Health of children in Alaskan indigenous communities improved through reductions in indoor airborne contaminants

2013–2014 Project

Improving Indoor Air Quality to Reduce Exposure to Airborne Contaminants in Alaskan Native Populations and Other Indigenous Communities in North America

This project demonstrated that education, along with no-cost or low-cost home modifications, such as replacing inefficient wood-burning stoves and improving home ventilation, can reduce the need for respiratory medical care in Alaskan Native populations by reducing exposure to airborne contaminants in homes. The methodology and results from this pilot project can be used to make policy recommendations and help guide decisions in future healthy homes projects in North America. For example, lessons learned about the effects of improved ventilation and efficient heating devices on indoor air quality, along with best practices for community education to ensure the long-term sustainability of such interventions.
Key Accomplishments

- Reductions in indoor contaminants and a decrease in the number of hospitalizations and missed days of school of 211 children in 63 households and eight communities in the State of Alaska

Products

- Development of a healthy homes study protocol, along with information and home/health assessment tools, enabling the replication of this project in communities in Canada and Mexico
- Project results were disseminated to an audience of stakeholders from the three countries (academia, indigenous representatives) through a CECTalks webcast
- Meeting with Canadian researchers, government and aboriginal representatives to present project results and lessons learned, and exchange information on best practices on similar projects

Partners, Stakeholders and Beneficiaries

The main partner in this project was the Alaska Native Tribal Health Consortium, which implemented the project. Other partners include Alaska’s 220+ Native Villages and their Tribal Councils and regional health corporations, the Denali Commission, the Alaska Energy Authority, the North American Network of Paediatric Environmental Health Specialty Units, the Alaska Housing Finance Corporation, US Environmental Protection Agency’s Office of Children’s Health Protection; Alaska Offices of Housing and Urban Development, Health Canada’s First Nations and Inuit Health Branch; and US Centers for Disease Control and Prevention. Relevant stakeholders include indigenous and northern communities across North America, the research community, and decision-makers at national and subnational levels.

About the CEC

The Commission for Environmental Cooperation (CEC) was established by the governments of Canada, Mexico and the United States through the North American Agreement on Environmental Cooperation, the environmental side agreement to NAFTA. An intergovernmental organization, the CEC is composed of a Council of cabinet-level environmental officials from the three countries, a Joint Public Advisory Committee and a Secretariat that provides operational support for cooperative work between the three countries. The organization brings together citizens and experts from governments, nongovernmental organizations, scientists, researchers and businesses to seek solutions to protect North America’s shared environment while supporting sustainable economic development.