

Add-on Study Consent/Parental Permission form for Additional data collection for eligible households

I. What is the aim of the additional data collection?

The additional environmental, personal, and biological samples will be used to improve our understanding of how young children's exposures to various indoor pollutants might change as a result of building renovations compared to homes without renovations.

II. Who is eligible?

While some of the additional measurements do not require the involvement of any of the residents, other measurements require participation by the caregiver, the index child (i.e., the child with asthma age 7-12 years already enrolled), and a younger sibling of the index child. An asthma diagnosis is not a requirement for the sibling. We would like to enroll the youngest sibling. If the youngest sibling will not or cannot participate, recruitment will proceed to enroll the next youngest sibling who is willing to participate (using the preferential order outlined below):

- 1) Sibling in the 0 to 3 year age range;
- 2) Sibling in the 4 to 6 year age range;
- 3) Sibling in the 7 to 12 year age range;

III. What are the additional measurements that occur at each of the home visits?

Table 1. Summary for the additional measurements.

Information Type	Index Child (Age 7 – 12 years)	Sibling (Age 0 – 12 years)	Technician Sample Collection (Inside or just outside of home)	Mother/ Caregiver
Location, Transportation, Activity, Diet, and Consumer Products Questionnaire				✓
Consumer products inventory (e.g., pictures of personal care products and cleaning products in the home)			✓	
Housing and community information			✓	
Device to measure physical activity of the child	✓	✓		
GPS (location information)	✓	✓		
Air samples			✓	
Dust collection			✓	
Surface wipe			✓	
Soil			✓	
Water sample			✓	
Hand wipe	✓	✓		
Sock sample (socks provided by study)	✓	✓		
Silicone bands	✓	✓		
Duplicate diet		✓		
Urine		✓		
Blood		✓		
Nail clippings		✓		
Feces		✓		

IV. These are explanations of the additional things we will ask your child to do:

Wear a small physical activity monitor and GPS unit: These devices are very similar in size to a watch. The children will wear them only while awake for five (5) days during each home visit.

Wear a silicone band: This band looks exactly like all the cool wrist bands that kids are wearing. The children will wear them continuously for five (5) days during each home visit.

Give a feces sample: We will train you (the caregiver) on how to collect the feces sample from the children in a safe and sterile manner. You will collect diapers for non-toilet trained siblings.

Give nail clipping samples: We will train you (the caregiver) on how to collect the nail clipping sample from the children in a safe and sterile manner.

Wear a pair of socks and get hands wiped: Hand wipes will be collected from the right and left hands of both the index child and the sibling. Alcohol swabs will be used to wipe both hands. Children will wear socks on both feet and move around the home for a couple hours playing as they would normally play when inside at home, then the socks will be removed and sent to the lab.

Give urine samples: We will ask your child to urinate in a bottle at home. We will collect two urine samples during one home visit (we prefer that both be the first morning urine samples of the day). We will test the urine for chemicals (e.g., pesticides). We will not be testing for illegal drugs in the urine.

Give a blood sample: We will take about 2 teaspoons of blood from a vein in the arm at only one home visit. This will be stored in 2 tubes. The blood will be sent to a laboratory to determine if chemicals in the environmental samples match the types of chemicals and levels in the blood. Children less than one (1) year old will have blood taken by using a heel stick to minimize risk.

V. These are explanations of the additional things we will ask you (the caregiver) to do:

Collect identical portions of the food that your child ate during a 24-hour period: This would occur during the period when we visit your home to do the other types of sampling. Each participant will be provided with clean containers for the food and drink collection. Samples will be kept cool until picked up by the field technician.

Answer additional questions (more than what we asked you in the main Green Housing Study) and keep a record book of factors that could affect your child's exposures to chemicals in the environment.

Temporarily store the child's urine and feces samples in a cooler that we will provide. Help the child remove the physical activity monitor and GPS unit at nighttime and put it back on during the daytime. Collect the nail clippings from your child.

VI. These are explanations of the additional things that the technician will do:

Air samples: We will collect three different types of air samples. A pump will collect air samples from the main living area in your home. A silicone band will hang next to the pump and collect chemicals from the air. Another sample collector will hang next to the pump and collect chemicals as they naturally move about your house.

Dust samples: In addition to the vacuum cleaner dust samples that were described in the main consent form, the technician will also collect other types of dust samples. A Swiffer sheet will be used to collect dust from the tops of door jambs and bookcases. A clean fabric furniture cleaner sheet will be left on a flat surface in your home for 5 days. The fabric sheets will collect dust that settles from the air naturally in your home. If you own a vacuum cleaner, the technician will also collect the contents from your vacuum cleaner bag (if the vacuum cleaner has a bag).

Soil samples: The technician will use a small scoop to collect soil outside your home in a location where your child spends time when playing outdoors.

Surface samples: The technician will wipe counter and floor surfaces from your kitchen and bathroom.

Water samples: The technician will collect about ½ quart of water from your kitchen sink tap.

Record information about chemicals in your home: The technician will photograph cleaning products in the home and personal care products that your child uses and record their bar-code labels.

VII. What are the risks or discomforts of the study?

Blood collection: Taking blood may cause pain, bleeding or bruising where the needle is placed. In some cases, it may result in fainting. There is a small risk of infection. For infants, there is also a risk of damage to the vein which typically would not be seen at the time of injury. So, for infants less than age 1 year, we will only use a heel stick and not insert a needle into the vein.

VIII. Are there benefits to being in the study?

These new measurements in your home and from your child might be able to improve our methods to help future Green Housing Study sites across the country. However, there are no direct benefits to you or your child from participating in this additional data collection effort. We just want to be clear that unlike the results that we give back for your child with asthma, these new methods are exploratory, so it is difficult for even us to know how they will affect children's health. Therefore, we will not be giving back any results from these new measurements.

IX. What will you get if you join this Add-on Study?

You will receive \$50 for participating in this additional data collection effort at each home visit. If the sibling participates in the additional collection of these items: feces, blood, nail clippings, and duplicate diet, you will also receive a one-time amount of \$25.

Please initial here if it is okay for the study to save the samples collected in this study for future research purposes related to public health. The samples may be kept indefinitely. These samples will not be identified by anyone's name. This means that I will not receive any results from any of those future studies.

Initials _____

Signature of Participant (Printed Name) Date

Signature of Person Obtaining Consent Date

NOTE: A COPY OF THE SIGNED, DATED CONSENT/PARENTAL PERMISSION FORM MUST BE KEPT BY THE PRINCIPAL INVESTIGATOR AND A COPY MUST BE GIVEN TO THE PARTICIPANT.