Intersections of Urban Indian Health and Environmental Health: Data, Programming, and Partnerships

Webinar One
Introduction to Urban Environmental Health and Community Partnerships
Today’s presentation

- Setting the Context for Health
- Introduction to the Health Impact Project
- Environmental Health & the city of Minneapolis
  - *Urban Environment and Health* - How do urban environments affect health?
  - *Responding to Environmental Issues* - How can Urban Indian Organizations detect and respond to environmental issues?
  - *Building on Partnerships* - How can innovative partnerships promote healthy environments?
What makes us healthy?

What Makes Us Healthy
- Genetics 20%
- Environment 20%
- Healthy Behaviors 50%
- Access to Care 10%

What We Spend On Being Healthy
- Medical Services 88%
- Healthy Behaviors 4%
- Other 8%

Source: Bipartisan Policy Center
Our Team
Urban Environmental Health & Community Partnerships in Minneapolis
Urban Environment and Health

Two major “legacy” issues:
Lead
Asthma

One major emerging issue:
Climate Change
Age of urban environment: 1900-1940
Leaded History

Lead Poisoning Minneapolis 1989-2017
Enforcement Blood Lead Level Varied
Over Time from ≥ 20 μg/dL to ≥ 5 μg/dL

Legend
- Neighborhoods
- Bottineau, Hawthorne, McKinley, and Sheridan Neighborhoods
- Green Zones
- Northern Metals

Count of Lead Poisoned Children Per Block
- 1 - 5
- 6 - 10
- 11 - 15
- 16 - 19

Lead Poisoning Minneapolis 2015-2018
Enforcement Blood Lead Level ≥ 5 μg/dL

Count of Lead Poisoned Children Per Block
- 1
- 2 - 5
- 6 - 10
- 11 - 15
- 16 - 19
Variety of sources for lead exposure

- Powder make up and medicine
- Ceramic cookware
- Food ingredients
Asthma

Asthma Hospitalizations, by Zip Code
Children (0-17 years), 2010-2014
Average of hospitalizations = 762 per year

Count of asthma hospitalizations:
- 27 - 62
- 63 - 90
- 91 - 190
- 191 - 473
- No data
# Asthma - Indoor Air Quality

**What we review**

- Combustion by-products
- Dust mites
- Mold caused by water intrusion
- Pests (cockroaches, rodents)
- Furry pets
- Secondhand smoke
- Volatile Organic Compounds

**What we provide**

- Quantitative review of interior and exterior of home through visual assessment and resident questionnaires
- Qualitative review of home using moisture meters, CO detector, PM2.5/10 meter, hygrometer
- Products to reduce triggers – dehumidifier, air purifier, HEPA vacuum, smoke/CO detectors, furnace air filter, hypoallergenic mattress and pillow covers, IPM services
Respond to Environmental issues: Communication strategies

1. Find common ground
   • Community educators or public health agencies
   • Photos
   • Building a knowledge bank

2. What is being used and how?
   • Unique behaviors of child
   • Ruling out other sources

3. Demonstrate empathy
   • Does the product or tradition hold significance?
     • “Mom or grandmother used to give me this”
   • Access to new behaviors
Building on Partnerships

• With residents
• With community organizations
• With funders
Partnerships: Working With the Community

--Climate Change Resiliency
--Community Supported Agriculture
--Block-by-block Lead Testing & Education
Community Supported Agriculture

- Determine feasibility of soil amendments for changing climate
- Reduce bioavailability of heavy metal contaminants
- Utilizing soil components to honor cultural practices (slash & burn, regenerative ag)
- Promote healthy eating with vegetable varieties from native lineages
24th Street Urban Farm Coalition welcomes you to our Agricultural research site!

This project is a collaboration with the City of Minneapolis Health Department Lead-Free housing project and the University of Minnesota Soil, Water & Climate Research Institute. It is made possible by a generous grant from the Minnesota Department of Agriculture.

We are growing a variety of fruits, vegetables, medicinal and pollinator plant species that are native to Minnesota. Our main research objectives are:

1. How these specific plants & their arrangement affect heavy metals or other toxins in the soil.
2. If including perennials on an once empty lot can sequester carbon and improve air quality in the city environment.
3. How Urban Farming can provide economic services to the community.

Research conducted by the UMN will measure: Crop yield & nutritional values, Soil health & bioavailability of heavy metals, Microbial community, Insect biodiversity, Water quality, Ambient temperature and Soil gas respiration. This research was made possible by a grant through Sustainable Agriculture Research & Education (SARE).

This summer we will be holding business classes beginning mid July. Check the Mashikiki Giligan’s or 'Watte Houses’ Facebook page, or this bulletin board. These classes will focus on creating a food specific business plan and participants will leave with a plan in hand. These classes are free and open to the public, please notify us if you need child care.

If you're interested in learning more please contact: MicheleM@pillsburyunited.org or EthanN@pillsburyunited.org.

We’d love to see you in the garden!

If you want to help out in the garden, please be mindful of the plants. We always need help weeding, but if you don't know what it is, wait to pull it until you know for sure.

Thank you!
Block-by-block lead testing
Minneapolis City Blocks Where Children Under Six Years Old Were Poisoned By Lead At A Level of ≥5μg/dl, 1999-2014
Climate Change Resiliency: Little Earth Partnership

- Develop and implement on MOU related to emergency preparedness and response
- Collaborate with LERA to provide education on health related impacts of climate change.
- Provide in-home assessments for energy usage and health hazards
- Installation of solar powered energy system and battery storage
Thank you For Attending
Questions?