

NATIONAL TRIBAL ENVIRONMENTAL HEALTH THINK TANK – Year 2

MEETING 2

February 21-23, 2013

Meeting Notes and Highlights

I. Overview

Fourteen National Tribal Environmental Health (NTEH) Think Tank members met for the second meeting in Albuquerque, New Mexico (see Appendix 1). Over the course of two days, the members identified top environmental health priorities and developed recommendations for strategies and products that the National Center for Environmental Health (NCEH) and Agency for Toxic Substances and Disease Registry (ATSDR) could implement to address those priorities. With all members of the Think Tank present, Meeting 2 allowed members to exchange knowledge and strengthen their relationships with one other, increasing the group's overall capacity.

DAY 1

II. Office of Tribal Affairs Updates

Annabelle Allison provided an update on OTA's activities. Since meeting 1 in November, Think Tank members' comments and feedback were incorporated into the OTA strategic plan. Further, Annabelle met with colleagues to ensure synergy between the OTA strategic plan and the overarching NCEH/ATSDR agency plan. The four objectives highlighted in the NCEH/ATSDR draft strategic plan line up well with the six pillars in the OTA draft strategic plan. Furthermore, the components of the OTA strategic plan emphasizing accountability, collaboration, innovation, equity, integrity, and respect were added to the NCEH/ATSDR draft strategic plan. In general, OTA will continue to communicate the need for activities that are specifically geared towards American-Indian/Alaskan Native populations.

Additionally, Annabelle commenced discussions with new partners. The Association for State and Territorial Health Officials (ASTHO), the Association of Maternal and Child Health Programs (AMCHP), the National Association of County and City Health Officials (NACCHO), and the National Association of Local Boards of Health (NALBOH) expressed strong interest in working with OTA. ASTHO has published a primer on tribal health for state health officials—it explores the history of health-related federal laws for tribal nations, discusses the role of the state health official in establishing partnerships with tribal nations, and provides tips on how to work successfully with tribes and tribal organizations (<http://www.astho.org/Programs/Health-Equity/Tribal-Health-Primer/>). Moving forward, OTA will seek to establish ties with professional interest groups and strengthen ties with the National Environmental Health Partnership Council.

OTA updates wrapped up with a discussion of the Think Tank's future. Everyone agreed that a third year is needed and provided feedback regarding what the goal of it should be:

- Communicate with tribal leaders to ensure their priorities are aligned with the Think Tank's priorities and that the group's products resonate with them.
- Focus on relationship building and develop a model on how to work with tribes for counties that have been mandated to do so.
- Look at other organizations that have successful models and build from there.

III. Reproductive Health Discussion

Katsi Cook, a former aboriginal midwife who is part of the St. Regis Mohawk tribe, presented information about environmental reproductive health and the importance of women-centered models of care. Katsi explained that from the centrist perspective, maternal and child health is a fragment of public health that includes preconception care, puberty, the reproductive years, and the child from birth to age five. Reproductive health, meanwhile, deals more specifically with reproduction and birth control. There are tribally-enrolled aboriginal midwives who are trying to create a space for the mother among medics. Katsi stated that from the tribal understanding of the Earth as Mother and as Woman, everything the mother sees, hears, and knows is transferred to the baby; consequently, to heal the child, one must heal the mother—the woman is the first environment.

Katsi emphasized not only the need to advance maternal and reproductive health and change the process of those frameworks within the federal agencies, but also the need to set a frame for health that focuses on the woman. In understanding environmental health, she stated that focus should be on those factors that influence women's health.

Although a mother's breast milk is not included in natural resource damage risk assessments, Katsi participated in a study involving Mohawk women and found that their breast milk and umbilical cord blood is contaminated; this has affected Mohawk women's menstrual cycle and caused all girls to experience early puberty, epigenetically programming them for reproductive failure.

Katsi conveyed the Environmental Protection Agency's (EPA) efforts to study the macroepigenetic model through an ecoAmbassadors program. EPA found that chemical compounds are an underlying cause of environmental reproductive health problems; its findings will be presented March 20th during a webinar to the Tribal Sciences Council. Katsi shared her involvement in incorporating tribes into the macroepigenetic study and securing funding to train tribal people on how to access organic foods. Her goal is to give the epigenetic model to the National Indian Health Board, IHS, organizations within tribes that can represent tribal communities, all the federal agencies, and the National Institute of Environmental Health Sciences, so that environmental health is viewed within the bigger picture of healing and culture. Katsi concluded her presentation by communicating the need for tribes to build from the bottom up and think about health care problems at the community level; she shared her belief that a respectful connection is needed between the health echelon and the community, as well as strengthened ties between tribal councils and the EPA regarding environmental health issues.

Comments and feedback following the presentation included:

- The Think Tank agreed that tribal communities need to reclaim the power of their own reproduction and find a way to bring back birthing in the community though it is not allowed under government contract money.
- Ralph McCullers cautioned that while scientific rhetoric and data around fish consumption and mercury levels is important, tribes should not lose sight of "place" and the importance of birth in place. He also highlighted that EPA stipulates how funds it provides tribes should be used, but tribes should be able to share their priorities as well and agree on what needs to be done.
- Several Think Tank members echoed difficulties in getting federal agencies to understand Indian culture and approve grants for traditional activities; there is a language that must be used in federal grant writing for an activity to be deemed appropriate, which often conflicts or does not fit into tribal language. Syndi Smallwood specifically noted challenges she had funding community gardens, and Jerilyn Church shared her difficulty getting a traditional dance class funded because it was not a traditional model of physical fitness, such as Pilates or yoga.
- Katsi shared that there is an opening for a tribal member on the Environmental Justice Advisory Committee and that although there is funding to collect data on tribal communities, funding is needed to evaluate tribal Rites of Passage and replicate successful activities in other communities.
- Esther Lucero drew attention to the problems of the siloed approach at the federal level and echoed the need to bring back the Rites of Passage, whose void Indian youth have filled with gangs.
- Isaiah Brokenleg expressed that sovereignty needs to be thought of on a different level—instead of the federal government prescribing what tribes should implement, tribes should be allowed to exert their sovereignty.
- Carol Rollins cautioned the group about getting too big in scope and suggested focusing on more attainable changes, sharing those success stories, and letting change spread from the grassroots level.
- Several Think Tank members stated the importance of implementable actions. Kristin Hill shared her excitement that the Think Tank was becoming more of a Do Tank and the group's potential to intervene and effect change.
- The Exposure Assessment Report on mercury can be viewed at www.cdc.gov/exposure.

This session concluded with Annabelle emphasizing that the Think Tank's purpose was to recommend specific, focused, and concrete activities that could be implemented within CDC and ATSDR. The priorities and concerns expressed by Think Tank members would guide priorities within the division, however prioritization, a phased approach, and incorporating partners were essential.

IV. Funding Recommendations Workgroup Update

Kristin Hill delivered a testimony to the Tribal Consultation Advisory Committee in 2010 regarding equity for American Indian applicants during CDC funding opportunities. Her message focused on the situation of tribal applicants and proposed recommendations that would allow tribes to be more successful and competitive in the funding process. During meeting 1, the Think Tank decided to build upon the existing recommendations and draft a formal recommendations memo addressed to the director of NCEH/ATSDR. Consequently, a workgroup consisting of Ramona Antone Nez, Kristin Hill, Carol Rollins, and Jerry Waukau was formed.

On February 11th, the workgroup held a very productive conference call and revised the draft recommendations. Everyone approved the original recommendations put forward by Kristin, but supplemental language and additional recommendations were added to emphasize the themes of reclaiming and self-determination. Based on comments

made by Think Tank members earlier in the day, the draft reflects the group's priorities and what they want CDC to consider when developing Requests for Proposals.

V. **Summary of Day One**

Discussions throughout day one highlighted potential areas where the Think Tank could make a difference. In preparation for day two, each Think Tank member was tasked with reviewing the 15 proposed priority areas and selecting his/her top eight priority issues.

Day 2

VI. **APHA Session Discussion**

The Think Tank was given the opportunity to do a staff-supported session at APHA's 141st Annual Meeting in Boston November 2-6, 2013, propose a special session, and provide speaker/topic suggestions for the closing session of the Annual Meeting.

Staff-supported Session:

The group decided to have APHA staff put forth a session that would highlight the work of Think Tank members. Staff-supported sessions attract 50-70 people on average and consist of 30 minutes of presentation followed by 15-20 minutes of questions. Suggestions for the session included:

- Focus on strength-based topics—topics that promote what is working and not just what is wrong
- Share what has transpired since the introduction of the Think Tank
- Share promising practices in tribal communities
- Communicate how to engage tribal leaders
- Communicate the message of self-determination

Closing Session:

The theme of the 2013 Annual Meeting is "Think Globally, Act Locally: Best Practices Around the World." The theme of the closing session is "Place Matters" and will focus on indigenous people's health. Think Tank members suggested Maria Braveheart, Evan Adams, Buffy Sainte Marie, Winona LaDuke, Wilma Subra, Dinah Bear, and Chief Theresa Spence as potential speakers. Think Tank feedback on content included the following:

- A segment from the documentary *History of the Iñupiat: Project Chariot*
- A focus on strength-based topics
- The history and trauma between the federal government and tribal people, as well as why it matters; WHY it matters being a potential overarching theme
- Environmental public health issues
- Intergenerational trauma and the need to focus on underlying causes, rather than just alcoholism and suicide
- Tribal sovereignty and need for self-determination
- Importance of trauma-informed care
- Violence Against Women Act and intricate laws regarding justice
- How "Place Matters" incorporates sacredness of place; tribal land is ancestral land and a sacred place of prayer with sacred medicines, so proposing that Native Americans "just move from the land" is an unacceptable solution to problems.

Audrey Solimon, an IHS employee and co-chair of the APHA AI/AN caucus' program planning committee, joined the meeting for this portion. She shared that the AI/AN caucus has been working for many years to get indigenous health included as a topic and that they made some initial recommendations for closing session speakers as well.

Audrey noted that every year the AI/AN caucus solicits abstracts for sessions and looks for ways to partner with other organizations. For the November 2013 conference, their submission process has already closed; however, Audrey expressed the caucus' willingness to support and promote the Think Tank's staff-sponsored session.

VII. **Presentation and Prioritization of Priority Issues**

The majority of day 2 was spent advocating for issue areas and narrowing down the list of priority issues from 15 to the Think Tank's top five. After a discussion about terminology and the need to address tribes' fundamental lack of public health system infrastructure and capacity, each Think Tank member voted on his/her top issues and the resulting top nine priority issues were:

- Tribal-specific Health Assessments
- Food (security, accessibility, community gardens, safety, adaptability)

- Clean Water
- Infrastructure/System Development
- Climate Change
- Clean Air
- Emergency Preparedness and Response
- Resource Extraction
- Cancer

For each priority issue, Think Tank members shared their reasoning with the group as to why it should be selected as a top issue; discussion highlighted how linked many of the issues were. A second round of voting then took place. The final list of priority issues chosen were:

- Food
- Resource Extraction
- Infrastructure/System Development
- Climate and Health
- Clean Air

The Think Tank decided to weave tribal-specific health assessments into the selected priority issues, rather than leave it as a stand-alone issue. Topics not chosen as a top priority were archived; they may be used in following years as a phased approach or pulled from if a funding opportunity arises. For the complete details of the prioritization process, please refer to Appendix 2.

VIII. Breakout Group Presentations

Following the Think Tank's selection of its top five priorities, Think Tank members divided into small breakout groups to develop concrete products that could help address each priority issue; each group also proposed a feasible project that could be done with a \$250,000 grant.

Food

Native populations exhibit a higher incidence and prevalence of metabolic syndrome, Type 2 diabetes, and obesity. These disease expressions are all lethal and preventable. Pre-conception choices and fetal development frequently drive these diseases. Native people often do not have access to local, traditional, healthy, and affordable foods.

Potential activities to address the issue:

- Trainings for tribal nurses and midwives, social workers, and tribal leaders in macroepigenetic model
- Funding and internships provided through OTA to develop best practices for climate and food and to reestablish the significance of traditional foods
- Development of emergency response plan and food preparation guidelines

The suggested products would enhance tribes' education and capacity, decrease their dependence on industrial foods, decrease their incidence of diet and food-related disease, and reduce the number of food deserts. With a \$250,000 grant, Ralph, Katsi, and Jerry decided to fund a tribe to partner with another tribe to share data and follow the macroepigenetic model for professional training and traditional food systems development.

Resource Extraction

Changes to land, water, and air resulting from resource extraction are impacting tribal health. 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. 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. Nevertheless, there is still a lack of accountability.

Potential products to address the issue:

- Policy briefs that assist agencies in working with tribes on specific impacts
- Templates for conflict avoidance agreements and legal agreements that ensure follow-up and accountability
- Internships to the communities facing issues
- Templates for sustainable restoration plans; sustainability plan development
- Strike team consisting of ATSDR and sister federal agencies that goes to tribes and provides tribal-specific risk assessments, thus strengthening tribal interests in resource extraction and ensuring tribal compensation
- Storytelling videos to spread the message about this issue

The suggested products would strengthen the tribal position on informed resource extraction; would enable better identification of environmental and human health risks and impacts; and would assist tribes to advocate for follow-up and the use of sustainable restoration alternatives (Brownfield approach). With a \$250,000 grant, Susan, Rosemary, and Ramona decided to assemble an ATSDR team of six that in cooperation with EPA would go to a tribe and do a tribal-specific health risk assessment to strengthen the tribe's voice. The team would assess the property and resource environment before and after extraction, develop a request for sustainable restoration plans before and after extraction, identify alternative sites for extraction, and complete a vulnerability assessment.

Infrastructure/System Development

When it comes to infrastructure, tribes span the spectrum in terms of needs. Many tribes lack the capacity to support the development of public health service structures (i.e. systems, people, knowledge, and policies); there are also many tribes that lack the ability to do surveillance and lack unified data systems. The lack of tribal communication infrastructure extends from lack of phones and internet to lack of GPS and 911. There is a need in tribal communities for infrastructure that promotes sustainability.

Potential products to address the issue:

- Technical assistance to support the development of data sharing agreements
- Workforce capacity building in epidemiology: expose tribal youth to public health at a young age; promote advocacy, epidemiology, and leadership in tribal colleges and other academic systems; connect tribes to universities for resources and incentivize internship programs; and fund a cultural exchange to ease the transition between academic and tribal communities.
- Funding for the development of EIS program dedicated to tribes and tribal organizations
- Non-competing access to high-level assignees for tribes and tribal organizations
- Technical assistance in relationship building with counties and states to prepare for accreditation of tribal public health departments
- Sharing of success stories (Cherokee Nation, Ho-Chunk Nation, and Navajo Nation)
- Policy recommendation related to tribal-specific health assessments
- Policy recommendation to prioritize the first one thousand days of life
- Expansion of Tribal Epidemiology Centers

With a \$250,000 grant, Esther, Jerilyn, Susan, and Carol decided to train representatives from each tribe in an IHS region on how to conduct their own environmental health assessment, and provide the Tribal Epidemiology Centers with the necessary resources and technical assistance to evaluate the data gathered.

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 extreme weather conditions; decreased food availability, inland water levels, and underground water aquifers; and non-native plant takeover. Consequently, tribal populations have been displaced, there is a shortage of housing, and traditional medicines and ceremonies are threatened.

Potential activities/products to address the issue:

- Partnerships with the Institute for Tribal Environmental Professionals and other organizations to further adaptation planning
- Memorandum of Understanding with Bemidji Area Office workgroup, which is currently addressing the issue
- Climate and health tribal toolkit to help tribes proactively address climate change
- Training and education for tribes on adaptation planning
- Tribal health impact surveillance system
- Showcase of tribal success stories
- Sample resolutions, policies, and ordinances
- Emergency declaration checklist; vulnerability assessment index
- Funding for tribes to pilot programs that conduct vulnerability assessments and develop climate and health tribal plans

The suggested products would enable tribes to proactively prepare for the impacts of climate change and help them develop emergency response plans. The potential exists to adapt CDC's existing vulnerability index to tribal communities. With a \$250,000 grant, Jennifer, Syndi, and Kristin decided to fund tribal pilot programs to conduct vulnerability assessments/indices and to develop a tribe-specific climate and health plan.

Clean Air

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, such as asthma and chronic lower respiratory disease, ear infections, heart disease, stroke, and poor immune response, which has led to work and school absenteeism.

Potential products to address the issue:

- Air quality testing and toolkit
- Policy template for smoke-free air
- Research demonstrating smoke-free air will not hurt commerce or casino revenue
- Research showing tribes how much could be saved from reduced catastrophic events (work absenteeism)
- Self-defense policies against industry and health impact assessments
- Police powers specific to tribes; education and toolkits on toxins (radon, mold, formaldehyde, etc)

The suggested products would motivate tribal leadership by demonstrating the cost savings and provide needed tools, education, and trainings for tribal communities and leaders. The potential exists to partner with the Public Health law Network and involve a Prevention Effectiveness Fellow in the research products. With a \$250,000 grant, Isaiah, Lorinda, and Sarah decided to develop and disseminate a policy, survey, and template toolkit for smoke-free air, and create and disseminate to Tribal Epidemiology Centers a formula to calculate the cost savings from reduced absenteeism and lower health care costs that could be achieved if the tribe became smoke-free.

IX. Summary of Day Two

Following the development of activities OTA could do under each priority issue, members identified next steps (see Appendix 3) and discussed the agenda for meeting 3, which will held in Rapid City, South Dakota. The entire Think Tank commented on the excellent productivity of meeting 2 and expressed excitement for meeting 3 and the potential impact of the group's future work.

APPENDIX 1: Meeting 1 Participant List

National Tribal Environmental Health Think Tank Participants:

- Rosemary Ahtuanguaruak, Barrow, Alaska
- Ramona Antone-Nez, Navajo Epi Center
- Isaiah Brokenleg, Great Lakes Inter-Tribal Epidemiology Center
- Jerilyn Church, Great Plains Tribal Chairmen's Health Board
- Katsi Cook, Woman is the First Environment Collaborative
- Susan Hanson, Shoshone Bannock Tribe, Idaho
- Kristin Hill, Great Lakes Inter-Tribal Epidemiology Center
- Jennifer Irving, Oglala Sioux Tribe
- Esther Lucero, Native American Health Center
- Ralph McCullers, Poarch Band of Creek Indians
- Carol Rollins, Ho-Chunk Nation Health Department
- Lorinda Sam, Tohono O'odham Nation
- Syndi Smallwood, Pechanga Band of Luiseno Indians
- Jerry Waukau, Menominee Nation

Invited Guests:

- Sarah Armstrong, Law Student, University of New Mexico Albuquerque
- Melinda Frank, Health Scientist, Native Diabetes Wellness Program, CDC
- Audrey Solimon, Health System Specialist, Indian Health Service
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- Annabelle M. Allison
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Senior Public Health Analyst, Public Health Law Program
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APHA Facilitators:

- Emma Din
Program Associate, Center for Public Health Policy
American Public Health Association
- Tracy Kolian
Deputy Director, Center for Public Health Policy
American Public Health Association

APPENDIX 2: Prioritization Process Discussion

After the initial round of voting, the priority areas received the following number of votes:

- Tribal-Specific Health Assessments: 17
- Food (security, accessibility, community gardens, safety, adaptability): 15
- Clean Water: 12
- Infrastructure/System Development: 12
- Climate Change: 10
- Emergency Preparedness and Response: 8
- Clean Air: 8
- Cancer: 7
- Resource Extraction: 7
- Clean Up/Restoration of Natural Areas: 6
- Suicide/Mental Health: 6
- Asthma: 2
- Mold: 1
- Injuries: 1
- Insect-Related Issues: 0
- Invasive Species: 0
- Emerging Industry Development: 0

Tribal Think Tank members then advocated for issues within the top nine about which they felt most strongly.

Tribal-Specific Health Assessments

Advocates: Susan Hanson, Rosemary Ahtuanguaruak, Kristin Hill, and Ramona Antone Nez

- Susan stated that tribal-specific health assessments are critical in identifying health outcomes as a result of environmental contaminants. In order to clean up a site, you have to have a risk. The agency that usually conducts assessments is the EPA, which has a western view of risk and does not uniformly assess across all the regions; although, they have guidance on conducting assessments, it is up to the local office to decide if they will consider tribal risk assessments. EPA is focused on conducting risk assessments in their traditional way and often ignores aspects culturally specific to the tribal community. For example, they may take a species not native to the area and use it as a model species and indicator all the way across the border. The danger is that if it is not tribal specific, exposures are missed and risks remain unidentified. And if you do not have a risk, you do not have a clean-up. The need exists to take into consideration what is happening in the community and how they are using things.
- Rosemary emphasized the importance of involving tribal people in the discussion. How tribal communities use food sources greatly impacts the study being generated. For example, averaging something over an entire year is very different than averaging it over the four months it is used, which leads to significant differences when evaluating impact.
- Kristin communicated another aspect of this priority issue, which is support for precautionary principles. She highlighted the need to identify risk before it happens and not just once it is a problem.
- Ramona stated that the position of the Navajo is to have a fully-funded Navajo risk assessment of uranium, so that the tribe can demonstrate their need and the impact on their people. Without the data to support assertions, no one will be held accountable. Moreover, tribal-specific health assessments could lead to additional environmental health impacts.

Existing health assessment models OTA could point to are St. Regis Mohawk Tribe's Cultural Damage Assessment, the assessments done around Superfund sites, and UC Berkeley's assessment tool around climate change. Tracy Kolian shared that EPA is currently expanding cumulative risk assessment efforts and a potential opportunity for the Think Tank could be to focus on a specific issue. Annabelle Allison communicated the significance this priority issue could have since ATSDR looks at exposures.

Food (security, accessibility, community gardens, safety, adaptability)

Advocates: Ralph McCullers, Katsi Cook, Esther Lucero, Rosemary Ahtuanguaruak, Syndi Smallwood, and Jerilyn Church

- Ralph stated that without food humans cannot survive. Looking at health, one of key places where humans and the environment interact is with food. Poor food quality and chemicals in food have lead to a myriad of health problems: diabetes, early maturation of girls, etc. Another issue is the security and availability of food sources. Climate change is preventing the growth of traditional foods and medicinal plants are now exceedingly rare. Addressing food safety and teaching tribal people how to adapt is crucial. If tribal food sources remain unprotected, starvation will become a bigger concern than obesity and diabetes.
- Katsi expressed that food includes breast milk and that implicated in this theme are clean air, clean water, and clean land. Indian culture and ceremonial life is based on the gardens. Furthermore, Indian political sovereignty depends on the cultural distinctiveness of the tribe. Tribes have a Rite of Passage and a large piece of the pedagogy is centered on the garden; cultural distinctiveness is based on the garden. Many important connections can be made to food, such as a child's improved mental function.

- Esther emphasized the importance of food in urban environments, particularly access to traditional foods and healthy foods. Poverty is a co-factor in the lack of health in tribal communities, so her organization supports community entrepreneurship; they only purchase items from tribal communities producing those foods.
- Rosemary communicated that grandparents are the first to give tribal individuals a taste of special tribal foods and that food ties into tribal stories of their lands and waters. The cultural significance of food and traditional knowledge tied to it underscore its importance. Rosemary shared her story of how she took advantage of the school yard habitat process to educate youth on both creating a sod house and use of root vegetation and traditional plants.
- Syndi stated that food and how tribes have been fed has been a form of genocide. Although tribes are starting to bring back traditional foods that were taken away, there needs to be an awareness that pushback still exists, such as the obstacle of including community gardens in grant proposals, and young tribal members need to be educated about the food struggle.
- Jerilyn shared her community garden story. It was implemented through her Detroit health center's youth program, but its impact was far-reaching. Crops from the garden were used in the center's diabetes classes and cooking classes; youth sold produce from the garden at the farmer's market and those earnings went into the youth fund; and elders in the community helped take care of the garden and could take what they needed. Furthermore, the center was allowed to grow traditional tobacco because it kept bugs away.

Infrastructure/System Development

Advocates: Carol Rollins, Ramona Antone Nez, Rosemary Ahtuanguak, Esther Lucero, and Isaiah Brokenleg

- Carol stated that most tribes do not have the infrastructure to do surveillance, analyze risk, and follow the health impact on members. Although Ho-Chunk nation tribes have basic public health infrastructure, they do not have a way to collect data.
- Ramona highlighted Navajo's lack of communication infrastructure. During emergencies, tribal members cannot call and say that they are at a specific address and when ambulances or fire trucks arrive, they may go down the wrong street because street names and numbers do not really exist.
- Rosemary emphasized the need to continuously train the community to build capacity and replace trained individuals that are recruited away from the village.
- Esther stated that Tribal Epidemiology Centers do not exist in California. Through a grant from SAMSHA, a data system is being created, but if Tribal Epidemiology Centers could be expanded that would be beneficial.
- Isaiah expressed the need to also think about human infrastructure. Reservations have high unemployment rates and good jobs require you to have a high level of education; tribal members need to be empowered and educated and then brought back to the community.

Various ongoing initiatives among Think Tank members' tribes underscored the full spectrum of infrastructure differences that exist across tribal groups. Cherokee Nation is working on accreditation and could be a good model; Navajo is trying to become a Department of Health so that it has more authority; Ho-Chunk Nation is working on public health accreditation; and Menominee Nation contracts a Human Service Board for services and is part of a Joint Public Health Board. Ralph suggested OTA build on work IHS has done and complete a thorough information gathering process that clarifies the infrastructure status of tribes and highlights where gaps exist.

Clean Water

Advocates: Ralph McCullers, Lorinda Sam, Syndi Smallwood, Rosemary Ahtuanguak, Ramona Antone Nez, Esther Lucero, and Jennifer Irving

- Ralph stated a need for reservations to develop their own water quality standard to protect what they have and the people who use it. Regarding activities that happen off the reservation but still impact it, this can be seen with drinking water. Chemicals are showing up in reservation water, which affects sovereignty, food, and emergency preparedness.
- Lorinda emphasized the importance of access to quality drinking water for community members. In Tohono O'odham Nation, there are 72 communities over 2.2 million acres. A utility authority provides water but it contains a high level of arsenic and bringing everything up to standard would be very costly. While work is being done to improve that, 150 homes do not have piped water at all because it needs to be pumped from outside into the home; many community members live in traditional homes that do not have indoor plumbing. Additionally, there are homes that do not have access to any type of water, so tribal members haul water to their homes. Moreover, in region 9, there are over 20,000 homes that lack access to good water.
- Syndi stated that her organization has produced a white paper of statistics on region 9 that demonstrates the disparity between funding states versus tribes (e.g. 18 percent of tribal homes lack access to water versus 1 percent of non-Indian

homes). The National Tribal Air Association also put together a document regarding air quality in tribal areas, which could be a good resource.

- Rosemary shared the difficulties her village faces getting a doctor to visit and getting correctly diagnosed for their illnesses. Although homes may have running water, when it freezes outside, no one has water. Rosemary advocated for ocean consideration and the importance of the Arctic Ocean to Alaskan tribes—it is not only a source for other waters, but also their garden and primary foods source. In Alaska, many concerns exist regarding water safety issues, such as threats to wet lands and protecting the water for fish passage. Rosemary also brought up how wildlife changes would increase invasive species and emerging pathogens.
- Ramona shared that on Navajo lands, many homes do not have running water or electricity. They use propane and haul water from contaminated sites, such as uranium waste areas; that water is then used as cooking water and drinking water for humans and animals alike. Navajo people are continuously affected by resource extraction and clean up. Ramona also discussed the difficulties Navajo people are having as a result of the Salt River project.
- Jennifer stated the importance of water extended to those who have lost access to water because wells have dried up from droughts.

Esther suggested using the staff-supported session at APHA's Annual Meeting to share what is occurring in tribal territory; she proposed making short, poignant "A Day in Indian Life" videos around air, land, and water issues. Her organization has a whole media team and would just need help editing, which CDC could provide. Potential also exists to show the videos during the Annual Meeting film sessions.

Climate Change (renamed Climate and Health)

Advocates: Kristin Hill, Syndi Smallwood, and Jennifer Irving

- Kristin expressed that climate change is not a regional issue but one that will impact everybody. Moreover, its impact will only continue to escalate, keeping it an increasingly emerging threat. Northern Wisconsin has been in a sustained drought for seven to nine years and the evidence is visible: hundreds of small lakes have dried up and those that have not are in danger of fish kills because they are too shallow; Lake Superior is at its lowest water level; and the algae blooms in the lake, which never previously existed, have affected fish consumption and wild rice production for tribes bordering the lake. Kristin stated that climate change is going to become more commonplace and costly and the issue weaves into everything (emergency preparedness, etc).
- Syndi emphasized the need to create an understanding of how the effects of climate change are affecting tribes. It is not commonly understood what adaptation means and how detrimental it could be to tribal culture.
- Jennifer expressed her view that this issue is a way the Think Tank and OTA can be a model to others. Indian way of life is changing because climate is changing (e.g. sun dance hotter and hunting grounds are different), and by selecting climate and health as a priority issue, the Think Tank can be the leaders, especially given their connection to Mother Earth.

Tracy mentioned that a connection could be made with people who sit on climate change committees—APHA has ties with those key people. Sarah highlighted that climate change could be the jugular argument for "why this matters."

Emergency Preparedness and Response

Advocates: Ralph McCullers, Lorinda Sam, Rosemary Ahtuanguaruk, Ramona Antone Nez, and Syndi Smallwood

- Ralph stated that emergency preparedness ties into climate change adaptation strategies. As climate change happens, tribes need to determine how they will deal with the changes and increasing number of natural disasters. He cited as an example the major hit Shinnecock Nation took from Hurricane Sandy. When tribes prepare for emergencies, Indian populations are restricted to the reservations; they need to be prepared for the aftermath of straight-line winds, dust or a heat storm. With flooding, there could be mold, contaminated water supplies, etc.
- Lorinda communicated that as most tribes have prepared emergency response plans for their communities, they have forgotten to look at continuity of operations. She expressed the need to not only prepare to help community members, but to also prepare for what will happen to the essential departments that maintain records and do daily operations.
- Rosemary stated the importance of tribal communities taking the process into their own hands, rather than letting others make decisions for them. She shared her experience living through an epidemic in her village and expressed that even in concerning situations, tribal people do not want to leave their homeland.
- Ramona expressed that Navajos are very poorly prepared and must deal with jurisdictional issues because they spread across three states. Moreover, if a situation necessitated accessing the national stockpile of medicines, the tribe would have to go through the state to make that request, which takes 48 hours, with no guarantee about when it would arrive.

- Syndi shared that the Sandy Act that passed finally made it possible for tribes to go directly to the president and declare tribes as nations of emergency. Some tribes have tribal emergency response commissions or groups, and some tribes have created pre-disaster mitigation plans with FEMA that are approved, but for tribes that do not have that it is a part of this priority issue as well.

Clean Air

Advocates: Isaiah Brokenleg, Ralph McCullers, Rosemary Ahtuanguaruak, and Syndi Smallwood

- Isaiah stated that the importance of clean air has a lot to do with asthma. Tribal communities have significant problems with clean indoor air because of tobacco; four out of the five leading causes of death in the Great Lakes and Great Plains regions are tobacco-related. Tribes are not protecting children or workers from secondhand smoke. A misperception exists that the majority of Indians smoke. Additionally, there are other air quality problems with industry that come into play.
- Ralph elaborated on the indoor air issue. Chemical contaminants, such as mold and phthalates from insulation, enter the body. There are also particulate-related illnesses due to increase in wild fires and straight-line winds. Disease modalities that had not typically been present in certain are having a distinct measurable impact.
- Rosemary stated that the natural movement of the air impacts everyone in many different ways and a change in those patterns would affect the ecosystem's balance. She also highlighted the Shell Air Quality Permit as an example of a good air quality process that has involved tribes.
- Syndi shared that in southern California urban sprawl has extended to the boundaries of reservations, bringing with it the most polluted air in the country and negative health impacts. She expressed that tribes need regulatory authority and clean air is a top priority because one can only survive minutes without air.

Chinyere highlighted that clean air would be a good priority issue since the interventions could be easily evaluated, documented, and replicated.

Resource Extraction

Advocates: Rosemary Ahtuanguaruak, Isaiah Brokenleg, Jennifer Irving, Jerilyn Church, Susan

- Rosemary shared her frustrations that outsiders come onto tribal lands, change and/or contaminate the land and water, and then leave tribes with the damage. Permits are issued with guidelines, documents have been created, and a process of checks and balances exists, but the reality is that it is not enforced. She also added that within each permit health protections need to be included.
- Isaiah stated that this priority issue includes extraction of wood, gas and oil, uranium, mining, phosphate, and fracking; it could also cover aquifers if water is viewed as a resource.
- Jennifer expressed the need to guide tribes on how to fight fracking on their land and protect their mineral rights. As a possible product, she suggested a list of questions or considerations of which tribes need to be aware.
- Jerilyn highlighted the need for policy development on federal trust lands and policy enforcement. She mentioned that resource extraction can be economically beneficial to tribes and still happen in a way that is sustainable.
- Esther highlighted the connection between resource extraction, sustainability, health and risk assessments, and clean-up and restoration. She emphasized the need for adequate planning and suggested the creation of a tool that tribes can reference and a guide to others on how to abide by the laws of the tribal community.

Cancer

Jerilyn stated that the cancer issue was a downstream effect of other priority areas and could be included in actions for those, so she removed it from consideration.

After a second round of voting, the priority areas received the following number of votes:

- | | |
|---------------------------|--|
| • Food: 13 | • Clean Air: 9 |
| • Resource Extraction: 12 | • Tribal-specific health assessments: 8 |
| • Climate and Health: 10 | • Clean Water: 7 |
| • Infrastructure: 10 | • Emergency Preparedness and Response: 1 |

The top five priority issues were selected as the areas the Think Tank would focus on.

APPENDIX 3: Next Steps

EH Tribal Think Tank Meeting 2 Next Steps		
Task	Date	Responsible
Development of staff-supported session at APHA Annual Meeting	March/April 2013	Chinyere Ekechi/Emma Din
Conference call to discuss APHA session	April 2013	Esther Lucero, Ralph McCullers, Jennifer Irving, Kristin Hill, CDC and APHA staff
Conference call for progress report from APPLETREE staff and funding recommendations comments	May 2013	ATSDR APPLETREE Staff/Annabelle Allison
Share list of CDC Tribal Advisory Committee members with Think Tank	May 2013	Ramona Antone-Nez/Annabelle Allison
Finalize guidance document to increase tribal eligibility, improve tribal applications and increase tribal awards for RFAs/RFPs	May 2013	Think Tank members
Water, sanitation and hygiene project funding opportunity announcement	Spring 2013	CAPT Gelting/Annabelle Allison
Develop a draft matrix of tribal priorities and NCEH/ATSDR resources	June 2013	CDC staff to create initial draft to share
Create an appendix of tribal organizations and relevant organizations (potential partners)	June 2013	Think Tank members and CDC staff
Produce document for Dr. Monroe on tribal consultation policy	June 2013	Jerilyn Church/CDC staff
Assess the National Environmental Health Partnership Council's knowledge around tribal issues and strengthen ties with group	Summer 2013	Kristin Hill and APHA
APPLETREE RFP for 3-year funding opportunity announcement	Summer 2013	ATSDR APPLETREE staff/Annabelle Allison