

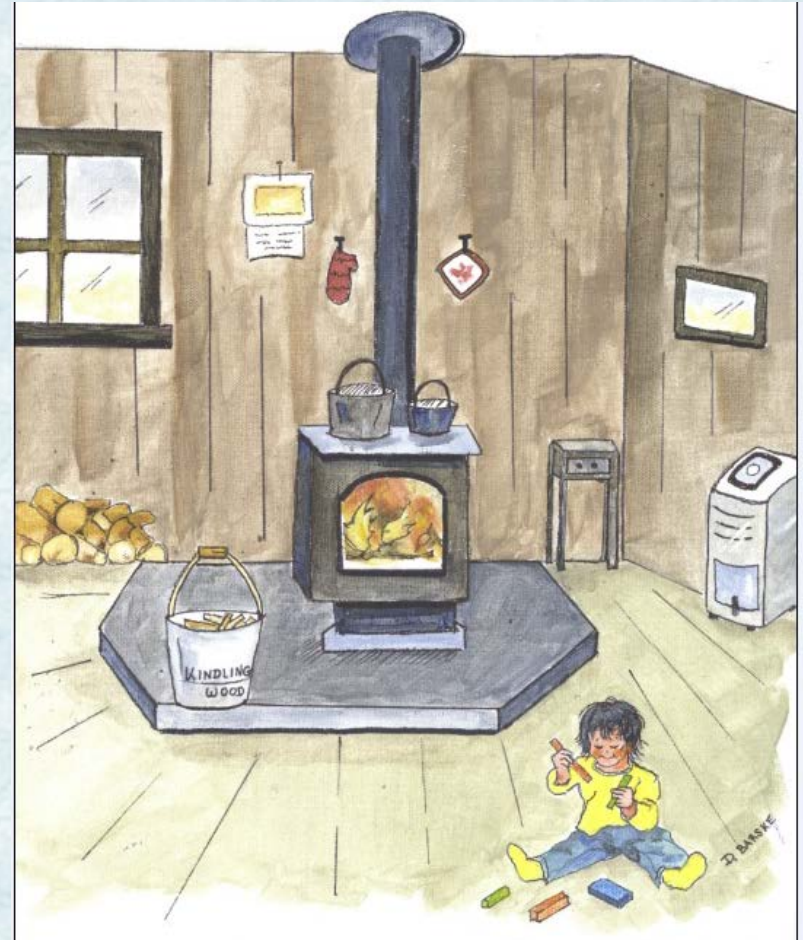
Improving Indoor Air Quality in Alaskan Native Populations and Other Indigenous Communities in North America



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Goal

- Reduce the need for respiratory medical treatment among high risk children



Approach

- Identify children with a history of serious and frequent respiratory problems
- Perform targeted interventions to improve indoor air quality
- Collect air quality and lung health data

Typical Rural Alaska Homes





Mold & Moisture









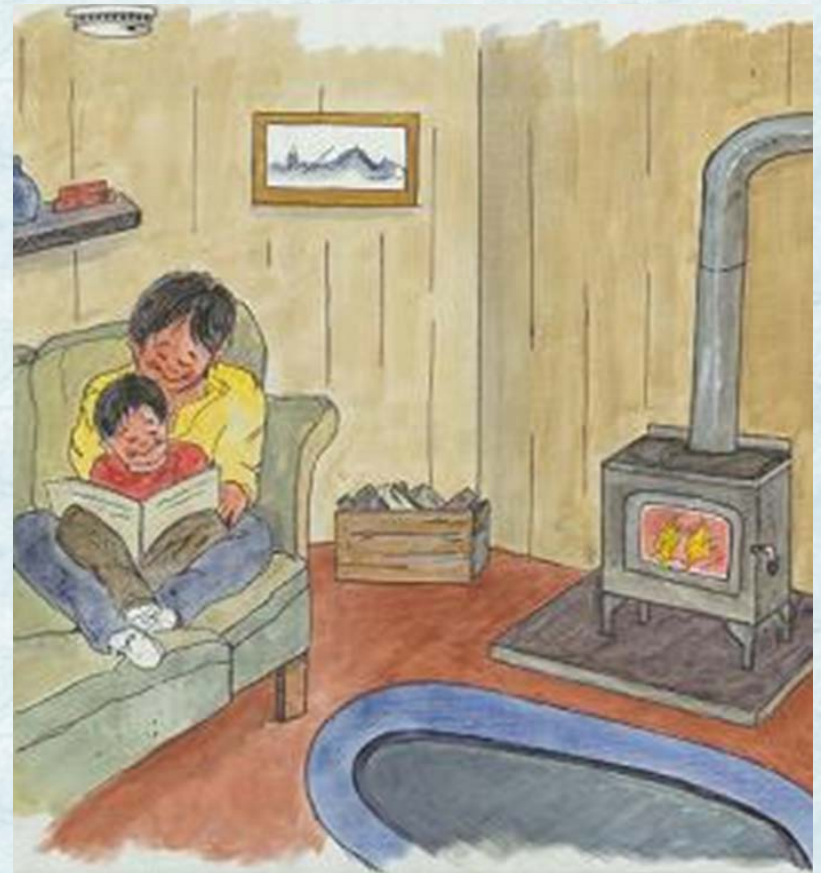






Preliminary Results

- Process outcomes
- Air quality
- Respiratory health







Monitoring Air Quality





Impact on Indoor Air Quality

- 26% decrease in carbon dioxide
- 68% decrease in VOCs
- 21% decrease in PM 2.5

**Results from monitoring conducted in 4 day periods immediately pre- post intervention.
Preliminary.*

Impact on Respiratory Health

- Clinic visits
- Hospitalization
- Missed school



Impact on Child Health

- Clinic visits (**18 pre vs 9 post**)
- Hospitalization (**7 pre vs 0 post**)
- Missed school (**16 pre vs 12 post**)

**Self-reported data from caregivers, 2 weeks pre- and post intervention. Preliminary.*

Impact on Adult Health

- Clinic visits (**9 pre vs 1 post**)
- Hospitalization (**3 pre vs 1 post**)

**Self-reported data from caregivers, 2 weeks pre- and post intervention. Preliminary.*

Disclaimer from 2012 Presentation

Additional years are needed to determine effectiveness of the interventions. Future activities include review of medical records to confirm the self-reported data and comparison of results with a control group.

**The key message for today is that we are closer to having a final result but there's more work to be done!*

Thank You!

- Commission for Environmental Cooperation
- Partners in Mexico and Canada
- EPA Children's Health
- EPA Region X Tribal Air Quality
- CDC Arctic Investigations Program
- Yukon Kuskokwim Health Corporation
- Bristol Bay Area Health Corporation
- HUD
- Tribes and participants