

TRIBAL SCIENCE COUNCIL
FALL 2015 BUSINESS MEETING

Children's Health and the Environment

U.S. Environmental Protection Agency

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The earth does not belong to man.

Man belongs to the earth.

All things are connected like the blood which unites one family.

Man did not weave the web of life.

He is merely a strand in it.

Whatever he does to the web, he does to himself.

Chief Sealth of the Duwamish Tribe, 1853

Federally-recognized Tribes: Trust Responsibility

- Federal Indian trust responsibility is a legal obligation under which the United States “has charged itself with moral obligations of the highest responsibility and trust” toward Indian tribes (Seminole Nation v. United States. 1942, first discussed by Chief Justice John Marshall in Cherokee Nation v. Georgia, 1831).
 - Legally enforceable fiduciary obligation on the part of the United States to protect tribal treaty rights, lands, assets, and resources, as well as a duty to carry out the mandates of federal law with respect to American Indian and Alaska Native tribes and villages.
 - Legal duties, moral obligations, and the fulfillment of understandings and expectations that have arisen over the course of the relationship between the United States and the federally recognized tribes.



Children's Environmental Health

Why is children's environmental health important?

- Children are uniquely vulnerable to environmental hazards. Exposure to environmental contaminants can cause irreversible damage during important periods of growth and development.
- A healthy environment for children is one in which environmental conditions ensure that children have the opportunity to reach and maintain their full potential.

There is now recognition of:

- special vulnerability of children and developing fetuses to toxicants and physical agents
- effects depend upon: toxicity, dose, timing and amount of exposure
- effects are exacerbated by:
 - poverty
 - malnutrition
 - degraded environments
 - stressful circumstances
 - historical trauma



WHO

Climate Change

Climate change is happening now...

- This past year (2014) was the hottest on record
- Worsening smog (also called ground-level ozone pollution)
- Increasing intensity and number of extreme weather events
- Increasing the range of insects that spread diseases
- Increasing allergy seasons

Impacts on Children's Health

The effects of climate change exacerbate existing health risks:

- More asthma attacks
- Increases in the range of insects that spread diseases such as West Nile
- Over 9,000 U.S. high school athletes treated for heat illness each year
- In the past decade, deaths of high school and college football players due to heat stroke doubled

Climate Change and Tribes

Climate Change Affects Tribes Nationwide



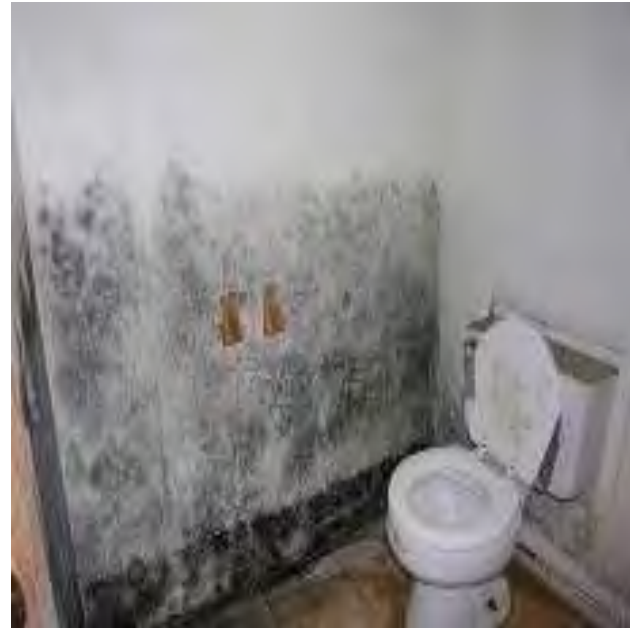
Environ Health Perspect 118:a64-a65 (2010). <http://dx.doi.org/10.1289/ehp.118-a64> [online 01 February 2010]

Health Problems Associated with Molds and Moisture

- Nose and throat irritation and congestion
- Coughing
- Asthma symptoms
- Pulmonary hemorrhage (in infants heavily exposed to certain molds)



Hazards to Avoid



- Exposure to both tobacco smoke and molds in the same home appears to be very hazardous

Climate Preparedness and Resilience



President Obama established a State, Local, and **Tribal Leaders** Task Force on Climate Preparedness and Resilience in 2013.

Tribal leaders across the country identified 4 needs:

1. Better access to data, information and Federal programs, and improved inter-jurisdictional coordination;
2. Promote Tribal inclusion and participation in preparedness and recovery decision making;
3. Address the lack of institutional capacity; and
4. Improve community education and its effects on community planning.

Federal Actions: President Obama's Climate Action Plan

- Cuts Carbon Pollution in America
- Prepares the United States for the Impacts of Climate Change
- Leads Efforts to Address Global Climate Change



“While no single step can reverse the effects of climate change, we have a moral obligation to future generations to leave them a planet that is not polluted and damaged. Through steady, responsible action to cut carbon pollution, we can protect our children’s health and begin to slow the effects of climate change so that we leave behind a cleaner, more stable environment.”

-President Obama’s Climate Action Plan

Current EPA Tribal Program Efforts:

- **Federal Tribal Collaboration – Healthy Homes Initiative:**
 - Housing and Urban Development (HUD)
 - Indian Health Service (IHS)
- **Coastal Erosion Workgroup – Chaired by HUD & DOI –**
 - Many agencies participating, including EPA R10 Alaska Operations Office and many of our Alaska partners
- **Tribal IAQ Cooperative Agreements/Grants:**
 - Northern Arizona Univ./Institute for Tribal Professionals (NAU/ITEP)
 - Upper Mid-West American Lung Association (ALA)
 - Radon Tribal Grants
- **Tribal Stakeholders/Partnerships:**
 - National Tribal Air Association (NTAA) – IAQ Subcommittee Workgroup
 - Tribal Green Building Code Toolkit/Workgroup
 - Tribal Healthy Homes Northwest (THHNW)
 - Alaska Native Tribal Health Consortium (ANTHC)

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[HTTP://WWW2.EPA.GOV/CHILDREN](http://www2.epa.gov/children)

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Additional Information

- Children's health and air quality: <http://www2.epa.gov/children>
- Actions EPA is taking to address outdoor and indoor air pollution
 - Ozone: <http://www.epa.gov/air/ozonepollution/>
 - Particle pollution: <http://www.epa.gov/particles/>
 - Mercury: <http://epa.gov/mercury/>
 - Lead: <http://www2.epa.gov/lead>
 - Asthma and indoor air triggers: <http://epa.gov/asthma/>
 - Radon: <http://epa.gov/radon/>
 - Clean Power Plan: <http://www2.epa.gov/carbon-pollution-standards>
- Climate Adaptation and Resilience: <http://epa.gov/climatechange/impacts-adaptation/>
- Climate Resilience Toolkit: <http://toolkit.climate.gov/tool/climate-resilience-alaskan-communities-catalog-federal-programs>
- Student Curriculum: <http://www2.epa.gov/children/student-curriculum>

Mold and Moisture Resources

- Indoor Environments Division Mold Website: www.epa.gov/mold
- HUD Healthy Homes Mold/Moisture Website: http://portal.hud.gov/hudportal/HUD?src=/program_offices/healthy_homes/healthyhomes/mold
- Mold Remediation in Schools and Commercial Buildings: www.epa.gov/iaq/molds/mold_remediation.html
- New: A Brief Guide to Mold, Moisture, and Your Home: www.epa.gov/iaq/molds/moldguide.html
- Guidance for Clinicians on the Recognition and Management of Health Effects Related to Mold Exposure and Moisture Indoors: www.oehc.uchc.edu/cieh.asp
- National Academy of Sciences Damp Indoor Spaces Report: <http://books.nap.edu/catalog/11011.html>
- IAQ Scientific Findings Resource Bank - Indoor Dampness, Mold, and Health: www.iaqscience.lbl.gov/dampness-summary.html
- Online mold course –Introduction to Mold and Mold Remediation for Environmental and Public Health Professionals: www.epa.gov/mold/moldcourse/index.html