# Homes-In-Profile Household Observation of Pollutants

HIP-HOP-Air

An EHFC, Concordia and U of A collaborative study on Indoor air

2023-2024









### What is ChEHC?

### Children's Environmental Health "Clinic"

### Clinical Arm

Research Arm

The ChEHC sees individual patients

The team educates community and health care providers

Collaborative research
Environmental Health
focus

### What is EHFC?







Charitable division of CIPHI

Founded in 1989

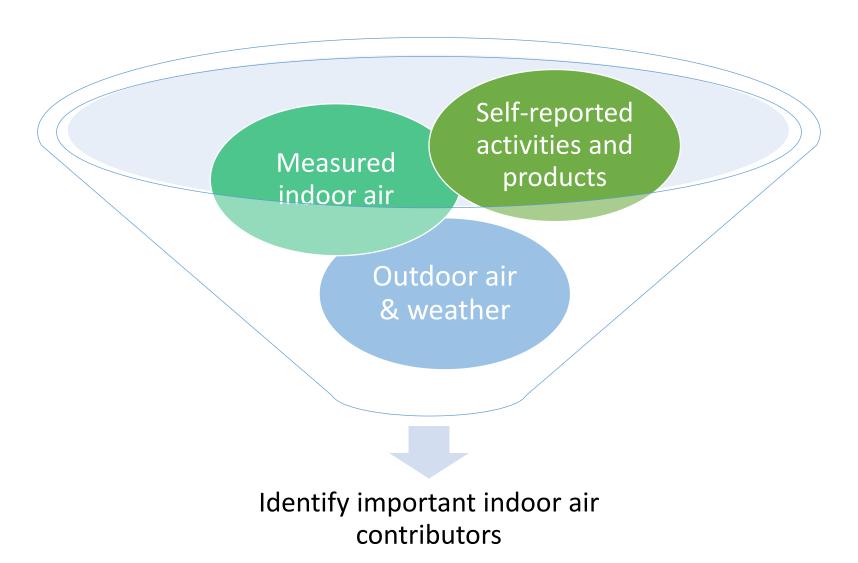
Volunteer board of Trustees

Supporting Environmental Public Health Protection in Canada and internationally through the development of educational materials and aid projects with partner organizations

## How this partnership came to be

- Each year EHFC chooses a domestic or international aid project to support.
- Up to \$5000.00 is available for aid projects depending on fundraising efforts
- The board approached ChEHC
- The board also wanted to involve students in this amazing opportunity

# What is the HIP-HOP Air study?

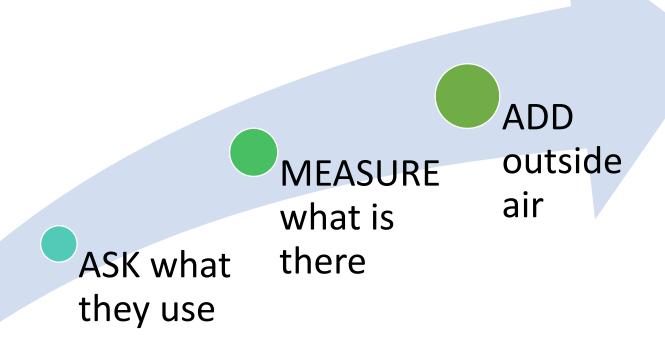


# The HIP-HOP Air questions

### **Problems:**

- Every home is different
  - >50,000 chemicals in products for home use
  - Cooking, cleaning, activities vary
- Nobody knows about:
  - What gets into the air?
  - Which chemicals are linked to health outcomes?

# The HIP-HOP approach to answers



100

homes

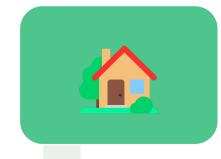
### **Project "deliverables"**

- IDENTIFY chemicals commonly found in home air
- LINK them with selfreported products and activities
- Start a "LIBRARY" of these chemicals for future research

# Why 100 homes? Why you?



An American Thoracic Society team identified that little is known about indoor chemicals or use patterns

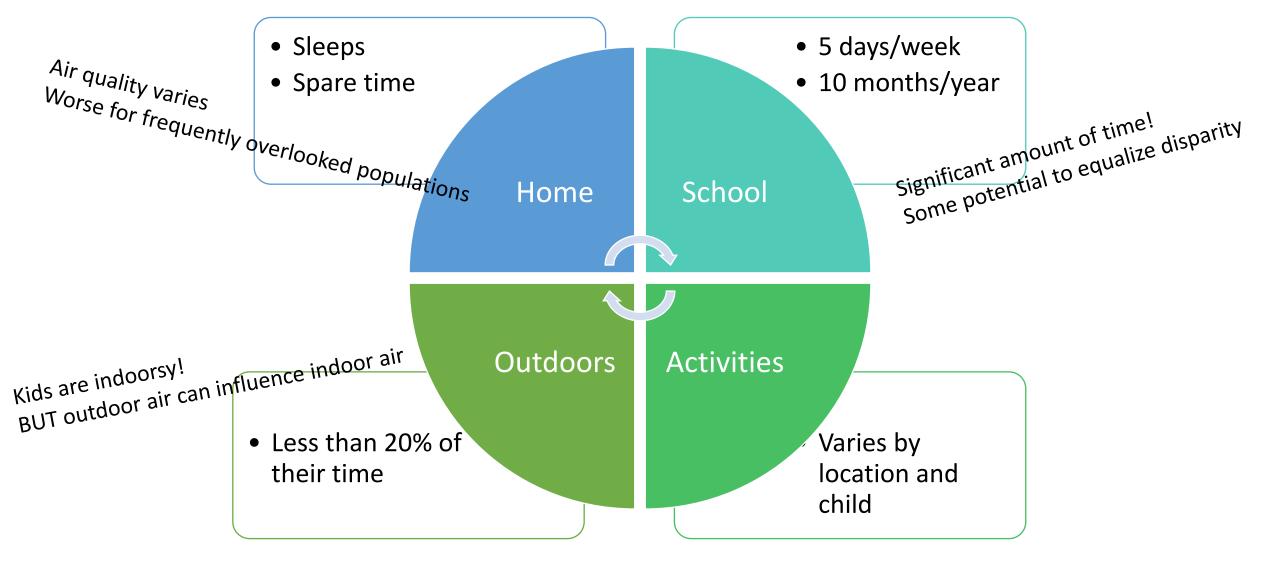


 A 100-home pilot study would be enough to get a baseline understanding



 Public Health Inspectors critically observe homes!

# Why is indoor air quality important?



# What is the knowledge gap?

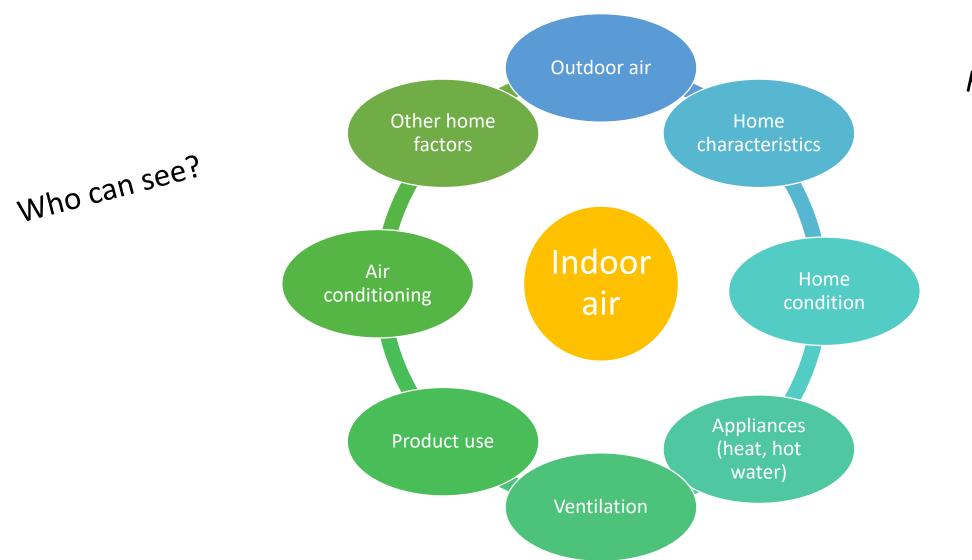
is a way forward to introduce effective preventive health Some research measures Some understanding Outdoor Indoor Total air air exposure Complex & variable environment

Emerging science

Important to understand

Linking exposure to outcomes

# Why are we asking you for help?



Home inspectors!

# What would we ask you to do?

### Learn about the project

Air quality testing

Questionnaire

Recruit community members as participants

#### Student role

Look for potential participants

Complete informed consent

Send email to coordinator (sends participant questionnaire)

Give participant passive air sampler

### Study role

Provide student recruiters with training and information

Send out study questionnaire

Analyze air samplers (participant mails them in after sampling)

# How we would describe the study to a participant

Informed consent

Indicate interest and understanding of study

Questionnaire

About 15-30 minutes

Describe home

Describe household activities and products

Includes address so researchers can link outside air quality

assive air samples

Small (2x0.5 cm) silicone strip hangs in the home inside a glass vial

Measures chemicals in home air

After 2-4 weeks, put in the pre-stamped envelope and mail to the lab

### Other activities



**Students** 

Answer for fun, not for real

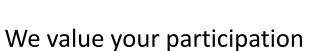
Not used in the study

Team can update the questionnaire based on feedback

# Thanks for considering!







We hope that this is a useful learning activity



We will be back with your team for:

Training

Sharing outcomes

### For a later visit

- Training videos
  - Informed consent
    - Practice on a neighbor during the session
  - Participant package
    - This is how we do it!
  - Deploying the passive sampler
    - Share a video
  - Returning the sampler to the chemistry lab

