

PEPH webinar highlights tribal efforts to address environmental justice and public health

By Audrey Pinto

Three researchers, each of whom brought a unique perspective, came together to highlight environmental justice and health disparity issues, and their ongoing efforts to heal affected Native American communities. The NIEHS Partnerships for Environmental Public Health (PEPH) webinar Aug. 21 offered important insights into the tribal perspective on these important topics, and the research programs that may begin to address them.

Presenters included grantees [Johnnye Lewis, Ph.D.](http://hsc.unm.edu/pharmacy/science/JohnnyeLewis.shtml), research professor and director of the Community Environmental Health Program at the University of New Mexico; Assistant Professor [Annie Belcourt, Ph.D.](http://pharmacypractice.health.umt.edu/users/anniebelcourt), of the University of Montana, whose areas of emphasis include mental health and health disparities in American Indian communities; and [Clarita Lefthand-Begay](http://claritalb.org/), a Ph.D. candidate at the University of Washington, working in the areas of self-determination, environmental health stewardship, and water health disparities.

Building on the NIEHS commitment to support research initiatives to identify environmental components of health disparities, Lewis, Belcourt, and Lefthand-Begay presented informative case studies, showcasing their efforts to promote environmental and public health awareness. These narratives underscored the ongoing efforts by many tribal groups to mobilize collaborative community efforts to identify causes of environmental contaminants and their health-related effects; educate their local communities about the public health impact of these contaminants; and change patterns of exposure.

The talks also highlighted the importance of incorporating the traditional knowledge of tribal leaders and healers from different tribal groups, when considering how best to address environmental health disparities

Water is sacred - it is the most essential element of life

In her opening remarks, Lewis stressed that water is sacred to the very existence of Native tribes. Yet, many in the Navajo communities she works with do not have access to safe public water supplies, and routinely use unregulated water sources that are not regularly tested or treated.

Over the past decade, researchers from the [DiNEH Project](http://hsc.unm.edu/pharmacy/healthyvoices/Dineh_Project.html) and government agencies, including the U.S. Environmental Protection Agency and the Centers for Disease Control and Prevention Agency for Toxic Substances and Disease Registry, have tested numerous water sources on tribal lands and found them contaminated with a mixture of toxic substances, including mercury, arsenic, uranium, selenium, thallium, and lead. Lewis pointed out that this legacy of exposure is associated with an increased risk of hypertension, autoimmune diseases, kidney disease, and lung cancer, but few tribal environmental programs have the expertise or funding to support broad-based research efforts to address this contamination.

The role of digital storytelling in public health education, promotion, and healing

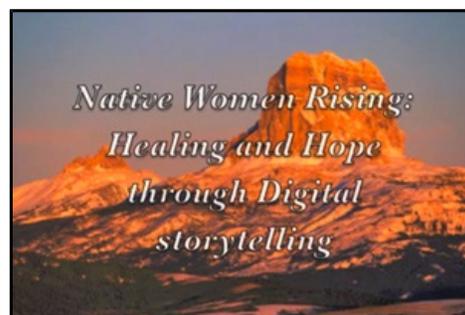
In her presentation, Belcourt noted that American Indians and Alaska Natives (AIANs) experience significant poverty and associated health disparities, including high rates of mortality due to poor air quality in homes from tobacco use, wood stoves, and mold; poor water quality, because many communities lack access to adequate water supply and waste disposal facilities; and a lack of public safety.



Tribal members, such as the man shown, test the water on Navajo lands, to make sure it is safe for their cattle and themselves. (Photo courtesy of Johnnye Lewis)



Lefthand-Begay used photos of tribal members in this slide illustrating a Native American conference about climate change. (Photo courtesy of Clarita Lefthand-Begay)



This photo and text from Belcourt's presentation expressed the role of Native American women and love of land in promoting environmental justice. (Photo courtesy of Annie Belcourt)

Belcourt discussed several ongoing collaborative projects designed for promoting healthy communities and protecting the local tribal lands for future generations, through education in culturally relevant formats. Through social media and the power of digital storytelling, AIANs are producing culturally sensitive health messaging that incorporates tribal ecological knowledge and a community-centered strategy to improve public health, prevent disease, and protect future generations. Recent examples of these projects include [Save Our Sacred Chief Mountain](https://www.facebook.com/SaveTheSacredChief), (<https://www.facebook.com/SaveTheSacredChief>) [Fracking the Blackfeet Nation](http://www.youtube.com/watch?v=Z9f5yySMqDw), (<http://www.youtube.com/watch?v=Z9f5yySMqDw>) and a [series of stories](https://www.youtube.com/user/anniebdnative/videos) (<https://www.youtube.com/user/anniebdnative/videos>) created by Belcourt.

Self-determination and connection to land and water

The final presentation, by Lefthand-Begay, discussed the importance of self-determination, and the need for structured decision-making regarding indigenous water values. To build trust among Native American populations, Lefthand-Begay proposed that the federal government should support and honor tribal self-determination and treaty-protected rights to access cultural resources within the boundaries of tribal lands. To strengthen ties between Native American tribes and federal agencies, Lefthand-Begay noted that the knowledge, skills, and values of indigenous communities should be reflected in decisions and policies that affect American Indian communities.

(Audrey Pinto, Ph.D., is technical editor for the journal Environmental Health Perspectives.)

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