health and Social Services, Health Analytics and Vital Records

	Alaska Native People			U.S. All Races			Rate Ratio	95% CI
	Count	% Total	Rate ¹	Count	% Total	Rate ¹		
1 Cancer	979	18.1%	205.9	2,984,050	21.7%	155.3	1.3	1.25 - 1.58
2 Heart Disease	893	16.5%	207.3	3,186,288	23.2%	165.9	1.2	1.17 - 1.33
3 Unintentional Injury	698	12.9%	114.7	780,936	5.7%	45.7	2.5	2.33 - 2.70
4 Suicide	302	5.6%	40.4	227,501	1.7%	13.6	3.0	2.66 - 3.33
5 COPD	277	5.1%	69.1	776,425	5.7%	40.6	1.7	1.51 - 1.92

Alaska Native Epidemiology Center, Alaska Native Mortality Report, 4h Edition



Morbidity

- Leading causes of hospitalization (FY 2019)

Race	Rank	Clinical Classification Categories ¹
AI/AN	1	Liveborn (newborn infant)
	2	Septicemia (except in labor)
	3	Other complications of birth, puerperium affecting management of mother
	4	Alcohol-related disorders
	5	Mood disorders
	6	Hypertension complicating pregnancy, childbirth and the puerperium
	7	Pneumonia (except that caused by tuberculosis or sexually transmitted disease)
	8	Skin and subcutaneous tissue infections
	9	Schizophrenia and other psychotic disorders
	10	Suicide and intentional self-inflicted injury

- Injury hospitalization (2007-2016)
 - Falls
 - Suicide attempts
 - Assaults

Alaska Native Epidemiology Center, Alaska Native Injury Atlas, 3rd Edition
<https://health.alaska.gov/dph/VitalStats/Documents/PDFs/AkFactsFiguresFrontPageLCOH.pdf>







1968



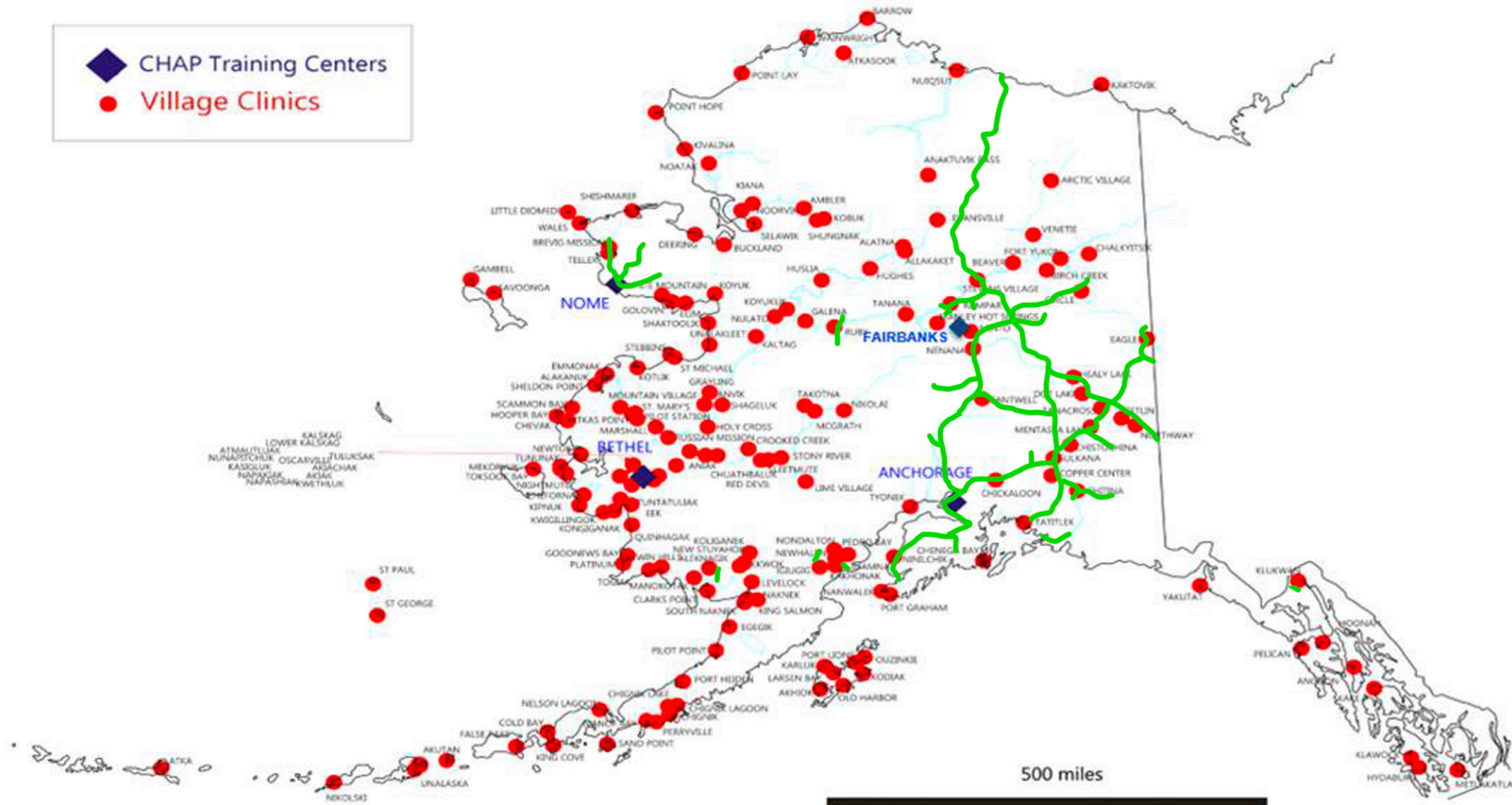
Problem

- Geography
- Small village populations
- Harsh and unpredictable weather
- High cost of travel
- Difficulty recruiting and retaining trained health care providers



Community Health Aide/Practitioner Village Clinics

- ◆ CHAP Training Centers
- Village Clinics



Alaska Native Tribal Health Consortium
rhall@anthc.org
 2014



Solution

- Train local people to provide medical care
 - “Eyes and ears” of the physician
 - Provide emergency, acute care, chronic and preventive care



CHAP History

- 1950's Chemotherapy Aides (Volunteers) provided Directly Observed Therapy for TB Patients
- 1960's Formal Training, Pilot Programs
- 1968 Recognized and Funded by Congress
185 positions, 157 villages
- 1976 Community Health Aide Manual (CHAM)
- 1998 Community Health Aide Program Certification Board (CHAPCB)
Formalized the process for maintaining training and practice standards and procedures
- 2004 Dental Health Aide Program
- 2009 Behavioral Health Aide Program





Community Health Aides/Practitioners (CHA/Ps)

- Estimated to conduct more than 50% of ambulatory patient encounters in the State of Alaska
- Provide emergency, acute, chronic, and preventive care
- Skills based training
- Make “Assessments”, do not medically diagnose
- Work under medical supervision of a licensed physician
 - Physician can delegate the day to day workload to an Advanced Practice Provider





Top 10 CHA visits

- Pharyngitis
- Otitis Media
- Hypertension
- Upper Respiratory Infection
- Bronchiolitis/Bronchitis/Cough
- Skin Infections
- Chronic Lung Disease
- Arthritis and Joint Pain
- Lacerations
- Fever



Innovative primary care delivery in rural Alaska: a review of patient encounters seen by community health aides. Int J Circumpolar Health 2012



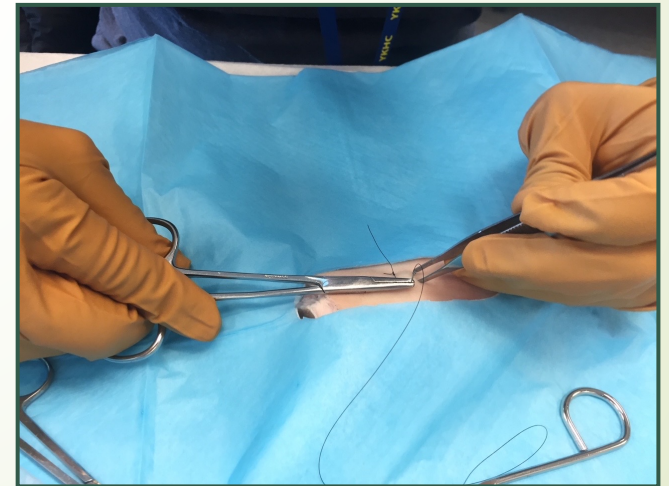
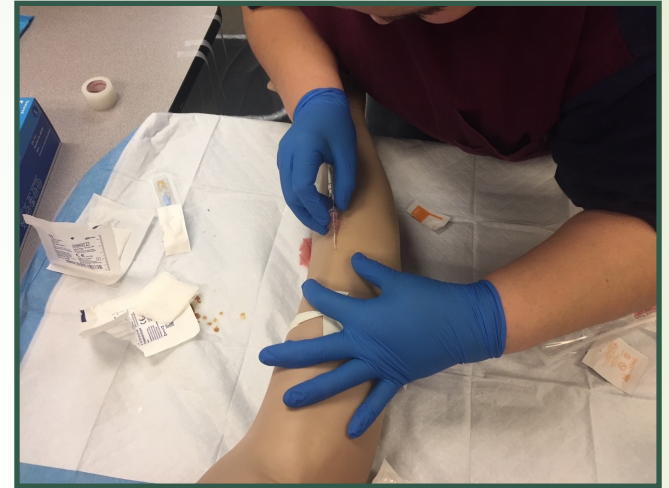
Clinical Skills

- Use of the Community Health Aide Manual (CHAM) for every encounter
- History taking
- Physical exam
- Performing labs
- Following plans
- Reporting
- Patient education
- Administering medicines
- Documenting in EMR



Clinical Skills

- Starting IVs
- Injections, including immunizations
- Emergency delivery
- Wound care
- POC testing
 - Rapid strep
 - UA
 - Urine pregnancy tests
 - Hemoglobin
 - Blood sugar
- TB skin tests



CHA Selection & Training



Pre requisites:

- Minimum 6th grade math and reading level
- Completion of Emergency Trauma Technician (ETT) or Emergency Medical Technician (EMT) certification
- Pre-session: Intro to CHAM and CHA Role



CHA Training and Progression

- Session I: 4 weeks → Learn about Ear, Eye, Respiratory, Digestive, and Skin, suturing, injections, IV therapy, labs, wound care
 - Complete 20 patient encounters in home village to complete training
 - Can seek certification as CHA-I
- Session II: 4 weeks → Learn about remaining body systems, Mental Health, suturing, injections, IV therapy, labs, wound care
 - Complete 200 hours and 60 patient encounters in home village to complete training
 - Can seek certification as CHA-II
- Session III: 3 weeks → focus in maternal and child health, emergency delivery, prenatal care, IV therapy, wound care
 - Complete 200 hours and 60 patient encounters in home village to complete training
 - Can seek certification as CHA-III
- Session IV: 4 weeks → review of body systems, chronic care, preventative care, injury prevention, IV therapy, wound care
 - Complete 200 hours and 60 patient encounters in home village to complete training
 - Can seek certification as CHA-IV
- Preceptorship: 30 hours and 15 patient encounters, skills are evaluated,
 - Can seek certification as a Community Health Practitioner, CHP
- Federal Certification at each level



University Credit



Alaska Pacific University

- **Certificate in Community Health-34 credits**
 - CHP F131 Community Health Aide I (8)
 - CHP F132 Community Health Aide II (8)
 - CHP F133 Community Health Aide III (8)
 - CHP F134 Community Health Aide IV (8)
 - CHP F135 Community Health Aide Preceptorship (2)
- **Associate of Applied Science-60 credits**
 - All of the above (34)
 - Additional group requirements (26)



Training Centers

ANTHC
Anchorage



Norton Sound Health
Corporation, Nome



Tanana Chiefs
Conference, Fairbanks



Yukon-Kuskokwim Health
Corporation, Bethel



Distance Learning

- Session I/II Blended
 - 24 weeks
 - 18 weeks in village via Distance Learning Network
 - 6 weeks at Training Center
- Session IV Blended
 - 18 weeks
 - 16 weeks in village via Distance Learning Network
 - 2 weeks at Training Center



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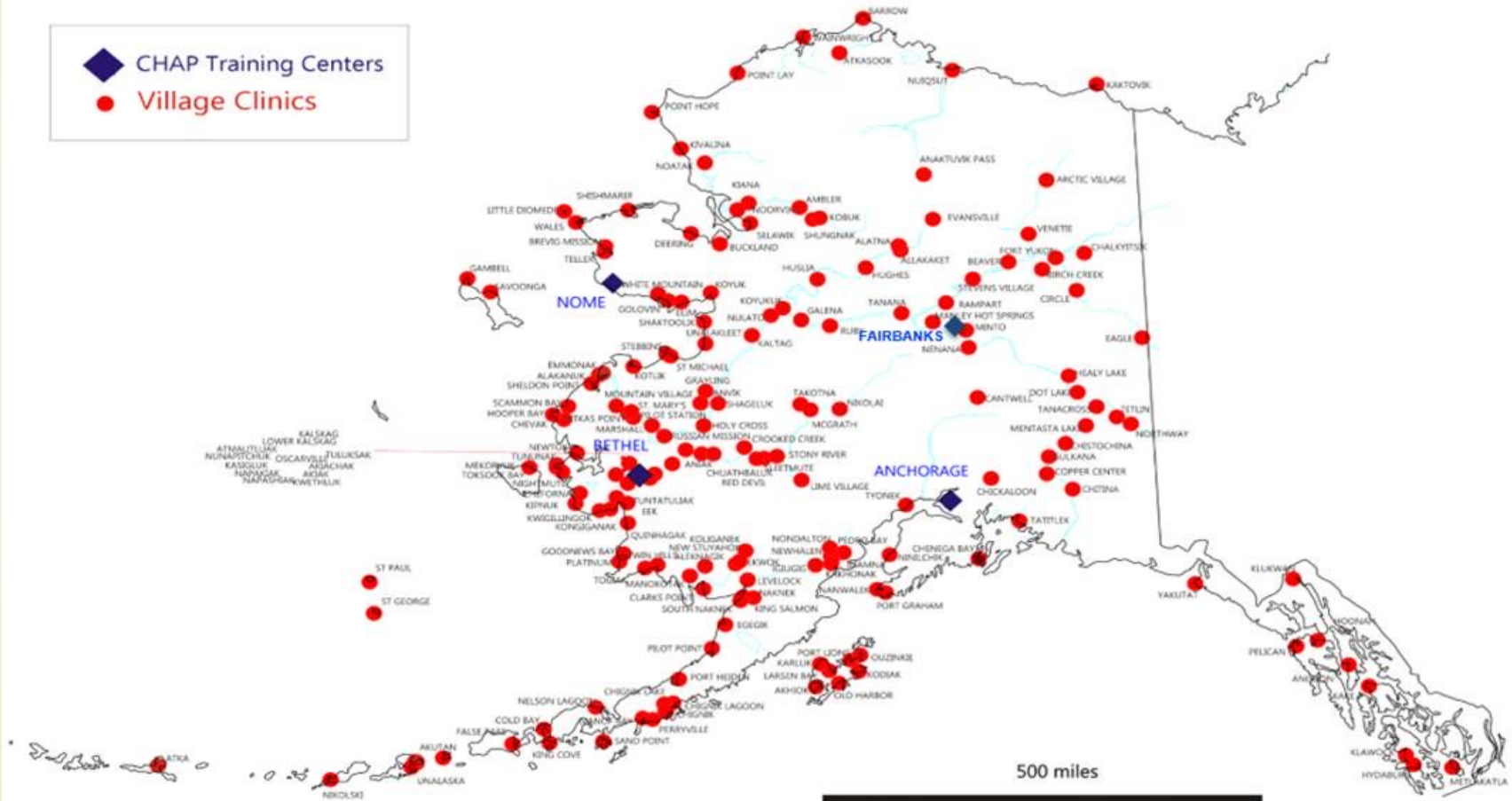


Mass General Brigham



Community Health Aide/Practitioner Village Clinics

- ◆ CHAP Training Centers
- Village Clinics



Alaska Native Tribal Health Consortium
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CHA Programs

- 25 programs statewide, run by the Tribal Health Organization (THO)
- 148 rural clinics
- 352 Certified CHA/P's statewide

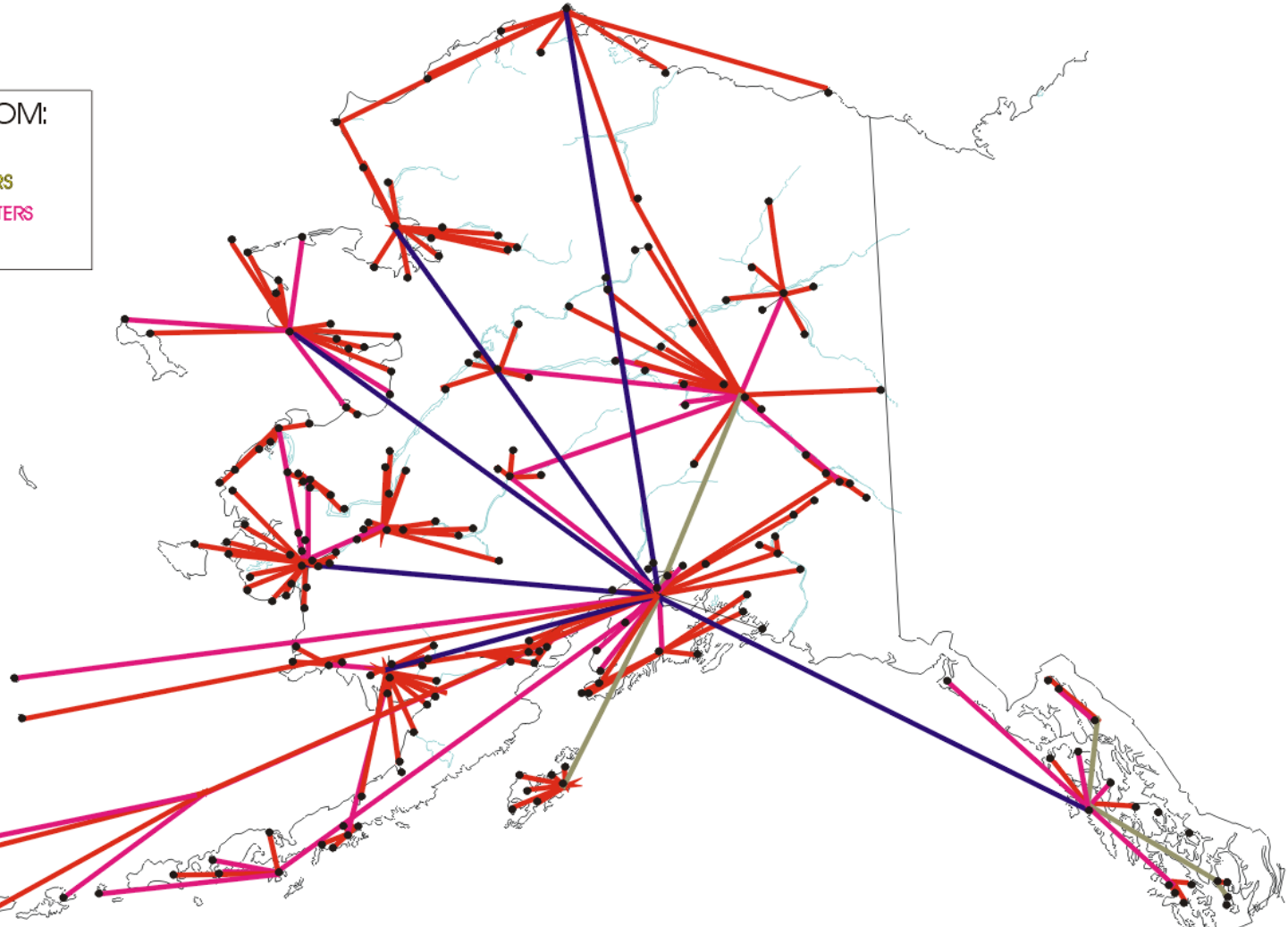


THE ALASKA NATIVE HEALTH CARE SYSTEM

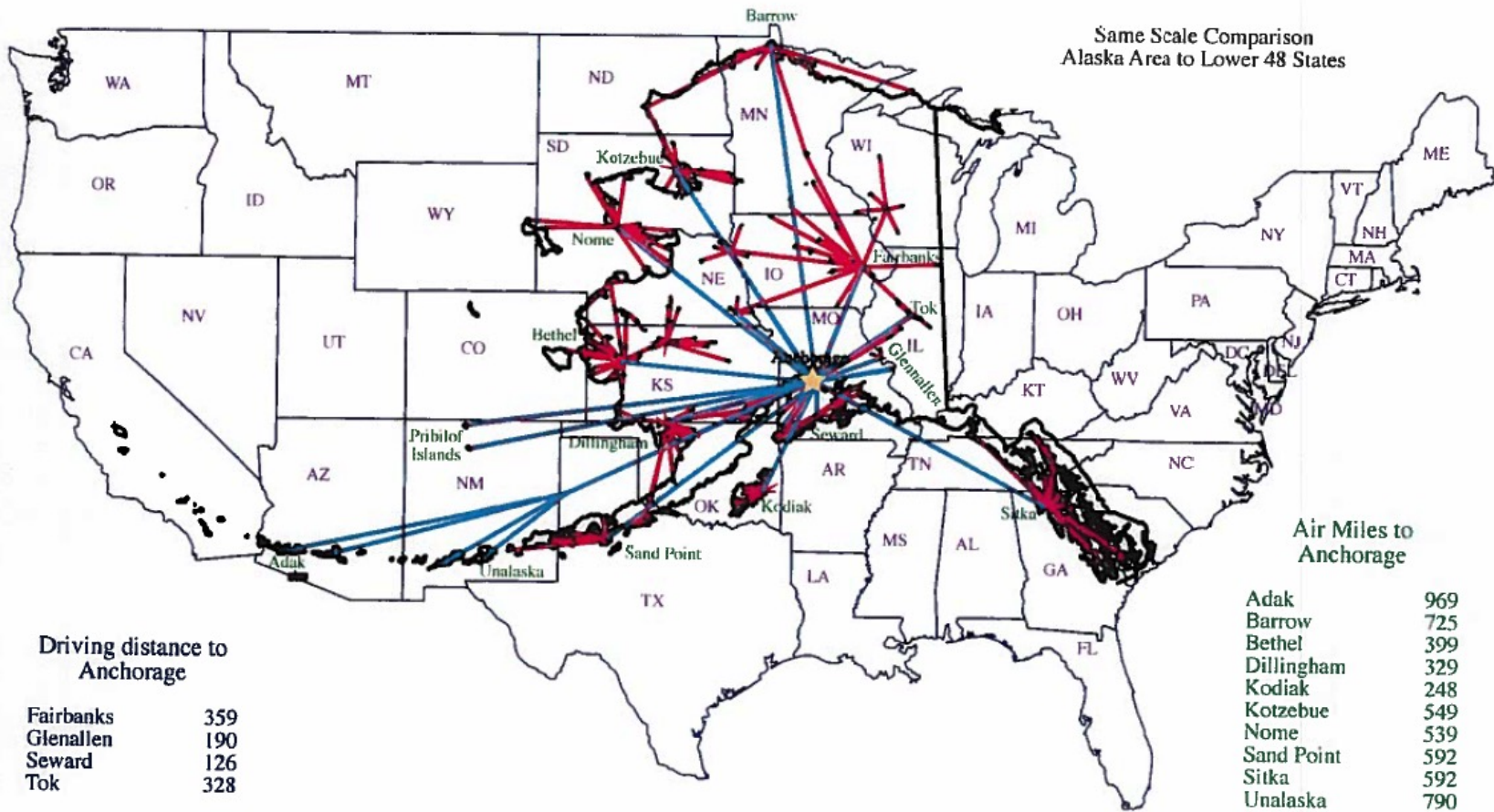
Typical Referral Patterns

REFERRALS FROM:

-  HOSPITALS
-  MD HEALTH CENTERS
-  PA/NP HEALTH CENTERS
-  CHA CLINICS



The Alaska Native Health Care System Referral Pattern





How CHA/P's Practice

- Employed by a THO
- Supervised by a Licensed Physician (or designee)
- Use the Community Health Aide Manual (CHAM)

For more information: www.akchap.org



CHAM





Alaska Community Health Aide/Practitioner Manual

- A guide to the CHA/P for every patient encounter
- Identifies specific section to guide history, exam and determine Assessment
- Follow a specific Plan, Report
- Online: eCHAM Website
- Offline: iCHAM (iPad app)
- Personalization features (bookmarks, comments, highlights)
- Regional Notes (YKHC, Norton Sound)



New Problem or Complaint

ALERT

For ALL patients who come to clinic:

- Wear a procedure (surgical) mask and eye protection (or follow your regional guidelines for PPE).
- Put a mask on EVERYONE over age 2 who comes to the clinic.

Chief Complaint (CC, problem). Ask patient/parent.

▶ Why have you come to the clinic today?

- For **Emergency**: Go to [Emergency](#). During COVID-19 pandemic wear PPE for [Droplet and Contact Precautions](#).
- For **Sick Child Younger than 8 Years**: Go to [Child Younger than 8 Years Who May Be Very Sick](#). Wear a mask and eye protection (or follow regional guidelines for PPE).

Infectious Disease Screening

▶ Do infectious disease screening on ALL patients and visitors over the phone, if possible or in person:

1. Do you have:

- Any shortness of breath? [If yes:]





Emergency

Begin Here for ALL Emergency Patients

Related Topics

[Emergency Childbirth](#)

[Planning for Emergencies](#)

[Emergency Equipment and Supplies](#)

[Emergency Skills \(Details\)](#)

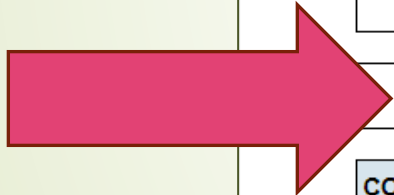
Infection Control Precautions / BSI (body substance isolation)

- **Wear gloves, eye protection and a mask with every patient (follow regional guidelines for PPE).**
- **Also wear a gown when:**
 - **As needed to protect from body substances.**
 - **Patient with positive COVID-19 screening or test.**
 - **Patient cannot be screened for COVID-19.**

- Take a deep breath. Do the best you can. Follow the steps.

COVID-19 Pandemic

- CPR and/or Assisted Ventilation aerosolizes the virus and will contaminate PPE and reusable life saving equipment that is potentially in short supply. [Airborne Precautions](#) required.
- If albuterol is needed, use metered-dose inhaler (MDI) with spacer or mask; avoid use of nebulizer in clinic, if possible. If nebulizer must be used, [Airborne Precautions](#) required.
- Remember, ALL patients must be screened for COVID-19. Follow Regional Guidelines. Take care of Emergency first, then go to [Infectious Disease Screening](#).



Scene Size-Up

1. Is scene SAFE?

- If NOT safe, do NOT enter.
- Call law enforcement, Behavioral Health, other CHA/Ps, as needed.

2. What Happened?

- **If patient was injured (trauma): How was patient injured** (Mechanism of Injury, MOI)?
 - Listen *briefly* to patient or bystanders.
 - Consider serious injuries if trauma caused by car, snowmachine, ATV, fall, crush, gunshot or stab wound, smoke, fire, or patient is unresponsive, or has decreased LOC.
 - Consider medical condition as possible cause of crash or fall.
- **If patient was NOT injured:** In what way is patient sick (Nature of Illness, NOI)?

3. How many helpers do you need?

- Call for help from other CHA/Ps, ETTs, EMTs, or bystanders.
- If needed call for law enforcement.
- If more than one patient, assign a helper to each patient, if possible.
 - Manage patients with life threatening injuries first.
- Consider having a helper call doctor for advice and to alert the system.

4. Evaluate the patient.

- For **Trauma** (injury): Go to [Primary Survey Trauma Summary](#).
- For **Eye Injury or Trauma**: Go To: [Eye Injuries](#)
- For **Medical Emergency** (non-trauma):
 - If **Child younger than 8 years**: Go to [Primary Survey Young Child Medical Summary](#).
 - If **Adult or Child 8 Years or Older**: Go to [Primary Survey Medical Summary](#).
 - For **Behavioral Health Emergency**: Go to [Behavioral Health Emergency: Violent, Agitated or Suicidal Patient](#).



Assessments and Plans for Trauma

Emergency 1: Shock

Confused, anxious; weak, fast pulse; low BP; Skin pale, mottled, cool, sweaty, capillary refill 3 seconds or more; positive orthostatic vital signs (pulse goes up 20 beats or BP falls 10 points); looks very sick.

1. **Report NOW** to your referral doctor.
 - While trying to reach doctor, continue with this plan.
2. Do **Primary Survey of Trauma Patient**, if not already done.
 - **Stop obvious life threatening bleeding NOW**, if not already done.
 - [Direct Pressure](#) (will stop almost all bleeding)
 - [Tourniquet](#)
 - [Pack Wound](#)
3. **Special Care**, if not already done:
 - **Position** patient.
 - If **possible neck or back injury**: Lie flat on back.
 - If **possible** severe head injury, or shortness of breath: Sit up slightly (raise head of bed 30°).
 - If **more than 20 weeks pregnant** (uterus above level of belly button):
 - If possible **neck or back injury**, lie flat on back:
 - ‡ Have someone push uterus to left side and hold until doctor tells you to do something else. ([Manual Uterine Displacement](#)).
 - If no neck or back injury, **lie on left side**.
 - ‡ Or tilt toward left (put something like a pillow under right hip).
 - **Keep patient warm**.
 - Remove wet clothes.
 - Cover with blankets.
 - **Give Oxygen** if SpO₂ is unknown or less than 94%.
 - Goal: SpO₂ 94 to 98%.
 - Start at 2 to 6L/nasal cannula.
 - 10 to 15L/non-rebreather mask, if needed to keep SpO₂ 94 to 98%.



Begin History of Present Illness (HPI)

1. [Describe the problem:]

- **When did the problem start?**
- **Where exactly is the problem?**
- **What does it feel like? [If pain:]**
 - Is it dull, sharp, throbbing, burning, other?
 - Does it stay in one place or move around?
 - Rate level of pain 0 to 10 [Pain Scale](#).
- **Is the problem there all the time, or does it come and go? [If it comes and goes:]**
 - How often does it come?
 - How long does it last?
- **Does anything make it better?**
(Such as: Time of day, body position, eating, moving a body part, exercising)
- **Does anything make it worse?**
- **Has the problem changed in any way since it began? [If yes:] In what way?**

2. Have you done anything to treat it?

- [If medicine:] Name? Strength (mg)? Amount? How often? Last dose? Did it help?
- [If other treatment:] What? How often? Did it help?

3. Have you had this problem before? [If yes:]



Respiratory Illness

COVID-19 Pandemic

- A person may be infected with COVID-19 but have a negative COVID-19 test. Review Information for CHA/P: [COVID-19 Testing](#), if needed.
- Give oxygen by nasal cannula if possible; avoid use of blow by or non-rebreather mask to deliver oxygen. Place patient's own face mask or procedure mask over nasal cannula.
- If albuterol is needed, use metered-dose inhaler (MDI) with spacer or mask; avoid use of nebulizer in clinic, if possible. If nebulizer MUST be used, [Airborne Precautions](#) required.

Do NOT begin here if:

- ▶ Chief complaint is chest pain. Go to [Chest Pain](#).
- ▶ Child younger than 8 years who is breathing very fast, working very hard to breathe, or with Chief complaint of shortness of breath with NO other illness,
 - Go to [Evaluation of Child Younger than 8 years with Medical Emergency](#).
- ▶ If Adult with Chief complaint of shortness of breath with NO other illness,
 - If *severe*, Go to [Severe Shortness of Breath](#).
 - If *mild*, Go to [Mild Shortness of Breath](#).

Begin Here for a patient with a respiratory illness, such as:

- ▶ Stuffy or runny nose.
- ▶ New loss of taste or smell.
- ▶ Sinus problem.
- ▶ Sore throat.
- ▶ Hoarse voice.
- ▶ Cough, including coughing up blood.
- ▶ Asthma attack with mild shortness of breath.



ASSESSMENT

1. Use Chart B: **Respiratory Illness** to make an Assessment; then follow its Plan.

- Also include any [High Risk Health Conditions](#).

Respiratory Chart B: Respiratory Illness

Note: "May"= May or May Not

HISTORY	EXAM	ASSESSMENT and PLAN
<p>May have headache. Stuffy or runny nose, sneezing. Ears may feel plugged. May have hoarse voice. Throat: Sore, dry, scratchy, may hurt more with coughing. Mild cough with little or no sputum. Cough may be worse when lying down. Others in family may be sick with same thing.</p>	<p><i>General Appearance:</i> Does <i>not</i> look very sick. <i>Vital Signs:</i> Low fever or no fever. <i>Sinus:</i> May have mild tenderness. <i>Nose:</i> Clear, white or yellow drainage. <i>Throat:</i> May have tiny clear bumps, mucus in back of throat. <i>Chest:</i> No retractions, <i>no</i> high-pitched sound when breathing in (stridor). <i>Breath sounds:</i> Normal, or may have some rhonchi (snoring sounds) that change with cough.</p>	<p>Common Cold (Upper Respiratory Infection, URI, head cold. Infection caused by a virus.) Plan: Respiratory 2.</p>
<p>May experience the same symptoms at the same time every year. May have allergies to plants, dust, pollen, animals. May have headache. Watery, itchy eyes. Stuffy or runny nose, sneezing. Sinuses feel full. Ears may feel plugged. Throat irritated, itchy. Mild cough with little or no</p>	<p><i>General Appearance:</i> Does <i>not</i> look sick. <i>Vital Signs:</i> Low fever or no fever. <i>Eyes:</i> May be itchy or watery. <i>Sinus:</i> May be a little tender. <i>Nose:</i> Clear or yellow drainage. Swollen mucous membranes. <i>Throat:</i> May have tiny clear bumps, mucus. <i>Breath sounds:</i> Normal.</p>	<p>Allergic Rhinitis (Hay fever; Inflammation of the lining of the nose; caused by allergies.) Plan: Respiratory 3.</p>



Respiratory 7: **Strep Throat** (Strep pharyngitis, Strep tonsillitis) [Standing Order possible]

Throat infection caused by Group A Streptococcus bacteria.

1. Report

- **Report** NOW to your referral doctor if patient:
 - Has any signs of respiratory distress:
 - Looks very sick.
 - Fast pulse and respirations.
 - Very short of breath.
 - Retractions or nasal flaring.
 - Grunting or high-pitched sound (stridor) when breathing.
 - SpO₂ less than 94%.
 - Is drooling or unable to swallow liquids.
 - Is unable to open mouth very much.
 - Is not able to turn neck side to side.
- ALWAYS report, even if you have a current Standing Order for this problem, if patient:
 - Is a child younger than 3 years.
 - Has a rash.
 - Has positive Rapid Strep Test AND symptoms like viral respiratory infection (cough, sneezing, runny nose).
 - Was treated for strep within the past 4 weeks.
 - Had three positive strep tests within one year.
 - Has any [High Risk Health Condition](#).
- *If you do Not have a Standing Order for this problem, report all patients.*
- While waiting to report, review this plan; begin Patient Education.

2. Patient Education

- Explain information in next Patient Ed box, [Strep Throat](#).
- Also explain information from Patient Ed box [Respiratory Illness](#).
- [If patient uses tobacco:] Also explain information from [Stopping Tobacco](#).



3. **Medicine**, if ordered by doctor or Standing Order.

- *For strep infection in patient 3 years and older:*

- [Penicillin V](#), by mouth.

Note: Liquid Penicillin tastes bad; use Amoxicillin for younger children to make it easier to take.

or

- [Amoxicillin \(Amoxil®\)](#), by mouth.

- [Penicillin G Benzathine \(Bicillin LA®\)](#), IM shot.

or, if allergic to Penicillin:

- Follow regional guidelines for antibiotic choice.

- [Azithromycin \(Zithromax®\)](#), by mouth.

or

- [Cephalexin \(Keflex®\)](#), by mouth.

- [If needed for headache, pain, or fever:]

- [Ibuprofen \(Motrin®\)](#), by mouth.

or

- [Acetaminophen \(Tylenol®\)](#), by mouth or [Rectal Suppository](#).



4. Additional Care

- *If patient has had three positive strep tests within one year, and still has tonsils, ask doctor about referral for possible tonsillectomy.*

5. Recheck

- In 3 days if not better, sooner if worse.
- **Recheck Visit**
 - History: [Recheck Visit](#).
 - Also ask if taking fluids OK.
 - Exam:
 - General Appearance.
 - Vital Signs: T, P, R, BP, SpO₂.
 - Weight, if younger than 3 years.
 - Repeat [Respiratory Illness Exam](#).
 - Patient Education: Review information that applies.
 - Patient is better if:
 - Throat less sore.
 - No trouble swallowing.
 - No ear pain or chest pain.
 - No fever.
 - Not losing weight.
 - Report to referral doctor, if not getting better.





Standing Orders

- Allowed after Session II
- Only for certain Assessments
- CHA/P does not need to report, unless there are specific findings
 - Able to dispense antibiotics, antipyretics without notifying a provider
- Must take and pass a Standing Orders test after each session
- Not all THOs grant Standing Orders





About

Programs ▾

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www.akchap.org

Health Aides of Alaska

A workforce of providers serving the health care needs of Alaska Native people in the Alaska Tribal Health System.

▶ What we do



Where Are We Headed?

- 2016 IHS Draft Policy Statement on Creating a National IHS CHAP Program
- From IHS Draft Policy statement:
 - “The IHS is currently exploring necessary steps to create a national CHAP, including the creation of a national certification board. The IHS is supportive of and committed to the expansion of CHA/P’s throughout Indian Country. It is our goal to use community health aides utilized to the fullest extent permissible in IHS and tribally run hospitals and clinics.”
 - “CHA/P’s are proven partners in health, and the IHS is committed to seeing them expand outside the state of Alaska.”



Indian Health Care Improvement Act

- IHS must establish the policy that creates the program
- State authorization is required for specific aides within the program
- What is the states role in expansion?
 - States must authorize their use through state legislation





Indian Health Service

The Federal Health Program for American Indians and Alaska Natives

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The Indian Health Service is working closely with our tribal partners to coordinate a comprehensive public health response to both [COVID-19](#) and [monkeypox](#).

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Community Health Aide Program Expansion



The Community Health Aide Program (CHAP) is a multidisciplinary system of mid-level behavioral, community, and dental health professionals working alongside licensed providers to offer patients increased access to quality care in rural Alaskan areas. In 2016, The Indian Health Service (IHS) consulted with Tribes on expanding the program, and in 2018, formed the [CHAP Tribal Advisory Group \(CHAP TAG\)](#) to expand CHAP to the lower 48 states.



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CHAP Tribal Advisory Group

- Alaska
- Albuquerque
- Bemidji
- Billings
- California
- Great Plains
- Nashville
- Navajo
- Oklahoma City
- Tucson
- Phoenix
- Portland
- 1 Tribal Self Governance Advisory Committee Rep
- 1 Direct Service Tribes Advisory Committee Rep



Questions?





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End of Presentation



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