

Tribal Public and Environmental Health Think Tank

Priorities in Tribal Public Health



2018



*“Through education of decision-makers and strategic partners to promote policies that advance tribal public and environmental health, tribal communities will have a healthier future and preserve their cultural traditions and practices **for generations to come.**”*



A Need for Action

Everyone deserves the opportunity for good health. Many American Indian and Alaska Native Tribes across the United States are finding their traditional ways of life disrupted by poor housing conditions, lack of access to quality education, poverty, poor infrastructure, historical trauma, racism, and food insecurity. All of these factors – compounded by geospatial challenges, high rates of unemployment, limited access or proximity to health care or medical services – lead to poor health outcomes.

In 2010, 5.2 million people, about 1.7% of the United States population, identified as American Indian and Alaska Native (AI/AN), either alone or in combination with one or more other races. Out of this total, 2.9 million people identified as American Indian and Alaska Native alone, 0.9% of the U.S. population.¹ There are 567 federally recognized Tribes in the U.S., yet the majority of Americans remain unaware of tribal public and environmental health concerns. American Indian and Alaska Native people have long experienced poorer health compared to other Americans. It is alarming to realize that American Indians and Alaska Natives live on average 4.4 years less than other Americans. They also experience higher rates of premature death compared to other Americans from diabetes, chronic liver disease, intentional self-harm and suicide, and chronic lower respiratory diseases.²

To further underscore vulnerabilities of American Indian and Alaska Native health and wellbeing, the unique history of forced relocation, intolerance of cultural norms and practices and discriminatory federal policies enacted over several generations has resulted in historical trauma, adverse childhood experiences, distrust and societal alienation. Additionally, American educational systems generally exclude an accurate history of American Indian/Alaska Natives. Public health practitioners and policy makers are often unaware of important concepts such as federal Indian law, trust responsibility, sovereignty, self-determination, consultation requirements, and research abuses. Many data challenges limit the quality of information available about the American Indian/Alaska Native population, resulting in under-reporting and misrepresentation of the public health conditions affecting the population.

But there is hope. Awareness building and prevention strategies that address these root social and environmental determinants of health can play a role in preventing negative health outcomes. Policies can be put into place to promote economic growth, increased employment opportunities, and improve academic achievement and graduation rates. Additionally, effective policies can help improve basic infrastructure in Tribal communities, including indoor plumbing, and healthy and affordable housing conditions.

The environmental injustices and lack of health equity that impact Indian Country need recognition, partners and action to remedy the deeply rooted causes of poor health to achieve a healthier future. The Tribal Public and Environmental Health Think Tank, commissioned by CDC and supported by the American Public Health Association, takes seriously the challenges faced by Tribal communities. *It is imperative that this country's national, state and local government officials, health professionals and citizens at large learn, understand, acknowledge and act on behalf of America's indigenous peoples, who remain disenfranchised and endangered by historical maltreatment and persistent neglect.*

While many of these health challenges are caused or aggravated by conditions that have impacted generations, there is hope. Through education of decision-makers and strategic partners to promote policies that advance tribal public and environmental health, tribal communities will have a healthier future and preserve their cultural traditions and practices for generations to come.



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Background

The Tribal Public and Environmental Health Think Tank is a work group composed of professionals with diverse backgrounds in tribal public and environmental health. The Think Tank is focused on promoting the voice of tribal communities across the country as a strategy to raise awareness about and achieve improvements to the unique public and environmental health challenges faced by the communities they serve. To do this, the Think Tank has developed a range of educational resources and products, and has facilitated relationships and connections between members and with partners to further these goals.

The group was originally established in 2011 as the National Tribal Environmental Health Think Tank by the Office of Tribal Affairs within the Centers for Disease Control and Prevention's National Center for Environmental Health and the Agency for Toxic Substances and Disease Registry.

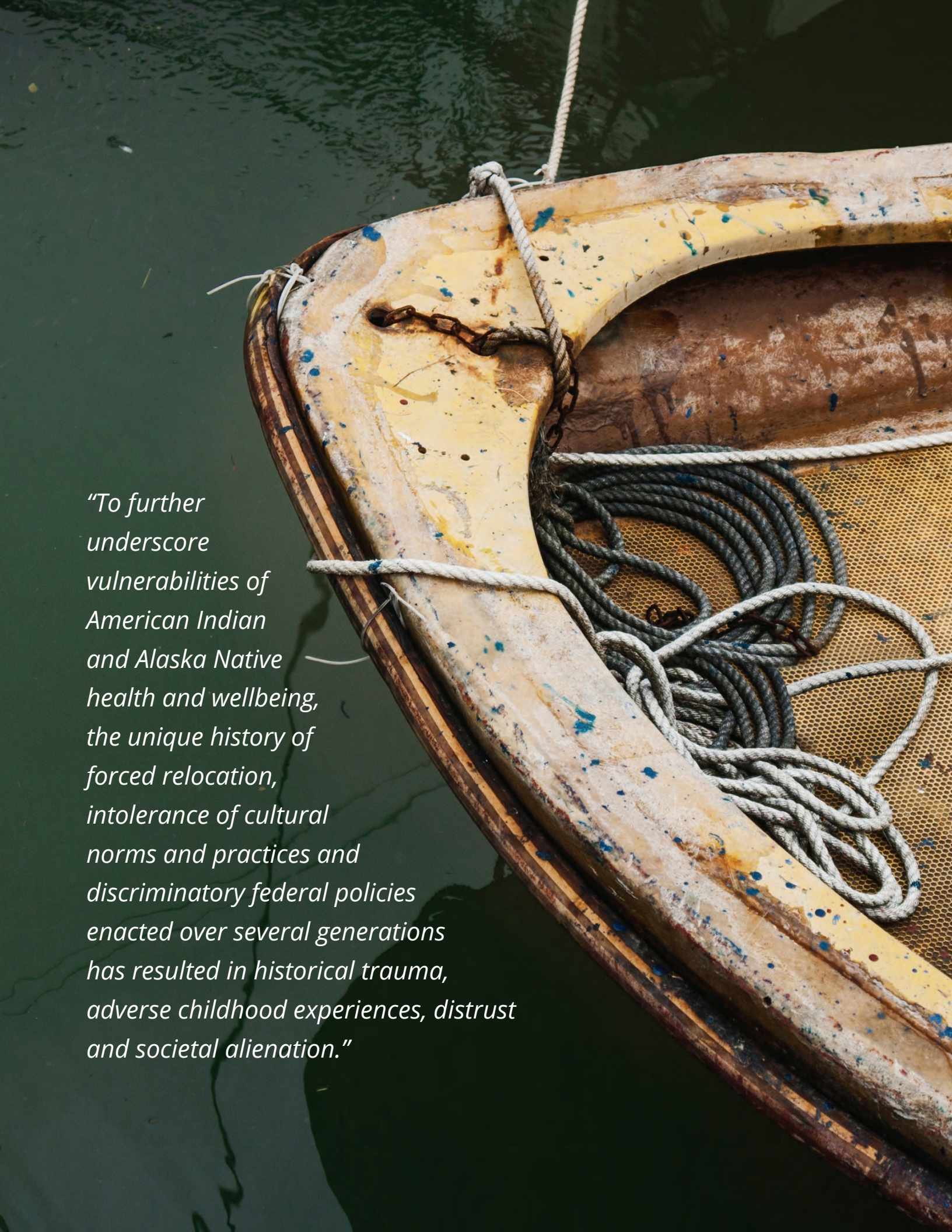
In 2015, the Think Tank decided to expand its focus to include broader public health issues, reconvening as the Tribal Public and Environmental Health Think Tank in alignment with CDC's Tribal Support Unit in the Office for State, Tribal, Local and Territorial Support.

As a collective, members of the Think Tank felt it was necessary to acknowledge five social determinants which have affected tribal health and well-being and to partner with others to educate and inform decision-makers and local, state and federal government officials on these issues. These areas include:

- Unsafe, inadequate *housing*
- Barriers to *educational achievement*
- Persistent generational *poverty*
- Deeply rooted *historical trauma*
- Societal and institutional *racism and discrimination*

The Think Tank believes that advancing American Indian and Alaska Native health requires a holistic strategy addressing the environmental factors, as well as the above social and cultural determinants of health, that contribute to poor health.

For more information about the Think Tank's work and accomplishments to date, visit [Appendix A](#).



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Historical, Political, Social and Cultural Contexts

While there are many issues that negatively impact the health of American Indian and Alaska Native communities across the country, there are several issues that are pervasive and call for change through education and preventive action. Over time, the conditions in which Native Americans are exposed to from birth to old age have changed due to disruptions in their social, cultural and physical environments. These environments have led to health inequities in Indian Country. By identifying root causes, partners and strategies for prevention, the Think Tank will support efforts for a healthier tomorrow.

Unsafe, inadequate housing

A home that is a healthy space for families to live without harmful toxins is not taken for granted in Indian Country. Availability and affordability of safe and quality housing are issues that disproportionately impact AIAN communities. Poor design, insufficient ventilation, lead paint and dust, formaldehyde-treated furniture and wood, and overcrowding, to name a few issues, play a role in the quality of homes and life.³ These toxins can lead to poor indoor air quality, mold and more, all of which lead to negative health outcomes.

A U.S. Department of Housing and Urban Development (HUD) household survey illuminates some of these disparities. It found that while the U.S. average share of



households with plumbing deficiencies is 1 percent, the share for American Indian and Alaska Native populations in tribal areas is 6 percent.⁴ Additionally, the share of households with heating deficiencies was 2 percent for the U.S. but 12 percent for AI/ANs in tribal areas; the share that was overcrowded was 2 percent nationally but 16 percent for AIANs in tribal areas.⁴ Without these basics that many

Americans take for granted, the quality of housing is often substandard and deleterious to health. Addressing housing conditions in tribal areas is made more difficult due to remoteness, lack of infrastructure, and complex legal and other constraints related to land ownership in those areas.⁴

However, some HUD policies that could benefit health do not impact tribal housing. In a sweeping policy change across the U.S., on November 30, 2016, HUD announced that its 3,100 public housing agencies must enact smoke-free policies that apply to all living units,

indoor common areas, administrative offices and outdoor areas within 25 feet of buildings.⁵ The rule is expected to impact almost a million public housing units, including 760,000 children, and is estimated to save \$153 million annually in health care, home repair and fire costs⁵. However, these policies were not included under the Native American Housing Assistance and Self Determination Act, which applies to tribal housing.

There is no safe amount of secondhand smoke exposure. Without comprehensive smoke-free air policies in all Tribal Housing Authorities, the health of vulnerable tenants and visitors is at risk. Tribes that demonstrate their own efforts to enact smoke-free policies would benefit from additional resources and support that increase public health capacity to grow and sustain these examples of effective policy, systems and environmental changes.

Barriers to educational achievement

Research indicates that education is the strongest predictor of long-term health, and that adults with low educational attainment are more likely to die from cardiovascular disease, cancer, infection, lung disease and diabetes.⁶ In Indian Country, the issue is further exacerbated by an inadequate support system for students, student and family health concerns that impact attendance, insufficient funding for academic programs, underdeveloped and limited culturally appropriate and relevant educational programs. American Indian youth have the lowest graduation rates, 69 percent, far below the national average of 81 percent. Still worse, the 8 percent of Native students attending Bureau of Indian Education schools are further disadvantaged, with an average graduation rate of 53 percent.⁷

Complicated by persistent poverty, health challenges and historical trauma, life crises can often interfere in a child's education or ability to attend school. Unfortunately, even those who are able to succeed academically often feel forced to choose between their community and economic stability, as there may be limited job opportunities in their home communities. Many tribal communities suffer from an out-migration of educated tribal members searching for career opportunities and better housing and education for their families.



Persistent generational poverty

Poverty disempowers and silences voices. Compared with a U.S. average poverty rate of 18 percent between 2006 and 2010, the American Community Survey (ACS) shows that the poverty rates for those identifying as AI/AN-alone stood at 22 percent in metropolitan counties outside Indian Country, 28 percent in the surrounding counties and 32 percent in tribal areas.⁴ According to the Bureau of Indian Affairs, on average about 49 to 50 percent of all Native Americans 16 years or older in or near the tribal areas of federally recognized Tribes are employed either full or part time in civilian jobs.⁸ The Bureau of Labor Statistics, which defines unemployment as the portion of the population that is jobless, available for work, and looking for a job, found that AI/ANs report the highest rates of unemployment at 9.9 percent.^{9,10} Many tribal communities lack job opportunities that pay a living wage, so even those that are employed are often underemployed and struggle to keep afloat, relying on government assistance to buy food or help with medical expenses. This dynamic forces an irreconcilable choice between staying in one's cultural community and seeking opportunities for better-paying work outside of the community. Poverty is also fueled by poor or partial education, contributes to health disparities and can lead to unsafe or inadequate housing conditions.

Through the years, some government policies have incurred poor economic consequences. Policies in the 1800s resulted in many Tribes' forced relocation to rural



areas with poor soil for agriculture and limited access to water resources. Concurrently, some AI/ANs were relocated to population centers distant from or foreign to traditional ways of life. Geographical realities, along with changing policies over the years with regards to the political relationship between Tribes and state and federal governments, have led to persistent poverty. Today, many tribal community

members must travel great distances between population centers and tribal communities in order to access services such as health care, food and retail shopping, and other services.^{11,12,13} This often requires increased expenses to access such services – traveling long distances, paying for transportation and taking time off from work.

Deeply rooted historical trauma

Historical trauma, sometimes referred to as intergenerational trauma, is the culmination of negative effects on one's behavioral health caused by traumatic experiences over the course of several generations.¹⁴ While common to all indigenous populations worldwide, Tribal communities in particular have faced colonization, exploitation and cultural repression, for multiple generations.

As the United States began attempting to expand in the 19th century, settlers sought to gain access to desirable lands occupied by Indian Tribes in the Southeast. The U.S. government intimidated and forced Tribes into signing treaties that surrendered their traditional homelands to the federal government. This was put into law when President Andrew Jackson encouraged Congress to pass the Indian Removal Act in 1830, which authorized the president to grant unsettled lands west of the Mississippi in exchange for Indian lands within existing state borders.¹⁵ With this Act in place, the government persuaded, bribed, and threatened Tribes into signing removal treaties. This was not without conflict. For example, when President Jackson obtained signature for a treaty with a Cherokee chief agreeing to relocation in the Treaty of New Echota, only a small fraction of Cherokee left voluntarily. The signing Cherokee chief only represented a faction of the Cherokee, and the majority felt the chief did not represent them. This majority was forced by federal troops and state militia to relocate, resulting in what is known as the Trail of Tears. It is estimated that 3,000 to 4,000 out of 15,000 to 16,000 Cherokees died in brutal conditions during the Trail of Tears.¹⁶



In addition, throughout the 19th and 20th centuries, young AIAN children were forcibly removed from their homes and placed in boarding schools. These facilities were often far away from their home communities and meant to separate them from family, their culture and traditional ways of life. This was an attempt to forcibly assimilate young Indians into mainstream US culture and eliminate traditional American Indian ways of life. At these boarding schools, many practices were intended to strip cultural identity from these children, including forcing them to cut their hair, give up traditional clothing, exchange traditional names for English ones and abandon their own language, punishing them if they did not comply.¹⁷

These are only two examples of the persistent and systematic oppression that has resulted in the suppression of American Indians' personal and cultural identities, which is often misunderstood and overlooked. This enduring history continues to impact tribal communities today. While historical trauma in Tribes is difficult to measure, there are many resulting health consequences including behavioral health, suicide, violence, and substance abuse.

Societal and institutional racism and discrimination

Stigma, inequalities and civil rights injustices still persist in our society today. Unfortunately, racial and ethnic discrimination plays a large part in how people are viewed, valued and treated. For example, the mainstream K-12 and higher education systems in the United States have inaccurately portrayed American history as it relates to the treatment of American Indians and Alaska Native peoples. Atrocities, if mentioned, are not studied in-depth and American Indian history, art, folk tales, literature, religion and languages are not afforded much coverage in most school settings. There is also little mention of today's vibrant American Indian communities, including 567 federally recognized Tribes. In addition, school and team mascots continue to illustrate American Indians and respective cultural symbols in caricature or pejorative forms. These stigmatizing practices instill in children and reinforce for communities a cultural belief system in which indigenous peoples are ignored and discriminated against.

Today, some Americans are unaware that American Indian and Alaska Native people are still a part of the current American landscape. Both intentional and unconscious racism affects the health of individuals and communities, limiting the opportunity of many to contribute fully to our nation.^{18 19 20 21} Structures and policies are needed to deinstitutionalize racism impacting Native American communities, as well as the recognition that policies and systems put into place for the general population do not always translate to tribal lands. For example, when the Hazard Ranking System (HRS) Guidance Manual was first developed in 1992, the guidance for estimating exposures received did not explicitly consider using Native American cultural practices when assessing a site for listing on the National Priority List, which identifies hazardous waste sites in the U.S. eligible for remedial action under the federal Superfund program.²² In 2007, the guidance was changed to direct the federal Superfund program to recognize and account for Native American traditional lifeways in this process.²³

In addition, some federal agencies are beginning to recognize the importance of the evolving knowledge acquired by indigenous and local peoples over hundreds or thousands

of years through direct contact with the environment, also known as Traditional Ecological Knowledge.²⁴ In January of 2017, the EPA Office of Land and Emergency Management issued a memorandum to provide recommendation for the Consideration of Tribal Treaty Rights and Traditional Ecological Knowledge in the Superfund Remedial program.²⁵ Adopting policies that recognize the unique exposures and human health risks faced by Native Americans exposed to sources of industrial and other pollution through cultural traditions and practices is critical to ensuring fair, equitable protection of all communities.

Finally, today's boards, councils, ad-hoc action committees and advisory bodies at the local, state and national levels continue to largely operate and make decisions without the benefit of American Indian/Alaska Native representation. While many boards have responded to changed bylaws requiring broader racial and cultural membership, the AI/AN population continues to be overlooked. However, there are also growing examples where proper engagement and formal tribal consultation has been implemented. In 2009, the White House released a memorandum requiring federal agencies to outline their tribal consultation efforts.²⁶ In addition, some states have enacted respective Tribal Consultation Policies and rely on the consultation process to seek input and policy advisement on a regular basis from Tribal representatives in their jurisdictions. However, while this practice is fully endorsed by AI/ANs who revere government to government relationships and decision making, consultation practice in and of itself does not further integrate the views and representation of American Indians into mainstream policy and decisions as direct representation would. Including AI/AN voices in decision making, through consultation and direct representation, is a critical tool in combatting institutionalized racism and discrimination.



Resulting Tribal Public and Environmental Health Issues

Understanding the social and cultural contexts for why American Indian and Alaska Native peoples suffer from some of the highest disparity rates for public and environmental health is key in grappling with resulting tribal public and environmental health issues. The Think Tank therefore identified the following six public and environmental health priorities to continue to bring visibility to:

1. Food Sovereignty and Access
2. Infrastructure and Systems Development
3. Climate and Health
4. Resource Extraction
5. Clean Air
6. Clean Water

American Indians believe in providing sound environmental stewardship to the land that preserves, perpetuates, protects, and enhances natural resources and the ecosystem. The environmental injustices and lack of health equity that impact Indian Country need recognition, partners and action to remedy the deeply rooted causes of poor health to achieve a healthier future. The Think Tank is positioned to lend a voice to these topics.

Food Sovereignty and Access

George Edwardson, an Inupiat elder who attended the Think Tank meeting in Barrow, Alaska in May of 2016 said: “When a people can feed themselves, only then are they an independent people” and “whoever controls my food, controls and regulates me.” Access to nutritious, local, safe and traditional foods is critical to the health of tribal nations.

Traditional foods and subsistence practices have provided sustenance and promoted health to tribal communities for generations. Lack of access to these traditional and healthy foods as a result of loss of land and disruption of traditional food practices increases reliance on processed foods, ultimately impacting the prevalence of metabolic syndrome and chronic diseases, including diabetes and obesity. These disease expressions are all lethal but also preventable.

Land use and zoning policies have made it more difficult to practice traditional food practices, including the cultivation of indigenous foods, hunting and fishing. For example, in the 1980s protests erupted in Wisconsin among sports fishermen and resort owners after courts affirmed the right of Chippewa Indian tribal members to fish walleyes off-reservation

in the traditional way, which involves spearing walleyes near the shoreline during the spawning season. The court's decision was based on 1837 and 1842 treaties that ceded millions of acres of what is now the northern third of Wisconsin. The ruling led to tensions, as some felt spearing by tribal members would dramatically reduce the walleye population and ruin the sport fishing available to non-tribal members. In the late 1980s and early 1990s, the protests sometimes escalated into violence involving racial taunts and rock throwing, and law enforcement officers had to guard boat landings at lakes. These protests eventually slowed after lawsuits against several protest leaders.²⁷ However, some tensions still persist today in the Lac du Flambeau community as the spearfishing season for tribal members unfolds each season. This example illustrates how honoring treaty rights, including hunting and fishing rights, and upholding policies that ensure access to and safety of traditional foods is critical to the health and cultural well-being of tribal communities.



An additional threat to food security specifically impacting American Indian/Alaska Native populations is the vulnerability of existing tribal lands and communities to the proximity of existing hazardous waste sites, mining operations and other sources of chemical exposure. Clean soil, ground and surface water in and around tribal communities is vital to sustaining the harvest of traditional foods, medicine and materials used in native implements and arts. To make matters worse, climate change has exacerbated the ability to attain traditional food sources by threatening the health of local plants and animals (*see section on climate change*).

Infrastructure and Systems Development

Tribal communities face a diverse spectrum of infrastructure needs. Infrastructure includes the physical and organizational structures and facilities needed for the operation of a community. Tribally operated health and environmental services may be disconnected from surrounding county and state public health operations such as emergency preparedness, public health laboratories and environmental health tracking systems. Many Tribes lack the capacity to support the development or sustainment of public health service structures (i.e. systems, people, knowledge, and policies). Data systems in place to inform state public health disease surveillance may not include tribal jurisdictions, and many Tribes lack the ability to conduct surveillance and lack unified data systems on their own.

In addition, community infrastructure that many U.S. communities enjoy, including built environments where access to healthy foods and public transportation or walking and biking paths are readily available, are not easily attainable by many tribal community members. Moreover, many tribal communities often lack access to clean water and sewage systems. Also alarming is the lack of, or limited access to, telephone and internet infrastructure in rural communities. This digital divide further increases the challenge to achieving a high school diploma and seeking higher education, responding to emergencies,



and presents challenges to economic growth and development such as telehealth advances, which could be a vital asset to tribal communities.

Complicated relationships between federal agencies, states, and Tribes often impact issues of infrastructure and systems. The federal government acknowledges and supports states' rights and the states' role in determining the

needs of each state. Public health, emergency response, transportation, education, agriculture, economic development and other infrastructure funds are apportioned to states using a variety of formulas that consider demographics and specific needs. Therefore, it is up to state governments to determine if and what portion of funds received are passed through to Tribal communities. Many Tribes have challenges with their respective states that may impact how much is passed along to tribal communities, particularly when those relationships are absent, distant or ill-defined.

Another funding pathway to both states and Tribes (and other service-providing organizations) is through application for competitive grant funds. While Tribes are listed as eligible applicants for many grants, they often struggle to compete successfully, when compared to academic institutions, as well as county, city and state governmental agencies due to limited resources and personnel, access to data and other challenges. Some federal entities such as the Centers for Disease Control (CDC) and other Health and Human Services agencies are slowly responding to Tribal needs through developing more equitable application processes to improve grant award success.

Climate and Health

Climate change is significantly impacting tribal air, water, and food. It has resulted in: rising coastal water levels; more frequent forest and grass fires; increased pests and vector-borne disease; extreme weather conditions; decreased food availability, inland water levels, and underground water aquifers; and non-native plant encroachment. Change in weather

patterns and warming waters can threaten the health of local plants and animals, if they are unable to migrate or adapt well to the changing ecosystems.

Native American hunting and fishing rights are limited by treaty right boundaries which have often historically been subjected to encroachment and litigation. This limits the access to culturally important species that have migrated to other geographic areas or native plants unable to survive in the changing environment. Treaty rights give American Indians legal protections to these specific geographic areas, so reestablishing elsewhere is not an option. In February 2016, EPA issued its first-ever Treaty Rights Guidance, which states that EPA programs will be implemented to enhance protection of tribal treaty rights and treaty-covered resources when it has the discretion to do so.²⁸



As a result of traditional subsistence lifestyles and cultural practices that have relied on direct contact with the environment for thousands of years, tribal communities have invaluable knowledge in the area of human interaction with the environment, and its resulting impacts on human health and well-being. This Traditional Ecological Knowledge, which is constantly evolving and has been passed down for generations, gives tribal communities a holistic approach to understanding the impacts of climate change and interpreting climate research. TEK is critical to anticipating climate change impacts and designing adaptation responses in tribal communities, such as identifying food substitutions, adjusting hunting and fishing cycles and practices, and more. In July 2014, EPA issued its Policy on Environmental Justice for Working with Federally Recognized Tribes and Indigenous Peoples for all Agency Programs. Principle 6 of this policy states: “The EPA encourages, as appropriate and to the extent practicable and permitted by law, the integration of Traditional Ecological Knowledge into the Agency’s environmental science, policy, and decision-making processes, to understand and address environmental justice concerns and facilitate program implementation.”²⁹

Still, as a result of geographic vulnerabilities and extreme environmental changes, some tribal communities have been forced to relocate and have been displaced, there is a shortage of housing, and traditional medicines and ceremonies are threatened.

Resource Extraction

Natural resources are cultural resources. These include hunting and fishing grounds, spiritual sites and ceremonial grounds. The voices of American Indians and Alaska Natives continue to be suppressed or ignored when business, state or national interests converge on or near Tribal lands. Some Tribal communities reside on resource-rich lands that are poached for their natural energy capital. Changes to land, water, and air resulting from resource extraction are impacting tribal health. Resource extraction has resulted in: the contamination of tribal natural resources and living space; the loss of traditions and cultural practices due to contaminated foods and gardens; a loss of connection to the land; and social, mental, and economic loss.



A unique relationship exists between the U.S. government and tribal governments of federally-recognized tribes. Federally-recognized tribes are sovereign nations with legal status, protected by a federal trust relationship with the U.S. federal government. The U.S. Department of Interior has interpreted the federal responsibility to be a legal responsibility to protect Indian lands,

water, minerals, and other natural resources. One of the responsibilities of the government is to work with tribes on a government-to-government basis consistent with the federal trust responsibility to protect and enhance tribal health and environment.³⁰ Nevertheless, there is still a lack of accountability. Often, permits issued to companies do not adequately characterize the risks from mining and other extractions, causing the human health impact to remain unaddressed. Moreover, companies often obtain federal waivers and do not recognize tribal laws. The understanding of Tribal rights when negotiating with the Department of Interior on undergoing resource extraction is critical to protecting Tribal sovereignty, monetary compensation and energy independence.

Clean Air

Air is essential to life, yet some tribal communities suffer from poor air quality due to environmental tobacco smoke, mold, formaldehyde, fires, particulates, airborne toxins, and radon. The National Tribal Air Association's 2017 Status of Tribal Air Report states:

"The health impacts of air pollution on many American Indian/Alaska Native (AI/AN) communities is magnified by such factors as the inability to receive quality medical care due to issues like cultural barriers and geographic isolation, and spending more time in ambient and indoor environments than their non-AI/AN counterparts. Most AI/AN community members, including children and Tribal elders, spend a considerable amount of time outside gathering and using plants of cultural significance. Other communities, such as those located in Alaska, are forced to spend a significant amount of time indoors during the winter months. This normal lifestyle can foster heightened respiratory conditions such as asthma. Approximately 14.2% of AI/AN adults have asthma compared to 11.6% of non-Hispanic white adults and AI/AN children are 60% more likely to have asthma as non-Hispanic white children. These are health figures which necessitate Tribal Air Quality Programs to engage in comprehensive air quality monitoring and management." ³¹



Consequently, many tribal members are affected by cancer, ear infections, heart disease, stroke, poor immune response and respiratory health problems, such as asthma and chronic lower respiratory disease. These negative health impacts can also bring about other consequences, such as limiting one's ability to go to work or attend school consistently - factors that, in turn, also impact health.

Clean Water

Safe drinking water is one of the most basic needs of any individual. Tribes use water resources for sanitation, food, medicine, cultural and traditional practices. As of 2013, about 7.5 percent of AI/AN homes did not have safe drinking water or basic sanitation, according to the Indian Health Service.³² Safe drinking water is critical to the welfare of individuals, families and local economies.

Approximately 77 percent of fresh water consumed in the United States is derived from surface waters, such as reservoirs, lakes and streams.³³ Many American Indian reservations are located in rural areas highly dependent on these surface water sources. Surface waters, in particular, are susceptible to non-point pollutant sources, such as substances and organisms that enter waterways during heavy precipitation and storms, as well as contamination from resource extraction. Examples of non-point pollution include insecticides, fertilizers, microbes, pharmaceuticals and legacy pollutants, such as chemicals that are resistant to decay. Many American Indian reservations have also experienced water contamination due to resource extraction, such as oil and gas drilling, and mining of natural resources. Furthermore, climate change is predicted to decrease snowpack which would affect surface water availability.

The impacts of water contamination can be serious and far-reaching, making safe drinking water a priority for tribal communities across the U.S., particularly since reestablishing elsewhere is not a viable option. Water contamination prevents treaty rights from being fully exercised and may threaten the health and cultural well-being of Tribes.



Next Steps

Strategic Engagement

The Think Tank hopes to achieve real change to advance American Indian/Alaska Native health and address the social determinants of health by working with strategic partners to advance its goals. Partnerships to take upstream actions that lessen the burden of health inequities will protect health for all downstream. As such, the Think Tank will strategically address audiences and engage existing or new partners to further the actions outlined in the section above.

The Think Tank, with support from CDC and APHA, has identified strategies and products to produce over the next three years. The intention of these next steps is to promote the voice of Tribes across the country and raise awareness of the issues that disproportionately impact the health of American Indians and Alaska Natives.

The Think Tank's goals include:

- Advance principles of sovereignty through education
- Provide outreach and technical support to Tribes
- Promote the need for data equity among Native populations
- Engage with partners to broaden its impact

To achieve these goals, the Think Tank will:

- Continue to present on priority topics at the APHA Annual Meeting to drive the connection between the social determinants of health to public health issues in Indian Country.
- Share the public health stories of tribal communities through blogs, briefs, videos, and engagement with partners.
- Encourage partners to participate in the *Working Effectively with Tribal Governments* course.
- Develop and disseminate widely a paper describing and prescribing the *Working Effectively with Tribal Governments* course.

Opportunities for Action for Partners

We need partners, including national non-profit organizations, federal agencies and community groups to take action towards improving tribal health by:

- Building awareness and educating stakeholders and decision-makers about root social and environmental determinants of health and related issues in Indian Country.
- Promoting policies that include and advance tribal public and environmental health.
- Integrating tribal voices and considering impact on Indian Country in their work.
- Building relationships with tribal groups or tribal-serving organizations in their region or area of work.
- Honoring cultural traditions and practices and acknowledging historical trauma and tribal perspectives.

The Think Tank has also created a handout summarizing highlights from this document, which you can find in [Appendix C](#) and electronically at <https://www.apha.org/topics-and-issues/environmental-health/partners/think-tank>. Disseminating this handout is an easy way to help to build awareness and education of tribal public and environmental health issues. Also, see [Appendix D](#) for more specific action items.

Acknowledgements

TPEH Think Tank members (as of May 1, 2017)

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Barrow, Alaska Meeting

There were also additional people present at the May 2016 Think Tank Meeting in Barrow, Alaska who discussed and determined the list of social and cultural contexts impacting health outcomes in tribal communities. It is through their hard work and thoughtfulness that these social and cultural contexts were identified and discussed. Titles are shown as provided at the time of the meeting, although known changes have been noted.

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*In 2010,
5.2 million
people, about
1.7% of the
United States
population,
identified as
American
Indian and
Alaska*



Appendix A: TPEH Think Tank Accomplishments

Since the group's inception in 2011, the Tribal Public and Environmental Health Think Tank has worked to promote the voice of tribal communities across the country as a strategy to raise awareness about and achieve improvements in the unique environmental health, and more recently public health, challenges faced by tribal communities. To do this, the Think Tank has developed a range of educational resources and products, and has facilitated relationships and connections between members and with partners to further these goals.

Products and Resources

The Think Tank has developed numerous materials and resources to raise awareness of tribal public and environmental health issues. These materials include:

- **strategic plan** setting out goals for the Think Tank's work to advance tribal environmental health,
- **"Tobacco: Honoring our Traditions and our Health" video** describing the differences between commercial tobacco and traditional, sacred tobacco by highlighting successful local initiatives in Wisconsin to address commercial tobacco use,
- **process paper** describing the Think Tank's novel approach to engaging with tribal communities, outlining the process of convening the Think Tank,
- **"Sacredness of Place" video** describing tribal communities' unique relationship to the environment, highlighting the ways in which geography and cultural traditions impact tribal environmental health, and
- several **digital stories** made by the Think Tank members themselves, describing what motivates them to work in this space, describing environmental health issues in the communities they belong to or serve.

Partnerships

Diverse public health partnerships are essential to bring visibility to public and environmental health priority issues, as well as to develop and implement strategies to address these issues. The Think Tank has been able to foster relationships, between Think Tank members, between the Think Tank and federal agencies, and between the Think Tank and other partners. These connections are perhaps the most significant successes of the Think Tank's efforts.

They have led to knowledge-sharing between tribal communities experiencing similar public and environmental health concerns, as well as increased access to information and



materials that Think Tank members could then share with the communities they serve. This has helped to increase understanding and raise awareness the impacts of these public and environmental health priorities, as well as connect other Tribal

members to specific resources and partners for assistance. The Tribal communities they serve have received information, resources, and guidance from federal agencies as a result of connections made through the Think Tank. Think Tank members have also reported that Tribes have become more aware of funding opportunities and have received grants they may not have been aware of prior to their involvement in the Think Tank.

The Think Tank has also built capacity among Think Tank members to work with new partners by promoting greater understanding of environmental health, public health and epidemiological resources, issues facing other Tribes, missions and programs across CDC, and the missions and programs at other national associations and partner organizations.

- The connections made on this council have led to a collaborative effort between the Great Lakes Tribal Epidemiology Center and the **Association for Public Health Laboratories**
- **CDC Tracking pilot** – after the Think Tank met with staff from CDC's Tracking program, it led to a first of its kind pilot project with the Great Lakes Inter-Tribal Epidemiology Center to assess environmental monitoring taking place in tribal communities they served, develop environmental priorities, determine related health outcomes of greatest concern, and build relationships between Tribal, state and federal partners.

Connections with federal agencies and partners have also provided additional opportunities for Think Tank members to engage with the wider public health community to educate others about the issues in tribal communities through presentations at APHA's Annual Meeting. Attendance at these sessions has increased steadily over time, with over 60 people in attendance at the 2016 session. Scientific sessions presented by Think Tank members at the APHA annual meeting include:

- 2013: Showcasing Sacredness of Place: Environmental Public Health Priorities in Indian Country
- 2014: Priorities, Practice and Partnerships – Lessons in Tribal Environmental Public Health
- 2015: Empowered to Take Action: Environmental Health in Indian Country
- 2016: Building Public Health Capacity to Achieve Health Equity in Tribal Communities
- 2017: Advancing Tribal Health Priorities through Partnership and Resource Development

In recent years, members of the TPEH Think Tank in attendance at the APHA Annual Meeting have engaged with APHA's American Indian, Alaska Native, and Native Hawaiian Caucus.

The Think Tank's partnership engagement efforts have also lead to Think Tank members' increased presence at meetings, providing opportunities for Think Tank members' to build awareness of tribal public and environmental health issues that may have otherwise been overlooked. For example, two members of the TPEH Think Tank also sit on APHA's National Environmental Health Partnership Council, which brings together diverse, executive-level stakeholders to help expand and sustain awareness, education, policies, and practices related to environmental health. Think Tank members' participation in the Partnership Council has increased that group's awareness of tribal environmental health issues, as well as provided an avenue for Think Tank members to network and make connections with other organizations working in environmental health.

Working Effectively with Tribal Governments Training Course

In order to build effective and sustainable partnerships with tribal communities, non-tribal public health leaders often need a deeper understanding of the cultural, historical, and political contexts in which tribal public health and environmental health challenges occur. The Tribal Public and Environmental Health Think Tank was critical in developing the curriculum for a *Working Effectively with Tribal Governments* training course. The course has been offered primarily to CDC staff through CDC University, but has also engaged staff from the U.S. Drug Administration and the U.S. Department of Transportation, as well as staff from other national organizations and partners, including the Association of State and Territorial Health Officials, the American Lung Association, Children's Environmental Health Network, National Association of County and City Health Officials, Association for Public Health Laboratories, and the HHS Office of Minority Health. This course serves as way to increase in knowledge, attitudes, and confidence about working with Tribal communities. Over 100 participants have completed the course since 2014.

Meetings

To work on these resources and develop strategies to engage partners in addressing inequities and advance public and environmental health in tribal communities, the Think Tank convenes one to three times each year across the US:

- 2011: Washington, DC (July), Suquamish, WA (August), and Anchorage, AK (September)
- 2012: Atlanta, GA (November)
- 2013: Albuquerque, NM (February), Atlanta, GA (July)
- 2014: Rapid City, SD (May), Washington, DC (September)
- 2015: Atmore, AL (March), Chicago, IL (November)
- 2016: Barrow, AK (May), Albuquerque, NM (September)
- 2017: Washington, DC (May), Albuquerque, NM (June)

Appendix B: Methods

The process for developing the social and cultural contexts took place at an in-person meeting in Barrow, Alaska on May 2-4, 2016. Each Think Tank member was asked to write down five of their individual public health priorities on post-its. These post-its were then collected and grouped. The following issues emerged many times:

- Food: access, security, sovereignty
- Mental & Behavioral health: suicide, trauma, substance abuse
- Air: air pollution from oil development, etc.
- Infrastructure & sustainability of public health services
- Resource extraction
- Water contamination
- Climate change
- Funding structures that go through other entities, not directly to Tribes or tribal-serving organizations

The below issues were also identified by at least one member:

- Chemicals in consumer products
- Data equity & profiles
- Housing: overcrowding, quality
- Cancer
- HIV
- Heart disease
- Obesity
- Loss of culture
- Domestic violence
- AI/AN representation on boards & councils, decision-making bodies
- Emergency response and preparedness

Through discussion of these issues, the Tribal Public and Environmental Health Think Tank decided that it was best to first approach the discussion from a social determinants of health framework, discussing some of the root causes that impact many adverse public health outcomes. The root causes identified and focused on in this discussion were: housing, education, poverty, employment, community infrastructure, historical trauma, racism, and food security.

Over the course of the three day meeting, the Think Tank explored each of these identified root causes in tribal communities. The members then discussed possible strategies to

address these root causes. The group then identified potential audiences and several possible priority strategies or products.

Community infrastructure and food security were already TPEH Think Tank priorities, so they were not included in this document as Historical, Political, Social and Cultural Contexts.

Housing



Issues

- Availability
- Affordability
- Quality - unsafe, unsanitary, inadequate, unstandardized, HUD ratings
- Unsafe
- Complicated land issues – historical land and housing policies: Alaska Natives – congressional act so that AN born after 1971 do not receive shares/no land for home, for other AI other land issues (like allotments)
- In Alaska, (for AN no shares if born after 1971 so no land for home – congressional act), land issues for other AI (allotments)
- Barriers for infrastructure development
- Relationship to health: stands in the way of recruitment and retention, stands in the way of economic development

Strategies/Recommendations

- Improve local control
- Create criteria based on life, health, safety and the importance of tradition and culture
- Must be preventive, identify markers, monitor and then trigger response once levels reach markers
- Elevating voices and stories, educate others and elevate issue to wider audience. Reach strategic partners to have them leverage some of their resources to help us elevate these issues



Issues

- Underdeveloped, limited culturally appropriate and relevant educational programs
- Funding of programs – how and how much available
- Complex acquisition of funding
- Disconnected education and housing
- Inadequate support system for students
- Not meeting HS graduation rate
- Life crisis interference (competition between life circumstance and education)
- Out-migration of educated, forcing choice of culture/community and education/economic stability

Strategies/Recommendations

- Address skill levels through funded internships
- Ask CDC foundation to host paid stipends for AI/AN students for public health internships
- Bring CDC into tribal communities (CDC epi aides, field assignees, 10% of PHAP's to Indian Country, 2 assignees to Indian Country)
- Interagency personnel agreement-bring reservation employee to CDC
- Visit schools during Think Tank meetings
- Model curriculum for schools and programs of public health – ASPPH, AAIP



Issues

- Redefining poverty - culturally and spatially applicable definition of poverty
- Underemployment, availability of jobs that can pay a living wage
- Wage/welfare imbalance – lack of motivation and employment
- Irreconcilable choice between work and cultural practice /out-migrations of the educated, undervaluing traditional choices
- Poverty silences voices, disempowers

Strategies/Recommendations

- Equitable allocation of programs addressing unemployment (Department of Labor)
- Path to independence, stepped benefits reduction as employment/income increases (rather than strict levels)
- Employment - economic development, create awareness of tribal success stories (brief/webinar/videos)
- Traditional/cultural practices leave (similar to maternity)
- Incorporate subsistence living into educational curriculum and adjust school year to allow subsistence living practices—more breaks, etc.



Issues

- Insufficient public health infrastructure
- Physical – clean water
- Built environment
- Systems - information/data systems, to collect basic data to get into national reporting systems surveillance)
- Lack of regulatory enforcement and transparency
- Inaccessible communication systems
- Underrepresentation at power tables
- Process dilution/invisibility
- Tribal political infrastructure
- Federal red tape – systematic racism, process to apply for funding complicated causing difficulty for small Tribes to apply
- Equitable criminal justice system – racism, poverty, employment, education

Strategies/Recommendations

- Educate/communicate – need to educate and provide technical awareness to Tribal leaders on processes so they can reach the right people. Federal partners, educate regarding sovereignty, how tribal governance works, and cultural awareness.
- Advocacy for resources – funding, technical assistance, mentorship, etc. Develop systems that best serve community. Structures in place that support infrastructure for state and counties do not necessarily work with tribes. Need for sustained support – move from grant based funding to continuous funding-permanent
- Dismantle institutional racism – incorporate principles of social justice through education, communications, & advocacy.

Employment: (see throughout – poverty, education, etc.)

Historical Trauma (identity, loss, disconnected with culture and place, language)



Issues

- Unrecognized by others
- Unaccepted
- Difficult to understand
- Persistent, systemic, unrelenting abuse
- Tribal cultures v USA
- Difficult to measure
- Co-occurring morbidities
- Historic cultural repression, colonization, exploitation
- Political racism

Strategies/Recommendations

- Offer WETG to other federal & state agencies, or national partners
- Develop community stories to highlight historical trauma
- Identify measures (factors and symptoms) to help local communities understand historical trauma – teach in schools and tribal colleges (curriculum)
- Establish trauma index level
- Healing/reconciliation events

Racism



Issues

- Individual, interpersonal
- Structural - policy, organizational, institutionalized
- Apply social-ecological model
- Alaska Natives – laws, policies learned from lower 48 applied to AK
- Has driven economic and legislative policy and exploitation
- Requirements in grants that do not reflect tribal ways of being. Grand/funding inequity
- Historical dismantling of sovereignty
- Dominance of corporate US, i.e. National Energy Policy Act

Strategies/Recommendations

- Education, communication
- Bringing WETG to other agencies and organizations
- Ensuring representation on boards, setting protocols
- Reviewing other agency's consultation policies – crosswalk of tribal consultation policies and practices.
- “Policy through the Native Eye” – could show the ways in which policies sometimes unintentionally have disproportionate effects on tribal communities. Provide examples of organizational and structural racism.
- Paper on WETG course (to help replicate effort)
- Literature search on how strategies that are effective against racism
- Utilize interns for research projects, other projects

Food Security “When a people can feed themselves then they are an independent people” “Whoever controls my food, controls and regulates me” (George Edwardson).



Issues

- Geographic isolation
- Corporate control of seed product
- Access to one's own food source
- Native people must take care of their own food sources
- Corporate/government control/distribution of food
- Persistent genocide policy
- Land use and zoning
- Persistent food deserts
- Unfavorable zoning
- Selective enforcement
- Unrecognized importance of traditional foods
- Interrupted control of traditional food sources and gathering
- Unrecognized impact of climate change
- Serious jeopardized ocean food sources. “Food is medicine” (Isaiah Brokenleg), the last third of the world's fish is in the Arctic ocean

Strategies/Recommendations

- Climate change - geosystem in critical state; story sharing
- Align Traditional Ecological Knowledge to inform and guide western science
- Corporate control of germplasm – seed banking, heirloom seed distribution and collection. Find research institutions that are collecting and preserving seeds and work with them to gain knowledge and resources
- Interrupted control of traditional food sources – Formation of hunter/gatherer associations to go outside legal structure and use tribal law and traditions on basis of tribal sovereignty
- Importance of traditional foods – food is medicine, Educate around traditional food rather than Standard adult diet (SAD)
- Economic opportunities for tribal entrepreneurs, food coalitions
- Selective enforcement – use the courts to implement native rights to hunt, gather, fish

Possible audiences:

- Funders – federal, foundations, non-profits, state, regulatory and non-regulatory
- Tribal Leaders
- Tribal serving organizations (NCAI, NIHB, Health Boards, NTAA, NTTC, TWC, etc.)
- Non-Tribal health organizations – state health departments, county, local
- CDC
- CDC Tribal Advisory Committee (TAC)
- Industry- corporations, private
- National & international associations/organizations
- Media

Identified possible priority strategies/products:

- Communities Spotlight – perhaps through Tribal Leader Videos? In other briefs/products?
- Policy through the “Native Eye”
- APHA Annual Meeting – what would we like through session? Save space on next call agenda
- WETG paper
- Technical assistance/talking points/summary/guidance for TAC



Priorities in Tribal Public and Environmental Health

A NEED FOR ACTION

No matter where they live, all people deserve the opportunity for good health. Disruptions in American Indian/Alaska Native social and physical environments over many generations have led to disparities in public and environmental health outcomes. This has perpetuated inequities that threaten traditional ways of life and tribal health and wellness. Despite the large number (567) of federally recognized tribes in the US today, there remains little national recognition of the environmental injustices and lack of health equity that impact Indian Country. American Indian/Alaska Native people have long experienced poorer health compared to other Americans. Their lifespan is, on average, 4.4 years shorter than other Americans, and they suffer at higher rates than other Americans from diabetes, chronic liver disease, intentional self-harm and suicide and chronic lower-respiratory diseases.

HISTORICAL, POLITICAL, SOCIAL AND CULTURAL CONTEXTS

Advancing American Indian/Alaska Native health requires a holistic strategy that addresses the deeply rooted *historical, political, social and cultural contexts* that affect tribal health and well-being. These include:

- Unsafe, inadequate **housing**
- Barriers to **educational achievement**
- Persistent generational **poverty**
- Deeply rooted **historical trauma**
- Societal and institutional **racism and discrimination**

These social and cultural contexts are shaped by a unique history that includes forced relocation; an intolerance of cultural beliefs, norms and practices; inconsistencies in federal policies enacted over several generations; unique environmental vulnerabilities; social narratives that exclude an accurate history of American Indian/Alaska Native people; a lack of understanding by public health practitioners and policymakers of federal Indian law, trust responsibility, sovereignty, self-determination and consultation policy; limitations in the quality of data and information available about American Indian/Alaska Native populations; environmental injustices.

All of these factors – compounded by geospatial challenges, inadequate national visibility and limited access or proximity to health care or medical services – reduce opportunities to achieve good health.

WHAT YOU CAN DO

There is hope. By acknowledging these social and cultural contexts, non-tribal partners can better address the resulting tribal public and environmental health concerns.

It is imperative that partners devise strategies and take action toward a healthier tomorrow for all. National nonprofit organizations, federal agencies and community groups can establish more effective relationships with tribal governments and tribal-serving organizations by:

- Learning and gaining confidence in working with tribal communities.
- Building awareness of social and cultural contexts
- Integrating tribal voices early and often.
- Building relationships with tribal governments and tribal-serving organizations in your region or area of work.
- Honoring cultural traditions and practices.
- Acknowledging historical trauma and tribal perspectives.
- Promoting policies that include and advance tribal public and environmental health.

Through efforts to build understanding of tribal public and environmental health issues and increase support for initiatives addressing these concerns, tribal communities can have a healthier future while preserving their cultural traditions and practices.



Priorities in Tribal Public and Environmental Health



RESULTING TRIBAL PUBLIC AND ENVIRONMENTAL HEALTH ISSUES

American Indian/Alaska Native people believe in providing sound environmental stewardship that preserves, perpetuates, protects and enhances natural resources and the ecosystem. The environmental injustices and lack of health equity that impact Indian Country need recognition, partners and action to remedy the deeply rooted social and cultural contexts that impact resulting tribal public and environmental health areas.



Food Sovereignty and Access

Access to nutritious, local, safe and traditional foods is critical to the health of tribal nations. Denial of healthy foods as a result of loss of land and traditional food practices increases reliance on processed foods, ultimately increasing the prevalence of chronic diseases like diabetes and obesity.



Infrastructure and Systems Development

Many tribes lack the capacity to develop public health service structures (i.e. systems, workforce, knowledge and policies) and the ability to conduct surveillance and produce unified data systems. Limited access to funding pathways complicates matters.



Climate and Health

Climate change significantly impacts tribal communities and their way of life. Tribal populations have been displaced, resulting in a shortage of housing and a threat to traditional food sources, medicines and ceremonies.



Resource Extraction

Resource extraction leads to contamination of tribal natural resources and living spaces; disconnection from the land resulting in the loss of traditions and cultural practices; contaminated foods; and social, spiritual and economic disintegration.



Clean Air

Clean air is essential to life, yet some tribal communities suffer from poor air quality due to environmental tobacco smoke, mold, formaldehyde, insulation, fires, particulates, airborne toxins and radon. Consequently, many tribal members suffer from cancer, respiratory health problems and more.



Clean Water

Many rural reservations are highly dependent on surface water sources, such as reservoirs, lakes and streams and groundwater. These water sources are susceptible to non-point source pollutants that enter waterways during heavy precipitation and storms, as well as contamination from resource extraction and industrial facilities.

This brief summarizes content from the report *Priorities in Tribal Public and Environmental Health (2018)*. The report and additional information on these topics can be found at www.apha.org/topics-and-issues/environmental-health/partners/think-tank



About the Tribal Public and Environmental Health Think Tank:

The TPEH Health Think Tank is a work group composed of professionals with diverse backgrounds in tribal public and environmental health. The group is focused on promoting the voice of tribal communities across the country as a strategy to raise awareness about and achieve improvements in the unique environmental and public health challenges faced by the communities they serve. The Think Tank is convened by the American Public Health Association with support from the Centers for Disease Control and Prevention's Office for State, Tribal, Local and Territorial Support.

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Appendix D: Opportunities for Action

There are several opportunities for the Think Tank to work with partners to advance the priorities listed in this document. Below is a list of opportunities for those interested in partnering with the Think Tank on social and cultural issues.

UNSAFE, INADEQUATE HOUSING

- Educate decision-makers about the disproportionate and detrimental housing crisis in Indian Country.
- Tell the story on housing inequities to a wider audience with the intent of elevating the issue for the masses through APHA's communications channels.
- Identify and strategically engage partners to leverage resources that will elevate the issues or mobilize action to reduce and prevent the housing inequities.

EDUCATION

- Encourage and promote the creation of model curricula for schools and programs of public health.
- Pursue the establishment of the curricula into the accreditation criteria offered through the Council on Education in Public Health.
- Network with partners such as Association of Schools and Programs of Public Health.
- Visit schools during in-person Think Tank meetings and talk with students about educational opportunities and public health.
- Identify a contact at CDC Foundation and discuss the opportunity to host paid stipends for AI/AN students for public health internships.
- Champion the impetus for incorporating subsistence living into educational curricula and adjust the school year to allow subsistence living practices.
- Spotlight communities through digital stories, issue briefs, articles or webinars.
- Support state statutes that require teacher education and cultural sensitivity regarding American Indians/Alaska Natives.

POVERTY

- Raise awareness of employment issues and potential solutions for economic development through tribal stories in the form of a brief, webinar or video.
- Support national, state and local workforce development initiatives specifically aimed toward American Indian/Alaska Native communities.

COMMUNITY INFRASTRUCTURE

- Develop a technical assistance guide for Tribal leaders.
- Navigate various infrastructure issues and demands.

- Reach the appropriate contacts for technical assistance and resources.
- Advocate for resources – funding, technical assistance, mentorship and more – to develop systems that best serve American Indian/Alaska Native communities and their unique needs.
- Raise awareness for the need for sustained infrastructure support, rather than grant-based, one time funding sources.
- Discuss a strategy to drive policy change that includes American Indian and Alaska Native leaders in key policy decisions around health of the country and Native health.

HISTORICAL TRAUMA

- Encourage CDC to continue offering the *Working Effectively with Tribal Governments* course to its staff and other federal and state agencies, or national partners.
- Develop community stories to highlight historical trauma.
- Identify measures (factors and symptoms) to help local communities understand historical trauma.
- Recognize the validation of historical trauma research and its relevance in mental and behavioral health treatment and recovery programs.

RACISM and DISCRIMINATION

- Crosswalk tribal consultation policies and practices with those of other governmental agencies, such as the Departments of Energy and Interior.
- Illustrate examples of organizational and structural racism in Indian Country from a tribal perspective in articles, documents, and/or webinars.

FOOD SECURITY

- Share stories on the effects climate change has on the very geosystem that plays a critical role in securing fresh, nutritious and traditional foods.
- Promote and raise awareness of traditional foods as a strategy to address poor nutrition.
- Identify research institutions that are collecting and preserving seeds and work with them to gain knowledge and resources.

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