Section 1: Home Characteristics

1. What type of building do you live in?
   - Single family or free-standing (Skip to Question 2)
   - Manufactured home/mobile home (Skip to Question 2)
   - Row house/townhouse/brownstone
   - Duplex/triplex, free-standing
   - High rise apartment/condo/coop (4 floors or more)
   - Low rise apartment/condo/coop (1-3 floors)
   - Other, please specify: ____________________________

2. What is the approximate age of your building?
   Age of building: ________ or Year built: ________

3. Is there an attached garage or an underneath garage in your building?
   - Yes
   - No (Skip to Question 4)

4. Is this garage used for: (choose one)
   - Parking one car
   - Parking two cars
   - Parking more than two cars
   - Storage only
   - Other, please specify: ____________________________
4. Do you use air conditioning in your residence?
   - Yes
   - No (Skip to Question 5)

4a. What type of air conditioning does your residence have?
   - Central A/C
   - Window unit(s). How many of them are there? ___________
   - Other, please specify: __________________________

4b. How often was the air conditioning used in the past July?
   - Not used at all
   - A few days a month
   - More than half of the days of the month, but less than daily
   - Almost daily (thermostat used also)
   - Other, please specify: __________________________

4c. How often was the air conditioning used in the past January?
   - Not used at all
   - A few days a month
   - More than half of the days of the month, but less than daily
   - Almost daily
   - Other, please specify: __________________________

5. Approximately how cool do you keep your residence in the summer during the day and over night?
   - During the day (when at home): Temperature: ____________ °F ____________ °C
   - During the night: Temperature: ____________ °F ____________ °C

6. What are the heating sources used in your residence? Please tell me of any that are used at least once a month.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiators (steam or hot water)</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Forced air (vents)</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Electric space heater</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Baseboard heat</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Gas space heater</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Kerosene space heater</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Wood burning stove</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Fireplace</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Open stove</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Other, please specify</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Follow-Up 9 Air Questionnaire -- Page 3

7. Approximately how warm do you keep your residence in the winter during the day and over night?

- During the day (when at home): Temperature: [ ] °F [ ] °C
- During the night: Temperature: [ ] °F [ ] °C

8. Does your residence have storm windows?

- Yes
- No (Skip to Question 9)
- I don't know (Skip to Question 9)

8a. Do you use storm windows on all, most, or a few of your windows during any season?

- All
- Most
- A Few

9. Does your residence have double pane windows?

- Yes
- No (Skip to Question 10)
- I don't know (Skip to Question 10)

9a. Are there double pane windows on all, most, or a few of your windows?

- All
- Most
- A Few

10. Please indicate the number of windows you usually had open in your residence in the past summer and winter. Also indicate how wide the windows were left open and how often you usually left the windows open.

In SUMMER (Jun. - Aug.):

10a. How many windows did you usually have open?

- None (Skip to Question 10d)
- All
- Some

10b. On average, how open were they?

- Cracked open (10% or less)
- Partially open (11 - 20%)
- Halfway open (21 - 50%)
- Mostly open (51 - 80%)
- Wide open (more than 80%)

10c. How often did you open windows?

- A few days a month
- More than half of the days of the month, but less than daily
- Almost daily
- Other, please specify: [ ]
In WINTER (Dec. - Feb.):

10d. How many windows did you usually have open?
   - None  (Skip to Question 11)
   - All
   - Some

10e. On average, how open were they?
   - Cracked open (10% or less)
   - Partially open (11 - 20%)
   - Halfway open (21 - 50%)
   - Mostly open (51 - 80%)
   - Wide open (more than 80%)

10f. How often did you open windows?
   - A few days a month
   - More than half of the days of the month, but less than daily
   - Almost daily
   - Other, please specify: ____________________________

11. Is an air cleaner/filter used in your residence (stand-alone or central)?
   - Yes
   - No  (Skip to Question 12)

11a. What type of air cleaner/filter is used? (please check all that apply)
   - HEPA filter
   - Electrostatic precipitator
   - Negative ion generator
   - Ozone generator
   - Regular or fiberglass furnace filter
   - Don't know
   - Other, please specify: ____________________________

11b. How often is the air cleaner/filter used?
   - Never
   - A few days a month
   - More than half of the days of the month, but less than daily
   - Every day or nearly every day
   - Don't know
12. What type of oven is used in your household?
   - Gas
   - Electric
   - Don't know
   - Other, please specify: 

13. What type of stove or range is used in your household?
   - Gas
   - Electric
   - Don't know
   - Other, please specify: 

14. How often do you or does someone else cook in your residence?
   - Never
   - A few days a month
   - More than half of the days of the month, but less than daily
   - Almost daily
   - Other, please specify: 

15. Is there an exhaust fan over the cooking stove, range, oven, or elsewhere in the kitchen area?
   - Yes
   - No (Skip to Question 16)
   - Not Applicable, no cooking area in residence (Skip to Question 16)

   15a. How often is the fan used during cooking?
   - Never (Skip to Question 16)
   - Occasionally
   - Most of the time
   - Every time the stove or the oven is used
   - Other, please specify: 

   15b. Where does this fan exhaust the air?
   - Kitchen exhaust vented outside
   - Recirculation back to kitchen
   - Don't know
   - Other, please specify: 

Inside your residence is there a pilot light on a:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas range:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oven:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clothes dryer:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water heater:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furnace:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If yes, location of dryer:

If yes, location of water heater:

If yes, location of furnace:

Other, please specify

End Section 1- go to next section or End on General Health Form

Section 2: Location/Activities

17. Do you usually spend 2 hours or more per day or 10 hours or more per week at a single location (working, school, volunteering, socializing, etc.) or doing a specific activity away from your household?

   ○ No  (Skip to Question 23)
   ○ Yes

18. If you go to a specific location, what is the street address? (Please give physical address; no PO Box)

   ○ Not Applicable; I do not go to a specific location.  (Skip to Question 20)

   Street
   City
   State
   ZIP

18a. Is this an indoor location or an outdoor location?

   ○ Indoor location
   ○ Outdoor location
QUESTIONS 19 through 22 WILL ASK YOU ABOUT THE LOCATION OR ACTIVITY YOU REFERRED TO IN QUESTION #17.

19. What do you do at this location?
   - School  (Skip to Question 22)
   - Work
   - Volunteer
   - Other, please specify:

19a. Briefly describe the industry you work or volunteer in:

19b. Briefly describe your activities when you work or volunteer:

19c. Are you regularly exposed there to vapors, gases, dusts, or fumes?
   - Yes
   - No

20. On average, how many days per week do you go there or perform the activity?
   - 1
   - 2
   - 3
   - 4
   - 5
   - 6
   - 7

21. On average, how many hours per day do you usually spend at the location or performing the activity?
   - 1-2
   - 3-4
   - 5-6
   - 7-8
   - More than 8

22. How many of the people smoke when they are in your immediate work/volunteer area or during your specified activity?

23. On average, how many hours each day do you spend doing the following during your travel time:
   a. walking or biking
   b. in a private car or taxi
   c. on a bus
   d. on a train or subway
   e. other

   Please specify:
24. On average, what percent of your travel time do you spend on or next to:

<table>
<thead>
<tr>
<th>Location</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freeways, expressways, highways, toll roads, etc.</td>
<td></td>
</tr>
<tr>
<td>Other major, heavily traveled roads or streets</td>
<td></td>
</tr>
<tr>
<td>Residential or lightly traveled roads, streets, or paths</td>
<td></td>
</tr>
</tbody>
</table>

25. What traffic condition best describes the majority of your travel time during the day?

- Light traffic, moving at the speed limit
- Heavy traffic, moving below the speed limit
- Congested or "stop and go"
- Heavy traffic, moving at or above the speed limit
- Not applicable, I travel by train or subway

We are now going to talk about how you spend time on different days of the week in terms of time spent indoors and outdoors.

26. What days of the week do you consider your "weekends"?

- Sunday
- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
- Not Applicable.

27. What days of the week do you consider to be your typical "weekdays"?

- Sunday
- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
- Not Applicable.

Interviewers: Use the answers in 26 and 27 above to complete questions 28 and 30. On a typical weekend day, how much time does the participant spend in each of the following locations? On a typical weekday how much time does the participant spend in each of the following locations? Use the "same as" option if two or more days are identical.
Please indicate the number of hours you typically spend each day in the following locations in the winter (Dec. - Feb.) (estimate to the nearest hour).

### WINTER (Dec. - Feb.)

<table>
<thead>
<tr>
<th>CODE</th>
<th>LOCATION DESCRIPTION</th>
<th>SUN or Typical Weekend Day</th>
<th>MON or Typical Weekday</th>
<th>TUES</th>
<th>WED</th>
<th>THURS</th>
<th>FRI</th>
<th>SAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Home indoors (including sleeping)</td>
<td>☐ Sun</td>
<td>☐ Mon</td>
<td>☐ Tue</td>
<td>☐ Wed</td>
<td>☐ Thu</td>
<td>☐ Fri</td>
<td>☐ Sat</td>
</tr>
<tr>
<td>2</td>
<td>Home outdoors</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Work, volunteer, school, indoors</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Work, volunteer, school, outdoors</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>In transit (car, bus, train, bike, walk, etc.)</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Other indoor places</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Other outdoor places</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Interviewer should total the hours

**TOTAL**

**Did you round?**
- ☐ Yes
- ☐ No

Interviewer to complete if the total does not equal 24 hours
29. Is the amount of time you spend indoors and outdoors daily the same in the summer as in the winter?
   - Yes
   - No

Interviewers: Use the answer to question 29 above to complete question 30 below. If the amount of time the participant spends in each category for each day is identical in the winter and summer, complete question 30 after the interview using the answers from question 28.

30. Please indicate the number of hours you typically spend each day in the following locations in the summer (Jun. - Aug.) (estimate to the nearest hour).

### SUMMER (Jun. - Aug.)

#### NUMBER OF HOURS EACH DAY

<table>
<thead>
<tr>
<th>CODE</th>
<th>LOCATION DESCRIPTION</th>
<th>SUN</th>
<th>MON</th>
<th>TUES</th>
<th>WED</th>
<th>THURS</th>
<th>FRI</th>
<th>SAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Same as:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Home indoors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Work, volunteer, school, indoors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Work, volunteer, school, outdoors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>In transit (car, bus, train, bike, walk, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Other indoor places</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Other outdoor places</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td></td>
<td>Did you round?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

If the total does not equal 24 hours, complete the interview to the nearest hour and round accordingly.
Interviewer: Did the Participant give a specific indoor location for Question 18? (i.e. does the participant work/volunteer or perform an indoor activity for more than 2 hours per day or 10 hours per week?)

- If yes, continue with question 31.
- If no, stop. End of questionnaire.

You previously answered that you work, volunteer, or do an activity indoors. The next questions ask for information on the characteristics of the building at that location.

31. What type of building do you go to?
   - Small residential style building (3 floors or fewer)
   - Small retail style business (strip mall, neighborhood store, etc.)
   - Large retail style building (large mall, etc.)
   - Office-type building (low or high-rise)
   - Industrial or warehouse
   - Other, please describe: [ ]

32. Does the building use mechanical or natural ventilation?
   - Mechanical (for example, central heating and/or air conditioning)
   - Natural (for example, open windows and doors)
   - Both
   - Other, please describe: [ ]
   - Don't know

33. Is there a parking garage or underground garage in your building?
   - Yes
   - No
   - Don't know

34. If the building uses windows and doors for ventilation when you are there, how often are the windows or doors open during:

<table>
<thead>
<tr>
<th>Season</th>
<th>Never (0%)</th>
<th>Almost Never (25%)</th>
<th>Sometimes (50%)</th>
<th>Often (75%)</th>
<th>Always (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter (Dec - Feb):</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Summer (Jun - Aug):</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

End Section 2- go to End on General Health Form

For MESA Field Center Use Only:  
Data Collection Method:  ○ Computer  ○ Paper

Interviewer ID: [ ]  
Reviewer ID: [ ]  
Data Entry [ ]

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