

## Attachment 4

### Chemical Exposure Question Bank

Items from the question bank can be used to develop a survey for each submission.

All forms will display OMB Control Number, Expiration Date, and Public Reporting Burden

## Example Script for Environmental and/or Biologic Sampling Events

### ***Sample Introduction for Environmental Investigation:***

*Hello, my name is {SAY NAME}. We are doing an Exposure Investigation for the Agency for Toxic Substances and Disease Registry, or ATSDR. ATSDR is a sister agency to the Centers for Disease Control and Prevention. As part of the investigation, we will be asking you some common questions like your name and address. We will also ask questions about your contact with chemicals. We are asking these questions to better understand all the data we collect.*

*The questions should take less than thirty minutes. After that, we will be offering free {FILL IN TYPE(S)} = [FOR ENVIRONMENTAL-air, soil, water, foods testing] Once we are done with this investigation, you will be given a copy and details of -your location or the exposure location test results. Generally, we are able to get results to you within {FILL IN ADJUSTED TIME FRAME OR INSERT 4 – 8 WEEKS}.*

---

### ***Sample Introduction for Biologic Investigation:***

*Hello, my name is {SAY NAME}. We are doing an Exposure Investigation for the Agency for Toxic Substances and Disease Registry, or ATSDR. ATSDR is a sister agency to the Centers for Disease Control and Prevention. As part of the investigation, we will be asking you some common questions like your name and address. We will also ask questions on your contact with chemicals. We are asking these questions to better understand all the data we collect.*

*The questions should take less than thirty minutes. After that, we will be offering free {FILL IN TYPE(S)} = [FOR BIOLOGIC-blood, urine, hair, nails, other testing for all people who live in your home]. Once we are done with this investigation, you will be given a copy and details of -your and your minor children's (if you have them) test results]. Generally, we are able to get results to you within {FILL IN ADJUSTED TIME FRAME OR INSERT 4 – 8 WEEKS}.*

# Questionnaire Categories

## Confounders for Biologic Samples:

For each chemical being investigated, what other sources of that chemical could the participant be encountering?



Occupation



Hobbies



Medicines

Rx



Health Conditions

Lifestyle



Household Uses or House Construction

Foods



## Exposure Factors ;

What activities would cause someone to have more exposure than another?



### Soils:

Gardening, Playing, Pets

### Foods:

Garden Veg, Fish, Game, Domestic



### Water:

DW source, Plumbing

### Air:

Indoor/Out door  
Odors, Symptoms, Length of time indoors, House construction, etc

## General Information Questions

*Example Script: Now I want to ask you questions about how I can contact you. I may also be asking how long you have lived at or visited certain places. This is needed to find out how long you may have had contact with chemicals and how long it may have lasted. We may also ask your age, race, weight and height, and about your jobs. This is useful to put your test results side by side with others like you to see what is typical.*

**NOTE: It is recommended that you ask the general questions last.**

|                               |   |
|-------------------------------|---|
| (Name of Survey Taker HERE :) |   |
| (Investigation ID)            | (For ATSDR, use Cost Recovery Number plus auto generated 2 digit hyphenated add on)   |
| (Participant ID Number)       | (May need a drop down if participant has been in a previous investigation)  |
| (Relationship/Household ID)   | (Use some way to connect participants to a location, family name, etc. Choose by keying in one of the following or some other where a drop down list appears to connect people): <ul style="list-style-type: none"> <li>• First Name/Last Name</li> <li>• Street and #, City, St</li> <li>• Exposure Location (Street. City, St or intersection)</li> <li>• Building</li> <li>• Room</li> </ul> |
| (Laboratory ID)               | (Given by lab. May be multiple if sample is split or divided into aliquots)   |

NOTE TO SURVEYOR: The following abbreviations and acronyms are used throughout.

DK-Don't know

NA-Not applicable

Mm/dd/year-2 digit month, 2 digit day, 4 digit year

Ft-feet

In-inches

(First name of person answering questions for minor child)

(Last name of person answering questions for minor child)

### General Information

First name:

(if minor child, put child's name here)

Last name:

Middle Initial:

Street Address:

If this is an apartment, or the address has another defining number or letter, please provide that now:

City:

County:

State:

Zip Code:

Do you (or household head) rent or own this property?

Own

Rent

NA

If your mailing address is different from your street address, what is your mailing address?

City:

State:

Zip Code:

How long have you lived at this address?

Less than  
6months

6mos to less than  
2yrs

2 to5 yrs

6 to10 yrs

More than10 yrs

How long have you lived at this address?

(Note: use this question if you need a more exact date)

mm/year

|   |  |                         |                           |            |
|---|--|-------------------------|---------------------------|------------|
| How long have you lived in {Fill in Town, Neighborhood, or City of Interest}?   | Less than 6 months   | 6mos to less than 2 yrs | 2 to 5 yrs                |            |
|   | 6 to 10 yrs  | More than 10 yrs        |                           |            |
| <b>Previous Address</b><br>Surveyor, ask for previous address if they have lived at current address less than a period you determine as a cut off. {6mos, 1 yr}.  |  |                         |                           |            |
| What was your previous street address:  |  |                         |                           |            |
| City:   |  |                         |                           |            |
| State:  |  |                         |                           |            |
| Zip Code:   |  |                         |                           |            |
| Years at that address?  |  |                         |                           |            |
| Please provide a phone number where we can reach you.   | Home:  | Work:                   | Cell:                     | Other:     |
| Is there an email address where we can reach you? If yes, what is it?   | No   |                         | Yes: _____                |            |
|   |  |                         |                           |            |
| * How well do you speak English? (5 years old and older)  | Very Well  | Well                    | Not Well                  | Not at all |
| * Do you speak a language other than English at home? (5 years old and older)   | Yes  |                         | No                        |            |
| * For persons speaking a language other than English (answering yes to the question above), what is the language? (5 years old and older)   | Spanish  |                         | Other Language (Identify) |            |
| What is the <b>occupation</b> of the adults in the household?<br><i>(Note to surveyor: You may want to ask this question here or with the list of jobs in the confounder section but probably not in both sections)</i> | Animal Control Worker, Animal Scientist, Veterinarian<br>Airport or Aircraft Worker<br>Arts & Media<br>Assemblers & Fabricator<br>Car Repair, Mechanic<br>Chemical Industry Worker (mixer, processor, researcher)<br>Child Care Worker<br>Cleaning homes or offices<br>Construction<br>Crop & Livestock Production<br>Dentist, Dental Hygienist<br>Detective and Criminal Investigator<br>Disabled & stay at home<br>Dry Cleaning Worker<br>Fire Fighter<br>Electrician, Electrical worker<br>Engineering, Sciences & Education<br>Equipment Operator<br>Etcher or Engraver<br>Extractive (e.g., mine machines, drills)<br>Explosives Worker<br>Farmworker<br>Fishing & Hunting<br>Floor Finisher<br>Food Processor<br>Food Service<br>Furniture Finisher<br>Grounds Maintenance Worker<br>Hairdresser, Hair Stylist &/or Cosmetologist<br>Health Care Worker<br>Home Care Taker<br>Installation, Maintenance & Repair Worker<br>Jeweler<br>Logging, Forest & Conservation Worker<br>Machinist<br>Material Moving<br>Metalworking & Plasticworking<br>Miner<br>Miscellaneous Production Worker |                         |                           |            |

|                                       |   |
|---------------------------------------|---|
| <div>Chinese</div> <div>Chinese</div> | Manicurist<br>Mortician and Embalmer<br>Office Worker<br>Painter<br>Pest Control Worker<br>Petroleum worker<br>Photo processing, photographer<br>Physician, Anesthesiologists<br>Pilot<br>Police or Sheriff Patrol Officer<br>Printing Worker<br>Retired<br>Roofer<br>Textile, Apparel & Furnishing Worker<br>Utilities & Transportation Worker<br>Welder including soldering & brazing<br>Woodworker<br>Other: List: _____<br>None |
|---------------------------------------|---|

Demographic Questions

Script: The next questions are about your own qualities and will help us compare your test results.

Surveyor, please indicate whether the person is a male or female. If this questionnaire is for a minor child, be sure to ask their sex.

|                               |   |   |
|-------------------------------|---|---|
| * What is your sex?           | M | F |
| Date of Birth: dd/mm/yr(yyyy) |   |   |
| Race and Ethnicity            |   |   |

American Indian or Alaska Native – provide details

Enter, for example, Navajo Nation, Blackfeet Tribe of the Blackfeet Indian Reservation of Montana, Native Village of Barrow Inupiat Traditional Government, Nome Eskimo Community, Aztec, Maya, etc.

|  |  |
|--|--|
| <input type="checkbox"/> Chinese   |  |
| <input type="checkbox"/>   |  |
| <div>Vietnamese</div> <div>Asian Indian</div> <input type="checkbox"/>   |  |
| Asian – provide details <input type="checkbox"/>   |  |
| <div>Korean</div> <div>Filipino</div> <div>Japanese</div> <div> <input type="checkbox"/> <input type="checkbox"/> </div> |  |
| Enter, for example, Pakistani, Hmong, Afghan, etc.   |  |

|   |  |
|---|--|
| <p><b>Black or African American – provide details</b></p>   | <div><input type="checkbox"/> African American</div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div>Nigerian</div> <div>Jamaican</div> |
| <p><b>Hispanic or Latin American – provide details</b></p> <div><input type="checkbox"/> Mexican</div> <div><input type="checkbox"/> Cuban</div> <div><input type="checkbox"/> Puerto Rican</div> <div><input type="checkbox"/> Dominican</div> <div><input type="checkbox"/> Salvadoran</div> <div><input type="checkbox"/> Guatemalan</div>   | <div>Lebanese</div> <div>Ethiopian</div> <div>Enter, for example, Trinidadian and Tobagonian, Ghanaian, Congolese, etc.</div> <div>Haitian</div>   |
| <p><b>Middle Eastern or North African – provide details</b></p> <div><input type="checkbox"/></div> <div>Enter, for example, Colombian, Honduran, Spaniard, etc.</div> <div><input type="checkbox"/> Syrian</div> <div><input type="checkbox"/> Iranian</div> <div><input type="checkbox"/> Iraqi</div> <div><input type="checkbox"/> Egyptian</div> <div><input type="checkbox"/> Israeli</div> <div>Enter, for example, Moroccan, Yemeni, Kurdish, etc.</div> | <div>Somali</div>  |

|   |     |                  |  |
|---|-----|------------------|--|
| <input type="checkbox"/><br><input type="checkbox"/> Tongan<br><input type="checkbox"/> Samoan<br><input type="checkbox"/> Fijian<br><b>Native Hawaiian or Pacific Islander – provide details</b><br><input type="checkbox"/> Chamorro<br><input type="checkbox"/> Marshallese                      |     |                  |  |
| <input type="checkbox"/> English<br><div data-bbox="386 688 927 787">Enter, for example, Chuukese, Palauan, Italian, Tahitian, etc.</div> <input type="checkbox"/> German<br>White – provide <input type="checkbox"/> Polish<br><input type="checkbox"/> Irish<br><input type="checkbox"/> Scottish |     |                  |  |
| What is your current <b>height</b> ?  | Ft  | in               |  |
| What is your current <b>weight</b> ?  | lbs |                  |  |
| (If female) Are you currently pregnant?   | No  | Yes: 0-3 4-6 7-9 |  |
| * Are you deaf or do you have serious difficulty hearing?   | Yes | No               |  |
| * Are you blind or do you have any serious difficulty seeing, even when wearing glasses?  | Yes | No               |  |
| * Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions? (5 years old and older)  | Yes | No               |  |
| * Do you have serious difficulty walking or climbing stairs? (5 years old and older)  | Yes | No               |  |
| * Do you have difficulty dressing or bathing? (5 years old and older)   | Yes | No               |  |
| * Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping? (15 years old and older)  | Yes | No               |  |
| <b>Household Characteristics</b><br><i>Script: The next set of questions is about the number of people in the household and how long you have lived here.</i>   |     |                  |  |
| How many people live here fulltime since (INSERT TIMEFRAME), including yourself?<br>(# People in Household)   |     |                  |  |
| Are there any children under the age of 18 who live in the household? [if NO skip the next questions]   | Yes | No               |  |



|   |                  |                   |                     |                   |
|---|------------------|-------------------|---------------------|-------------------|
| How many children are between the ages of 0-6 years old?  |                  |                   |                     |                   |
| How many children are between the ages of 7-12 years old?   |                  |                   |                     |                   |
| How many children are between the ages of 13-18 years old?  |                  |                   |                     |                   |
| Do they play or ride bikes in bare soil?  | Never Do<br>This | Seldom Do<br>This | Sometime<br>Do This | Always Do<br>This |
| If there are children who <b>regularly</b> ( <i>Choose a timeframe: daily/weekly</i> ) visit the household, what are the ages of children under 18? |                  |                   |                     |                   |
| Please estimate to the nearest hour approximately how long each person was present in the home in the last (INSERT TIMEFRAME).                      | Person 1         | Person 2          | Person 3            |                   |
|   | Person 4         | Person 5          | Person 6            |                   |

|   |   |         |                     |                  |
|---|---|---------|---------------------|------------------|
| <b>Exposure Location</b>  |   |         |                     |                  |
| <i>Note to Surveyor: If the potential exposure location is different than the household address, ask the following questions. Also fill in the exposure location by address, long/lat, or some other way.</i> |   |         |                     |                  |
| Did the potential exposure take place away from home?   | Yes   |         | No                  |                  |
| If yes, where? (Building Name)  |   |         |                     |                  |
| (Room Number)   |   |         |                     |                  |
| (Exposure Location- Street Address)   |   |         |                     |                  |
| (Street Address 2 for intersections)  |   |         |                     |                  |
| (City)  |   |         |                     |                  |
| (State)   |   |         |                     |                  |
| (Zip Code)  |   |         |                     |                  |
| How long have you been visiting or going to the (Fill in Location Name)?  | mm/year   |         |                     |                  |
| When was the last time you were at the (Fill in Location Name)?   | mm/dd/year  |         |                     |                  |
| What do you do or were you doing at the (Fill in Location Name) exposure location (for example, work, hunt or fish, etc.)?  |   |         |                     |                  |
| <b>Exposure Location Information from ATSDR's Rapid Response Registry</b>   |   |         |                     |                  |
| At the time of the event on [specify day and time], what address were you [was the registrant] at or what was the name of the building or intersection closest to you [the registrant]?                       |   |         |                     |                  |
| Were you [was the registrant] present at [the event site]?  | Yes   | No      | DK                  | Refused          |
| If yes, were you [was the registrant]:  | inside a building or structure<br>inside a car or other vehicle | Outside | Other               | Specify:         |
|   | Don't Know (DK)   | Refused |                     |                  |
| Did you [the registrant] get an injury or any illness as a result of the event?   | Yes   | No      | DK                  | Refused          |
| If Yes, what illness or injury did you [the registrant] get? (List all)   |   |         | DK                  | Refused          |
| Before the event, did you [the registrant] have a:  | Chronic illness   |         | Physical Disability | Other Disability |
|   | Unsure  |         | Refused             |                  |
| Are you [is the registrant] pregnant? [or "Were you (was the registrant) pregnant at the time of the event?"]   | Yes   | No      | DK                  | Refused          |
| Are you [is the registrant] in need of:   | Medications/supplies  |         | Medical care        | Utilities        |
|   | Food  |         | Shelter             | DK               |
|   | Refused   |         |                     |                  |

## Indoor Air

*Script: These questions will help us determine the possible sources of air pollutants in your household and any symptoms or conditions that would make breathing pollutants more harmful to you.*

### Time Indoors

|   |  |
|---|--|
| How many hours per day do you spend inside your home in a usual weekday? (24 hours is one day)                  | Less than 8 hours<br>Between 8 and 14 hours<br>Between 15 and 24 hours |
| How many hours per day do you spend inside your home in a usual weekend? (24 hours is one day)                  | Less than 8 hours<br>Between 8 and 14 hours<br>Between 15 and 24 hours |
| How many fewer hours do you spend indoors during the warmer months? (How much additional time are you outside)? | Same<br>Between 1 and 3 more hours<br>4 or more hours                  |
| How many hours per day did you spend inside the home [INSERT TIMFRAME]? (24 hours is one day)                   |  |
| How many hours per day did you spend away from home [INSERT TIMFRAME]? (24 hours is one day)?                   |  |
| Did you leave you window open [add timeframe]?  |  |

### Confounders and Other Sources

*Script: These questions relate to other things that may trigger symptoms similar to air pollutants.*

*Note to surveyor:* Confounders to symptoms are listed here. Chemical specific confounders are listed under the chemical you are investigating.

|  |   |     |             |         |     |
|--|---|-----|-------------|---------|-----|
| Are there any smokers in the household (not including you) [if 'no' skip]?   | Yes   |     | No          |         |     |
| Do you currently smoke?  | Yes   | No  |             | Refused |     |
| If you smoke, how long ago did you smoke your last cigarette?  |   |     |             |         |     |
| [If there are any smokers in the house] How many people smoke?   |   |     |             |         |     |
| How many cigarettes per day are usually smoked anywhere inside the home by anyone? (20 in a pack)                            | none  | 1-5 | 6-10        | 11-20   | >20 |
| How many cigars per day are usually smoked anywhere inside the home by anyone?   | None  |     | 1           |         | >1  |
| In the last three days, did {you/she/he} spend 10 or more minutes near a person who was smoking a cigarette, cigar, or pipe? | Yes   |     | No          |         | DK  |
| How many pipes per day are usually smoked anywhere inside the home by anyone?  | None  |     | 1           |         | >1  |
| Do you have any pets?  | Yes   |     | No          |         |     |
| What types of indoor pets do you have in your home?  | Dog   |     | Cat         |         |     |
|  | Rodents: hamster, mice, rat, gerbil, guinea pig |     | Rabbit      |         |     |
|  | Ferret  |     | Other: list |         |     |

### Fuels Used Indoors

|   |  |
|---|--|
| Do you use any of the following in your home? | Natural gas used for heating<br>Natural gas used for cooking<br>Propane gas used for heating<br>Propane gas used for cooking<br>Kerosene<br>Coal used for heating<br>Coal used for cooking<br>Wood Burning Stove used for heating<br>Wood Burning Fireplace used for heating |
|---|--|

|   |   |
|---|---|
|   | Wood Burning Fireplace used for cooking<br>Gasoline<br>Solar<br>Artificial Logs (disposable store bought e.g., Duraflame)<br>None<br>If 'none' skip next two questions. |
| During which month do you (or does the building) usually start using those fuels? | <i>Start Month:</i> Jan Feb March April May June July August Sept Oct Nov Dec   |
| During which month do you usually (or the building) stop using those fuels?       | <i>Stop Month:</i> Jan Feb March April May June July August Sept Oct Nov Dec  |

**Symptoms/Conditions**

*Script: Individuals with certain conditions may be more sensitive to the effects of chemicals. I would like to ask you questions about your health.*

|                                      |     |     |     |
|--------------------------------------|-----|-----|-----|
| Is anyone in the household pregnant? | Yes | No  | DK  |
| If yes, in what month of pregnancy?  | 0-3 | 4-6 | 7-9 |

**Adults**

|  |              |     |            |
|--|--------------|-----|------------|
| Have you <b>or any other adult household members</b> ever been told by a health <b>care</b> professional that <b>you/they</b> have a chronic heart or lung conditions, such as coronary artery disease, <b>angina (pain in the heart)</b> , asthma, or emphysema? [if 'no' go to the next section] | Yes          | No  | Refused    |
| Do you/ <b>they</b> currently have that condition?   | Yes          | No  | Don't Know |
| If yes, please describe the health condition(s).   |              |     |            |
| Are there any adults with chronic heart or lung conditions, such as coronary artery disease, asthma or emphysema?  | No           | Yes | DK         |
| Are there times when your condition(s) gets worse? (e.g., night, day weekend, weekday)   | Yes<br>When? | No  |            |
| Are there any places when your condition(s) get worse? (e.g., home, work, school)  | Yes<br>When? | No  |            |
| Are there any seasons when your condition(s) get worse? (e.g., spring, summer, fall, winter)   | Yes<br>When? | No  |            |

**Children**

|  |              |    |            |
|--|--------------|----|------------|
| Are there any children (under the age of 18 years old) with chronic heart or lung conditions, such as congenital heart disease, asthma or cystic fibrosis? | Yes          | No | Don't Know |
| If yes, what are the ages of these children?   |              |    |            |
| Please describe the condition(s).  |              |    |            |
| Are there times when your condition(s) gets worse? (e.g., night, day weekend, weekday)   | Yes<br>When? | No |            |
| Are there any places when your condition(s) get worse? (e.g., home, work, school)  | Yes<br>When? | No |            |
| Are there any seasons when your condition(s) get worse? (e.g., spring, summer, fall, winter)   | Yes<br>When? | No |            |

**Odors/Fumes**

|  |   |    |    |
|--|---|----|----|
| Have you or your household members <b>of any age</b> noticed odors or fumes in your home or in common areas where you spend the most time (bedroom, living room, kitchen)? | Yes   | No | DK |
| If yes, please describe the odors/fumes, as well as their location, when they occur (times of the day, days of the week, seasons of the year), and duration:               | Describe odor:                                |    |    |
|  | When:<br>Time of day<br>Day of week<br>Season |    |    |
|  | How long:                                     |    |    |

Have you been told you have the following:

| Condition                        | Yes/No | Were you told you had this by a doctor or nurse? Yes/No | How old were you when a doctor or nurse first told |
|----------------------------------|--------|---|--|
| Asthma, allergies                |        |   |  |
| Chronic bronchitis or emphysema? |        |   |  |
| Angina                           |        |   |  |

### Attributes of the Structure or Home

The following questions are about the qualities and characteristics of your home.

|   |  |                    |                          |
|---|--|--------------------|--------------------------|
| Do you live in an:  | Apartment  | Single Family Home | Townhouse or Condominium |
|   | Mobile Home  | Other (Specify)    |                          |
| If you live in an apartment, town home, or any multistory structure, how many floors are there? | Number of floors in building _____   |                    |                          |
| If you live in an apartment, town home, or any multistory structure, what floor do you live on? | Participant floor number _____   |                    |                          |
| About when was the building built?  | 2000-present<br>1990-1999<br>1985-1989<br>1980-1984<br>1970-1979<br>1960-1969<br>1950-1959<br>1940-1949<br>1939 or earlier<br>DK |                    |                          |
| What is the condition of your home or building?   | Good   | Fair               | Poor                     |
| Is the home or building built on a slab?  | Yes  | No                 | DK                       |
| Does the home or building have a basement?  | Yes  | No                 | DK                       |
| Does the home or building have a crawlspace?  | Yes  | No                 | DK                       |
| Does the home or building have an attached garage?  | Yes  | No                 | DK                       |
| Do the windows (e.g., sills) have peeling paint?  | Yes  | No                 | DK                       |
| Is there peeling paint in other places?   | Yes  | No                 | DK                       |
| Do you currently have mold in your home on an area greater than the size of a dollar bill?      | Yes  | No                 | DK                       |
| Do you have a woodstove or fireplace?   | Yes  |                    | No                       |
| Does smoke enter the room when you use it?  | No   | Yes                | DK                       |
| Are there any chemicals or open containers stored in or near the living spaces of your home?    | Yes  | No                 | DK                       |
| Do you use pesticides in your home?   | Yes  | No                 | DK                       |
| <b>Other</b>  |  |                    |                          |
| Is there anything you want us to know that we did not ask about?                                |  |                    |                          |

## Water

*Script: These questions will help us determine the overall quality of your water as it relates to your exposure or use.*

|   |   |           |        |
|---|---|-----------|--------|
| What is your main source of <b>drinking</b> water in your home or building?   | City or county (public)<br>Private well<br>Spring<br>Pond<br>Cistern<br>Community well<br>Bottled<br>Other Specify: _____<br>Don't know |           |        |
| (If a water company) What is the name of the water company that provided the water (the place where you send in your water bill)?<br>(Interviewer may want to get the usage off the water bill) |   |           |        |
| If you have a <b>private well</b> , has it been tested?   | Yes   | No        | DK     |
| If 'yes' do you know the date it was tested, who did the testing, whether it was tested for bacterial and/or chemical contamination, and the results?   | Date:<br>Company:<br>Bacteria / Chemical<br><br>Results:  |           |        |
| What is your main source of water used for <b>cooking</b> ?   | City or county (public)<br>Private well<br>Spring<br>Pond<br>Cistern<br>Community well<br>Bottled<br>Other Specify: _____<br>Don't know |           |        |
| What is your main source of water for <b>bathing and showering</b> ?  | City or county<br>Private well<br>Spring<br>Pond<br>Cistern<br>Community well<br>Bottled<br>Other Specify: _____<br>Don't know          |           |        |
| <i>Surveyor, the next three questions are for suspect Volatile Organic Compounds (VOCs) in water:</i>   |   |           |        |
| In the last three days [or INSERT TIMEFRAME], did {you/she/he} take a hot shower or bath for five minutes or longer?  | Yes   | No        | DK     |
| How long ago, in hours, has it been since {your/her/his} last shower or hot bath?   |   |           |        |
| Do you limit time showering and bathing?  | Never   | Sometimes | Always |
| Do you shower or bathe in cool water?   | Never   | Sometimes | Always |
| Do you limit steam exposure (e.g., from dishwasher, boiling)?   | Never   | Sometimes | Always |
| What is your main source of water for <b>pools and hot tubs</b> ?   | City or county<br>Private well<br>Spring<br>Pond<br>Cistern<br>Community well<br>Bottled<br>Other Specify: _____                        |           |        |

|   |  |           |        |    |
|---|--|-----------|--------|----|
|   | Don't know   |           |        |    |
| List all of the water treatment devices for your <b>drinking water or water used for mixing drinks</b> (e.g., formula, juices). | None<br>Charcoal Filter/Granular Activated Carbon (GAC)<br>Ceramic Filter<br>Reverse Osmosis<br>Water Softener<br>Boil Water<br>Distillation<br>Aerator<br>Water Filter System (Brita, Pur, etc) |           |        |    |
| List all of the water treatment devices for your water used for <b>cooking</b> .  | None<br>Charcoal Filter/GAC<br>Ceramic Filter<br>Reverse Osmosis<br>Water Softener<br>Boil Water<br>Distillation<br>Aerator<br>Water Filter System (Brita, Pur, etc)                             |           |        |    |
| List all of the water treatment devices for your <b>bathing and showering water</b> .   | None<br>Charcoal Filter/GAC<br>Ceramic Filter<br>Reverse Osmosis<br>Water Softener<br>Boil Water<br>Distillation<br>Aerator<br>Water Filter System (Brita, Pur, etc)                             |           |        |    |
| Do you use water filters in your home?  | Yes  |           | No     |    |
| If you have filters, do you regularly replace and maintain filters?   | Never  | Sometimes | Always | DK |
| Do you follow drinking water recommendations?   | Never  | Sometimes | Always | DK |
| <u>Plumbing</u>   | Yes  |           | No     |    |
| Do you have copper pipes?   | Yes  |           | No     |    |
| Does your plumbing have lead solder?  | Yes  |           | No     |    |

## Soils

**Script - If chemicals are in the soils, you can get them on your skin by gardening, playing, touching your pets, walking barefoot on exposed dirt (no grass, mulch, etc).**

**If the question is not applicable to you , please answer "Never Do This."**

### Soils Information –Contact

|   |               |                |                   |                |
|---|---------------|----------------|-------------------|----------------|
| Did you bring home [LIST soil, products, etc] from [LIST LOCATION].   | <b>Yes</b>    |                | <b>No</b>         |                |
| How often do you work in soil IN YOUR YARD (e.g., gardening, digging, building, repairing)?   | Never Do This | Seldom Do This | Sometimes Do This | Always Do This |
| <i>If "Never Do This", skip next 5 questions</i>  |               |                |                   |                |
| If so, how frequently do you work in soil in your yard?   | Daily         |                | Weekly            | Monthly        |
| How often do you use gloves and protective clothing when you work in soil? (e.g. working, playing outdoors, gardening, yardwork)                          | Never Do This | Seldom Do This | Sometimes Do This | Always Do This |
| How often do you change clothes immediately after outdoor activity (e.g. working, playing outdoors, gardening, yard work)                                 | Never Do This | Seldom Do This | Sometimes Do This | Always Do This |
| How often do you wash hands, face, and/ or other exposed skin immediately after outdoor activity (e.g., working, playing outdoors, gardening, yard work)? | Never Do This | Seldom Do This | Sometimes Do This | Always Do This |
| How often do you wash dirty clothes immediately after wear (e.g., work clothes, yard work clothes)?   | Never Do This | Seldom Do This | Sometimes Do This | Always Do This |

### Soil Information (Tracking inside home)

|  |               |                |                   |                |
|--|---------------|----------------|-------------------|----------------|
| How often do you remove shoes before entering your home?                       | Never Do This | Seldom Do This | Sometimes Do This | Always Do This |
| How often do you cover bare soils with turf or mulch?                          | Never Do This | Seldom Do This | Sometimes Do This | Always Do This |
| How often do you wet-down disturbed soils (e.g. gardening, digging, building)? | Never Do This | Seldom Do This | Sometimes Do This | Always Do This |
| When you go outside, how often do you have contact with dirt without shoes?    | Never Do This | Seldom Do This | Sometimes Do This | Always Do This |

### Pets (Tracking dirt inside and dander)

|  |               |                |   |                |
|--|---------------|----------------|---|----------------|
| Do you have any pets?  | Yes           |                | No  |                |
| What types of indoor pets do you have in your home?                      | Dog           | Cat            | Rodents: (hamster, mice, rat, gerbil, guinea pig) | Rabbit         |
|  | Ferret        | Other:         |   |                |
| When your pets go outdoors, how often do they track dirt into the house? | Never Do This | Seldom Do This | Sometimes Do This                                 | Always Do This |
| List the number of indoor pets that regularly go outdoors.               |               |                |   |                |

Note to surveyor - The pets questions can be asked of one person in the household and don't have to be repeated for each person.

### House Cleaning Frequency

**Script –This next set of questions is about the cleaning habits in your home by you or someone else.**

*Note to surveyor: The home cleaning questions can be asked of one person in the household and don't have to be repeated for each person.*

|  |              |             |                        |       |
|--|--------------|-------------|------------------------|-------|
| How often does anyone wet mop your home?     | Twice a week | Once a week | Less than once a month | Never |
| How often does anyone dry dust your home?    | Twice a week | Once a week | Less than once a month | Never |
| How often does anyone broom sweep your home? | Twice a week | Once a week | Less than once a month | Never |



|  |                 |             |                        |       |
|--|-----------------|-------------|------------------------|-------|
| How often does anyone vacuum your home? [if never go to next section]                            | Twice a week    | Once a week | Less than once a month | Never |
| Does your vacuum have a bag?   | Yes             |             | No                     |       |
| Does your vacuum have a high efficiency particulate air (HEPA) filter?                           | Yes             | No          | Don't Know             |       |
| Was (INSERT TYPE OF CLEANING, OR SAY ANY CLEANING) done in rooms where the samplers were placed? | Yes             |             | No                     |       |
| If yes, what type of cleaning?   | Vacuum          | Damp mop    | Wet mop                |       |
|  | Dry mop or dust | Sweep       | Other:                 |       |

**If you currently have children  $\leq 18$  in your home, please respond to the following statements. If not, please skip to the next section.**

|   |               |                |                   |                |
|---|---------------|----------------|-------------------|----------------|
| Do you keep children from playing, biking, or doing other activities in areas with possible soil contamination? | Never Do This | Seldom Do This | Sometimes Do This | Always Do This |
| Do you keep children from eating dirt?  | Never Do This | Seldom Do This | Sometimes Do This | Always Do This |
| Do you keep children from putting their fingers and hands in their mouths?                                      | Never Do This | Seldom Do This | Sometimes Do This | Always Do This |

## Garden

*Script: The next questions are about your contact with fresh fruits and /or vegetables*

|   |       |       |            |            |
|---|-------|-------|------------|------------|
| Does anyone, including you or a lawn service, use chemicals on your lawn or garden?                               | Yes   | No    | Don't know |            |
| Do you or your neighbor grow fruits and vegetables in the yard?   | Yes   |       | No         |            |
| What vegetables/fruits do you grow and eat from you or your neighbor's garden?                                    |       |       |            |            |
| When was the last time you ate that vegetable and/or fruit?   | Days  | Weeks | Months     | Years ago  |
| When you eat those fruits and/or vegetables, how often do you eat them?   | Daily |       | Weekly     | Monthly    |
| How often do you wash the vegetables and/or fruit before you eat them?  | Never |       | Sometimes  | Always     |
| How often do you wash the vegetables and /or fruit before you cook them?  | Never |       | Sometimes  | Always     |
| (Note to surveyor: Process can include pressure cooking (can or bag, hot water (can or bag), freezing, or drying) |       |       |            |            |
| Do you process your fruit and vegetables or your neighbor's? [if 'no' go to next section]                         | Yes   |       | No         | Don't Know |
| When was the last time you ate your processed fruit or vegetables?  | Days  |       | Weeks      | Months     |
| How often do you or your family eat the vegetables and/or fruit you processed from your garden?                   | Daily |       | Weekly     | Monthly    |
| How often do you or your family eat the vegetables and/or fruit you processed from your neighbor's garden?        | Daily |       | Weekly     | Monthly    |

## Foods

### Fish

*Script: These questions will help us determine if eating locally caught fish may increase your contact with chemicals.*

*First for the following questions, when I say “fish”, I mean any type of seafood, including shellfish, squid, crab, sea urchins or seaweed*

|  |   |                               |  |
|--|---|-------------------------------|--|
| Does anyone in your household currently catch fish (of any kind) from [LIST WATERBODY]?  | Yes   | No                            | DK   |
| Does anyone in your household eat the fish caught from [LIST WATERBODY]?   | Yes   | No                            | DK   |
| How long have you eaten fish?<br>(RECORD IN YEARS)   |   |                               |  |
| <i>Script: When I say “fish meals”, I mean any meal you had which consisted of the entire fish or parts of fish</i>  |   |                               |  |
| What kind of fish and how many fish meals have you eaten in [INSERT TIME FRAME OR USE the last 30 days]?<br>(RECORD NUMBER for each)   |   |                               |  |
| How many ounces of fish do you usually eat in one meal?<br><br>(Surveyor: USE A MODEL FOR SIZE IF POSSIBLE)  | 1-4oz   | 5-8oz                         | >8oz   |
| What is your primary source of fish? In other words, where do you usually get the fish that you eat? Do you...<br>(SURVEYOR: READ LIST. ONE ANSWER ONLY)   | Catch fish yourself or get it from a household member<br>Purchase from a roadside vendor or flea market<br>Purchase from a fisherman’s co-op<br>Purchase from a supermarket<br>Purchase from a restaurant<br>Receive from family and friends<br>Other (SPECIFY) |                               |  |
| In the last 30 days, how often did you eat fish caught from<br><i>LIST WATERBODY(IES) OF INTEREST?</i>   |   |                               |  |
| For (AREAS MENTIONED ABOVE), what type(s) of fish did you USUALLY catch, take home and eat?  |   |                               |  |
| Did you eat fish within the last [INSERT TIME FRAME OR USE seven days]?  | Yes   | No                            |  |
| Where did you get the fish that you ate within the last [INSERT TIME FRAME OR USE seven days]? In other words, where do you usually get the fish that you eat? Do you... (READ, CIRCLE ALL THAT APPLY) | Catch fish yourself or get it from a household member<br>Purchase from a roadside vendor or flea market<br>Purchase from a fisherman’s co-op<br>Purchase from a supermarket<br>Purchase from a restaurant<br>Receive from family and friends<br>Other (SPECIFY) |                               |  |
| (FOR EACH FISH EATEN) Which parts of this fish do you usually eat? (CHECK ALL THAT APPLY)  | Whole<br>Eyes   | Filet<br>Skin                 | Head<br>Bones<br>Fish eggs (roe)<br>Intestines |
| FOR EACH FISH EATEN) How do you usually prepare this fish? Do you skin it, trim the fat, gut it, a combination of, or some other way?  | Skinning<br>Combination   | Trimming fat<br>Other         | Gutting  |
| What is your PRIMARY cooking method for this fish?   | Raw<br>Stewed   | Pan Fried<br>Grilled<br>Baked | Deep Fried<br>Other<br>Boiled/                 |

### Communication/Education

Before taking this survey, were you aware of the LIST ADVISORY that has been issued for the LIST AREA?

Yes

No

|   |   |
|---|---|
| <p>Which of these information sources made you aware of the ADVISORY OR WARNING?<br/>(CHECK ALL THAT APPLY)</p>   | <ul style="list-style-type: none"> <li><input type="checkbox"/> A story in the newspaper</li> <li><input type="checkbox"/> A print advertisement in the newspaper</li> <li><input type="checkbox"/> Television broadcast</li> <li><input type="checkbox"/> Radio talk show or radio news</li> <li><input type="checkbox"/> Posted signs and notices</li> <li><input type="checkbox"/> Meeting</li> <li><input type="checkbox"/> Family and friends</li> <li><input type="checkbox"/> Church announcement/church bulletin or newspaper</li> <li><input type="checkbox"/> Word of mouth</li> <li><input type="checkbox"/> Other</li> </ul>  |
| <p>Since you learned about the ADVISORY OR WARNING, have you made any changes in either the way you eat the fish you catch or in your fishing habits?</p> | <p>No, I have not made any changes in my fishing or eating habits.</p> <hr/> <p>Yes</p>   |
| <p>If 'yes', which of these apply to you?</p>   | <ul style="list-style-type: none"> <li><input type="checkbox"/> I no longer eat any fish from the Advisory or Warning area</li> <li><input type="checkbox"/> I eat less fish now than before the Advisory or Warning.</li> <li><input type="checkbox"/> I eat more fish now because I can choose fish from areas outside the Advisory or Warning area.</li> <li><input type="checkbox"/> I have reduced the size of my fish meal portions.</li> <li><input type="checkbox"/> I have changed the way I prepare locally caught fish before I eat it.</li> <li><input type="checkbox"/> I have changed the way I cook locally caught fish before I eat it.</li> <li><input type="checkbox"/> I have changed my fishing locations.</li> <li><input type="checkbox"/> I have changed the species I fish for because of the Advisory or Warning.</li> <li><input type="checkbox"/> Other</li> </ul> |
| <p>How would you like to be informed of any future advisories or notices?</p>   | <ul style="list-style-type: none"> <li><input type="checkbox"/> Newspaper article</li> <li><input type="checkbox"/> Newspaper advertisement</li> <li><input type="checkbox"/> Television news broadcast</li> <li><input type="checkbox"/> Radio talk shows/news</li> <li><input type="checkbox"/> Posted signs and notices in areas that you fish</li> <li><input type="checkbox"/> Meetings</li> <li><input type="checkbox"/> Family and friends</li> <li><input type="checkbox"/> Church announcement/church newspaper</li> <li><input type="checkbox"/> Word of mouth</li> <li><input type="checkbox"/> Other</li> </ul>   |

### Domestic Animals

*Script: These questions will help us determine if eating locally raised domestic animals may increase your contact with chemicals.*

*First for the following questions, domestic animals are defined as locally raised animals that are used as a source of meat (such as cattle or chicken). Also the products of these domesticated animals such as milk or eggs are to be included in this survey*

|   |   |                                |
|---|---|--------------------------------|
| Do you currently eat locally raised domestic animals (of any kind)? | Yes   | No                             |
|   | <b>Domestic Animal</b>  | <b>Food</b>                    |
|   |   | <b># meals in last 30 days</b> |
|   |   | <b>Source (see list)</b>       |
|   | <b>Cattle:</b> Beef Milk* **Organs<br><b>Chicken:</b> Meat Eggs Organs<br><b>Goat:</b> Meat Milk* Organs<br><b>Sheep/Lamb:</b> Meat Milk* Organs<br><b>Pigs/Boar:</b> Meat Organs<br><b>Turkey:</b> Meat Eggs Organs<br><b>Ostrich:</b> Meat Eggs Organs<br><b>Other: List</b>  |                                |
| If yes, what type and how are they used for food?                   | * Milk and milk products including milk, butter, cheese, yogurt, etc)<br>**Indicate if the milk products are pasteurized.<br><br>Source List:<br>Where do you usually get the domestic animals that you eat? Do you... (READ LIST. ONE ANSWER ONLY)<br><br>1. Raise domestic animals yourself or get it from a household member<br>2. Purchase from a roadside vendor or flea market<br>3. Purchase from a domestic animal co-op<br>4. Purchase from a supermarket<br>5. Purchase from a restaurant<br>6. Receive from family and friends<br>7. Other (SPECIFY) |                                |

### Game

*Script: Game refers to wild animals such as deer which are hunted and used as a source of food.*

|  |   |  |     |
|--|---|--|-----|
| Do you currently eat game (of any kind)?           | No, NEVER<br>I do not currently eat game, nor have I ever eaten game. | No, PREVIOUS but I have previously eaten game. | Yes |
| How long have you eaten game?<br>(RECORD IN YEARS) |   |  |     |
| Do you hunt or is game given to you to eat?        | Yes   | No   |     |
| Where do you hunt? (RECORD LOCATION)               |   |  |     |

Check the game you consume and list how often (weekly, monthly, yearly) and the primary place you get the game (READ LIST. ONE ANSWER ONLY):

| <i>Game</i>   | <i>Frequency</i><br><i>(Weekly, Monthly, Yearly)</i> | <i>Source</i><br><i>(see list)</i> |
|---|--|------------------------------------|
| Deer  |  |                                    |
| Rabbit  |  |                                    |
| Quail   |  |                                    |
| Duck  |  |                                    |
| Dove  |  |                                    |
| Turkeys   |  |                                    |
| Elk   |  |                                    |
| Caribou   |  |                                    |
| Alligator   |  |                                    |
| Other: List   |  |                                    |
| Where do you usually get the game that you eat? Do you... |  |                                    |
| 1. Hunt game yourself or get it from a household member   |  |                                    |
| 2. Purchase from a roadside vendor or flea market         |  |                                    |
| 3. Purchase from a game co-op                             |  |                                    |
| 4. Purchase from a supermarket                            |  |                                    |
| 5. Purchase from a restaurant                             |  |                                    |
| 6. Receive from family and friends                        |  |                                    |
| 7. Other (SPECIFY)  |  |                                    |

## Confounders/Other Possible Sources of Exposure Questions

*Script: For the next set of questions, we will be asking you about other ways or places you may have come in contact with chemicals.*

### Occupational Questions

*Script: Answer the following questions about the kinds of jobs you have had.*

|   |  |               |                                  |                                  |      |  |
|---|--|---------------|----------------------------------|----------------------------------|------|--|
| What is the name of your current employer (s)?  | Job1   |               | Job2                             |                                  | Job3 |  |
| Which best describes your current employment status?  | Employed for wages   | Self-employed | Out of work for more than 1 year | Out of work for less than 1 year |      |  |
|   | A Homemaker  | A Student     | Retired                          | Unable to Work                   |      |  |
| At your <b>present</b> work:  | Animal Control Worker, Animal Scientist, Veterinarian<br>Airport or Aircraft Worker<br>Arts & Media<br>Assemblers & Fabricator<br>Car Repair, Mechanic<br>Chemical Industry Worker (mixer, processor, researcher)<br>Child Care Worker<br>Cleaning homes or offices<br>Construction<br>Crop & Livestock Production<br>Dentist, Dental Hygienist<br>Detective and Criminal Investigator<br>Disabled & stay at home<br>Dry Cleaning Worker<br>Fire Fighter<br>Electrician, Electrical worker<br>Engineering, Sciences & Education<br>Equipment Operator<br>Etcher or Engraver<br>Extractive (e.g., mine machines, drills)<br>Explosives Worker<br>Farmworker<br>Fishing & Hunting<br>Floor Finisher<br>Food Processor<br>Food Service<br>Furniture Finisher<br>Grounds Maintenance Worker<br>Hairdresser, Hair Stylist &/or Cosmetologist<br>Health Care Worker<br>Home Care Taker<br>Installation, Maintenance & Repair Worker<br>Jeweler<br>Logging, Forest & Conservation Worker<br>Machinist<br>Material Moving<br>Metalworking & Plasticworking<br>Miner<br>Miscellaneous Production Worker<br>Manicurist<br>Mortician and Embalmer<br>Office Worker<br>Painter<br>Pest Control Worker<br>Petroleum worker<br>Photo processing, photographer<br>Physician, Anesthesiologists<br>Pilot<br>Police or Sheriff Patrol Officer |               |                                  |                                  |      |  |
| What best describes the type of work you are doing (at Job 1, Job2, Job3 etc.)?<br><br><p>(Note to surveyor: This is an example of an industry or occupation list. It should be edited to only include jobs of interest to your investigation (e.g., jobs that may include chemical use similar to what you are investigating. If you want to include an exhaustive list of occupations or industries, you can use the U.S. Census list found at <a href="http://www.census.gov/hhes/www/oiindex/overview.html">http://www.census.gov/hhes/www/oiindex/overview.html</a>)</p> <p>If you want to narrow the list to jobs or industries with chemical of interest, consider searching “agents” @ <a href="http://hazmap.nlm.nih.gov/">http://hazmap.nlm.nih.gov/</a>, then look at processes, industries, and activities with risk of exposure. You can also search it backward when you know a job and it will tell you the hazards associated with that job.)</p> |  |               |                                  |                                  |      |  |

|  |   |              |                |          |            |              |
|--|---|--------------|----------------|----------|------------|--------------|
|  | Printing Worker<br>Retired<br>Roofer<br>Textile, Apparel & Furnishing Worker<br>Utilities & Transportation Worker<br>Welder including soldering & brazing<br>Woodworker<br>Other: List: _____<br>None |              |                |          |            |              |
| What is your current job title?  | Job1  |              | Job2           |          | Job3       |              |
| What are your main job tasks?  | Job1  |              | Job2           |          | Job3       |              |
| When did you start to work for your current employer(s)?<br><br>(Note: try to get month and year or at least year) or<br>“current job” ) | mm/dd/year  |              |                |          |            |              |
| For the following questions, “contact” means touching, breathing, or eating/ ingesting/swallowing  |   |              |                |          |            |              |
| Do you have contact with harmful chemicals, physical debris, dusts or mists, or hazardous powders at your current job?                   | Yes<br>Job1<br>Job2<br>Job3   |              | No             |          | DK         |              |
| If yes to the above question, please describe the hazard<br><br>(Surveyor, list the hazards and circle the response).                    | Solvent   | Breathing    | Physical       | Dusts    | Inhalable  | Breathing    |
|  |   | Touching     |                | Gas      |            | Touching     |
|  |   | Swallowing   |                | Liquid   |            | Swallowing   |
|  |   | Other (list) |                | Mists    |            | Other (list) |
|  | Asbestos  |              | Silica         |          | Lead       |              |
| Have you or could you have contact with radiation at your job?   | Yes<br>Describe:  |              | No             |          | DK         |              |
| Have you or could you have contact with [INSERT CHEMICAL OR COMPOUNDS OF INTEREST] at your job (e.g., lead, asbestos, silica)?           | Yes<br>Job1<br>Job2<br>Job3<br>Describe:  |              | No             |          | DK         |              |
| Are you required to wear protective equipment at your current job? [if ‘no’ skip to the next section]                                    | Yes   |              |                | No       |            |              |
| Do you wear protective equipment such as gloves, dust mask or respirator, hood, etc at work?   | Always  |              | Sometimes      |          | Never      |              |
| What type of equipment was worn?   | Gloves  | Always       | Dust Mask      | Always   | Respirator | Always       |
|  |   | Sometime     |                | Sometime |            | Sometime     |
|  |   | Never        |                | Never    |            | Never        |
|  | Coveralls/ Suits  | Always       | Eye Protection | Always   | Hood       | Always       |
|  |   | Sometime     |                | Sometime |            | Sometime     |
|  |   | Never        |                | Never    |            | Never        |
| Do you wear your work clothes home?  | Always  |              | Sometimes      |          | Never      |              |
| Do you wear your work shoes home?  | Always  |              | Sometimes      |          | Never      |              |
| Do you shower and/or change clothes before coming home from work?  | Always  |              | Sometimes      |          | Never      |              |
| Have you ever been off work from your current job for more than a day because of an illness or injury related to your work?              | Yes<br>Describe:<br>When:   |              |                | No       |            |              |

|  |  |                    |               |    |
|--|--|--------------------|---------------|----|
| At your <b>past</b> work:  | <i>Job</i>   | <i>Time Period</i> | <i>Months</i> |    |
| What jobs or industries have you worked in the past<br>(Surveyor: insert 1, 2, 5, 10 or other timeframe of interest)<br>year(s)?     |  |                    | <i>Years</i>  |    |
|  |  |                    | <i>Months</i> |    |
|  |  |                    | <i>Years</i>  |    |
|  |  |                    | <i>Months</i> |    |
| Note when (approximate year or timeframe) and<br>approximately how long (months or years) by each.                                   |  |                    | <i>Months</i> |    |
|  |  |                    | <i>Years</i>  |    |
| <i>Example: Welding and soldering metals, 1989-<br/>Construction, 1987, years</i>  |  |                    |               |    |
| What is the longest job held? When? How long?  |  |                    |               |    |
| Have you ever been in the military?  | Yes<br>Main Job Tasks:<br>When:<br>How long:   |                    | No            |    |
| Have you ever worked on a farm or done seasonal farm work?   | Yes<br>Main Job Tasks:<br>Describe:<br>When:<br>How long:  |                    | No            |    |
| At your past work, have you ever worked at a facility that<br>[INSERT (processed, machined, used)] [INSERT<br>CHEMICAL OR COMPOUND]? | Yes<br>Job Tasks:<br>Describe:<br>Job Title:<br>When:<br>How Long:<br>or<br>Year Began:<br>Year End: |                    | No            |    |
| Have you ever been off work from a past job for more than<br>a day because of an illness or injury related to your work?             | Yes<br>Describe:<br>When:  |                    | No            |    |
| Have you ever changed jobs or work assignments because<br>of work-related health problems or injuries?                               | Yes<br>Describe:<br>When:  |                    | No            |    |
| <b>Occupational/Take Home Questions</b>  |  |                    |               |    |
| <i>Script: Answer the following questions about the jobs people in or visiting the household have had.</i>                           |  |                    |               |    |
| Has anyone in the household worked in [list industry]?   | Yes  |                    | No            |    |
| <i>Surveyor: If more than one person has contact with<br/>chemicals, ask these questions for each separately.</i>                    |  |                    |               |    |
| Did that person come home from work without showering?   | Always   | Sometimes          | Never         | DK |
| If they worked in the past: Did that person wear work<br>clothing home after working?  | Always   | Sometimes          | Never         | DK |
| Did that person wear protective equipment such as gloves,<br>dust mask or respirator, hood, etc at work?                             | Always   | Sometimes          | Never         | DK |
| Did they wear their work shoes home?   | Always   | Sometimes          | Never         | DK |
| If they are currently working: Does that person wear work<br>clothing home after working?  | Always   | Sometimes          | Never         | DK |
| Do they wear their work shoes home?  | Always   | Sometimes          | Never         | DK |
| Does that person shower before they come home from<br>work?  | Always   | Sometimes          | Never         | DK |
| Does that person wear protective equipment such as<br>gloves, masks, hood, etc at work?  | Always   | Sometimes          | Never         | DK |



## Hobbies Questions

*Script: A hobby is considered an activity or interest pursued outside one's regular occupation and engaged in primarily for enjoyment. Answer the following questions about your hobbies and activities at home.*

What **hobbies** do you or your household members engage in **AT home**?

(List hobbies (excluding sports). Example: woodworking, stained glass, etc.)

(Note to surveyor: If you want to narrow the list to hobbies with chemical of interest, consider searching the tab "ingredients" @ <http://hpd.nlm.nih.gov/index.htm> , then list the chemical and it will provide a list of products that contain it. You can also search "products" and choose "arts and crafts" to display the chemicals associated with the hobby.)

Batik printing  
Candle-making  
Ceramics making  
Dye Use  
Electronics  
Epoxy Use  
Enameling  
Fishing gear (making) sinkers, etc  
Glassblowing  
Home remodeling  
Intalagio printing  
Jewelry making  
Leather crafting  
Lithography printing  
Lost wax casting  
Metal work  
Model making  
Painting  
Preparing, stuffing, and mounting animal skins (taxidermy)  
Soap making  
Staining  
Sculpturing plastics  
Sculpturing stone containing crystalline silica, e.g., granite  
Stained glass making  
Woodworking  
None

What **hobbies** do you or your household members engage in **AWAY** from home?

(List hobbies (excluding sports). Example: woodworking, stained glass, etc.)

Batik printing  
Candle-making  
Ceramics making  
Dye Use  
Electronics  
Epoxy Use  
Enameling  
Fishing gear (making) sinkers, etc  
Glassblowing  
Home remodeling  
Intalagio printing  
Jewelry making  
Leather crafting  
Lithography printing  
Lost wax casting  
Metal work  
Model making  
Painting  
Preparing, stuffing, and mounting animal skins (taxidermy)  
Soap making  
Staining  
Sculpturing plastics  
Sculpturing stone containing crystalline silica, e.g., granite  
Stained glass making  
Woodworking  
None

Do you burn, solder, or melt any products?

Yes

No

If yes, please describe:

|  |  |    |
|--|--|----|
| On average, for the past month, how many days did you use lead solder to join pieces of stained glass?   | <input type="radio"/> Never<br><input type="radio"/> 1-3 days per month<br><input type="radio"/> 1-2 days per week<br><input type="radio"/> 3-6 days per week<br><input type="radio"/> Daily<br><input type="radio"/> Don't know |    |
| On average, for the past month, how many days did you use lead based oil paint to paint pictures or jewelry?   | <input type="radio"/> Never<br><input type="radio"/> 1-3 days per month<br><input type="radio"/> 1-2 days per week<br><input type="radio"/> 3-6 days per week<br><input type="radio"/> Daily<br><input type="radio"/> Don't know |    |
| Do you use any alternative healing or cultural practices?  | Yes<br>Describe:   | No |
| <b>Household Chemical Uses and House Construction Questions</b><br><i>Script: To the best of your ability, answer the following questions about the household products you are using and/or that were used in the construction of your home.</i> |  |    |
| <b>Fuels</b>   |  |    |
| Have you recently (within the past {X} days) used or been near <u>fuels</u> ?  | Yes  | No |
| Is any gasoline, diesel, fuel oils, or kerosene being stored in any room or basement of your home or in an attached garage or carport?   | Yes  | No |
| Are any devices with gasoline or diesel engines such as lawn mowers being stored in any room or basement of your home or in an attached garage or carport?   | Yes  | No |
| In the last three days – today, yesterday, or the day before yesterday   | Yes  | No |
| In the last three days [or INSERT TIMEFRAME], did {you/she/he} pump gas into a car or another gasoline/diesel powered engine {yourself/herself/himself}?   |  |    |
| How long ago, in hours, did {you/she/he} pump gas?   |  |    |
| When did you last ride in a gasoline/diesel powered vehicle?   |  |    |
| In the past three days [or INSERT TIMEFRAME], have you breathed fumes from car, lawn mower or any other gasoline or diesel powered engine?   | Yes  | No |
| How long ago, in hours, did {you/she/he} breathe fumes?  |  |    |
| <b>Landscape or Yard Products</b><br>Have you recently (within the last {X} days or weeks) used any <u>landscape or yard products</u> such as fertilizer, lawn care, swimming pool products, etc?  | Yes  | No |

|   |  |    |
|---|--|----|
| If so, list the commercial or brand name of those   |  |    |
| <b>Cleaning Products</b><br>Have you recently (within the last{ X} days or weeks) used any <u>cleaning products</u> inside the home? Example: air fresheners, bleach, toilet bowl cleaner, etc              | Yes  | No |
| If so, list the commercial or brand name of those.  |  |    |
| Yesterday or {INSERT TIMEFRAME}, did any activities in the home or elsewhere involve working with or being near stain or spot removers?   | Yes  | No |
| If so, list the commercial or brand name of those.  |  |    |
| <b>Auto Products</b><br>Have you recently (within the last{ X } days or weeks) used any <u>auto products</u> such as brake fluid, de-icer, lubricant, sealant, etc?   | Yes  | No |
| If so, list the commercial or brand name of those.  |  |    |
| <b>Home Maintenance and Renovations</b><br>Have you recently (within the last {X} days or weeks) used any <u>home maintenance products</u> such as caulk, grout, insulation, paint, putty stain, etc?       | Yes  | No |
| If so, list the commercial or brand name of those.  |  |    |
| Are any paints or varnishes being stored in any room or basement or your home or in an attached garage or carport?  | Yes  | No |
| Are any woodworking solvents, paint stripping fluids or adhesives stored in any room or basement of your home or in an attached garage, or carport?   | Yes  | No |
| On average, for the past month, how many days did you paint walls, furniture, cars, or other objects?   | <input type="radio"/> Never<br><input type="radio"/> 1-3 days per month<br><input type="radio"/> 1-2 days per week<br><input type="radio"/> 3-6 days per week<br><input type="radio"/> Daily<br><input type="radio"/> Don't know |    |
| On average, for the past month, how many days did you use chemical paint strippers?   | <input type="radio"/> Never<br><input type="radio"/> 1-3 days per month<br><input type="radio"/> 1-2 days per week<br><input type="radio"/> 3-6 days per week<br><input type="radio"/> Daily<br><input type="radio"/> Don't know |    |
| On average, for the past month, how many days did you remove paint by other methods such as scraping, heat gun, or sanding?   | <input type="radio"/> Never<br><input type="radio"/> 1-3 days per month<br><input type="radio"/> 1-2 days per week<br><input type="radio"/> 3-6 days per week<br><input type="radio"/> Daily<br><input type="radio"/> Don't know |    |
| In the {last 6 months or INSERT TIMEFRAME}, have you or anyone else renovated your home in any way? This would include indoor painting, refinishing floors, adding rooms to the house or laying new carpet. | Yes  | No |
| In the{last 6 months or INSERT TIMEFRAME}, was any indoor painting done?  | Yes  | No |
| In the{last 6 months or INSERT TIMEFRAME}, have the floors in your home been refinished?  | Yes  | No |

|  |  |         |       |     |
|--|--|---------|-------|-----|
| In the{ <b>last 6 months or INSERT TIMEFRAME</b> }, have you had new carpet installed?   | Yes  |         | No    |     |
| If you have had new carpet, was glue used or was it tacked down?   | Glue   | Tacked  | Other | DK  |
| In the{ <b>last 6 months or INSERT TIMEFRAME</b> }, were additions constructed to the house or building?   | Yes  |         | No    |     |
| <b>Pesticides, Herbicides</b><br>Have you recently (within the last { <b>X</b> } days or weeks) used any <u>pesticides</u> including animal repellent, fungicide, herbicide, insecticide, etc to get rid of insects, rodents or other pests? | Yes  |         | No    |     |
| Was that done:   | Inside   | Outside | Both  |     |
| If so, list the commercial or brand name of those  |  |         |       |     |
| How many times in the ( <i>insert time period</i> ) were pesticides applied by a PROFESSIONAL?   | 1-2  | 3-5     | 6-9   | 10+ |
| How many times in the last ( <i>insert time period</i> ) did you PERSONALLY apply pesticides?  | 1-2  | 3-5     | 6-9   | 10+ |
| In the <b>past month</b> , were any chemicals used to treat this home to control fleas, roaches, ants, termites, or other insects?   | Yes  |         | No    | DK  |
| <b>Pet Products</b><br>Have you recently (within the last { <b>X</b> } days or weeks) used any <u>pet care products</u> such as flea & tick control, litter/stain/odor remover?  | Yes  |         | No    |     |
| If so, list the commercial or brand name of those.   |  |         |       |     |
| <b>Arts and Crafts</b><br>Have you recently (within the last { <b>X</b> } days or weeks) used any <u>arts and crafts products</u> such as adhesive, glaze, glue, primer, varnish, etc?   | Yes  |         | No    |     |
| If so, list the commercial or brand name of those.   |  |         |       |     |
| <b>Drinking Water</b><br>Have you had your <u>drinking water</u> tested?   | Yes  |         | No    | DK  |
| If so, what did the results show?  |  |         |       |     |
| On average, for the past month, how many days did you use lead solder to solder pipes, do electric repairs?  | <input type="radio"/> Never<br><input type="radio"/> 1-3 days per month<br><input type="radio"/> 1-2 days per week<br><input type="radio"/> 3-6 days per week<br><input type="radio"/> Daily<br><input type="radio"/> Don't know |         |       |     |
| <b>Lifestyle Questions</b>   |  |         |       |     |
| <i>Script: Sometimes our lifestyle can contribute to an increase or decrease in the chemical levels found our body. Answer the following questions about lifestyle.</i>  |  |         |       |     |
| Have you had a meal high in fat (fried fish, hamburgers, etc) in the X days?   | Yes  |         | No    |     |
| <b>Medicine Questions</b>  |  |         |       |     |
| <i>Script: Some medicines may contain small amounts of chemicals and can affect your test results. Please answer the following questions about medicines you are taking.</i>   |  |         |       |     |
| Please list the prescription medications you now take.   |  |         |       |     |

|  |       |
|--|-------|
|  | _____ |
|  | _____ |
|  | _____ |

|  |       |
|--|-------|
| Please list any over the counter medications such as vitamins, supplements (herbal and nutritional), acetaminophen (Tylenol) taken on a daily basis. | _____ |
|  | _____ |
|  | _____ |

|  |  |
|--|--|
| For medicines you do <u>not</u> take frequently (in the past few days), when was the last time you took that medicine? |  |
|--|--|

**Frequency of Contact Questions**  
*Script: Script - You may have had contact with chemicals from more than one place. Please answer these questions on where you believe you had the most contact with chemicals. "Contact" means breathing, touching, swallowing/eating/ingesting. "Chemicals" means (dust, paints, glues, cleaning fluids, pesticides, weed killer, etc.)*

|   |           |      |   |   |   |   |      |
|---|-----------|------|---|---|---|---|------|
| Answer the following questions on a scale of 1 to 4, 1 meaning "less" and 4 meaning "more." Where do you believe you have more frequent contact with chemicals? | Work      | Less | 1 | 2 | 3 | 4 | More |
|   | Hobbies   |      | 1 | 2 | 3 | 4 |      |
|   | Home      |      | 1 | 2 | 3 | 4 |      |
|   | Lifestyle |      | 1 | 2 | 3 | 4 |      |
|   | Foods     |      | 1 | 2 | 3 | 4 |      |

|  |           |      |   |   |   |   |      |
|--|-----------|------|---|---|---|---|------|
| Answer the following questions on a scale of 1 to 4, 1 meaning "less" and 4 meaning "more." Where do you believe you have the most amount of contact with chemicals? | Work      | Less | 1 | 2 | 3 | 4 | More |
|  | Hobbies   |      | 1 | 2 | 3 | 4 |      |
|  | Home      |      | 1 | 2 | 3 | 4 |      |
|  | Lifestyle |      | 1 | 2 | 3 | 4 |      |
|  | Foods     |      | 1 | 2 | 3 | 4 |      |

## Confounders/Other Possible Sources of Exposure Questions Chemical-Specific Set

### Food, Drink, Medicines

*Script: Sometimes chemicals are naturally found, can accumulate in, or are added to foods. Answer the following questions about food, drinks, or medicines you have had recently.*

#### Arsenic

|  |                                  |    |
|--|----------------------------------|----|
| Have you eaten seafood (finfish, shellfish like oysters, crabs, mussels, lobster, or other like octopus, squid, etc) in the past 3-4 days?             | Yes                              | No |
| Have you used any herbal supplements or remedies imported from India (containing ayurvedic medicine) or imported from South Asia in the {past X} days? | Yes<br>If yes, please list them: | No |
| <i>(Note: Asian herbal remedy Kushtay may contain Ar)</i>  |                                  |    |
| Have you eaten [INSERT FOOD] in the past [INSERT TIMEFRAME]?   | Yes<br>If yes, please list them: | No |

#### Mercury

|  |                                  |       |        |
|--|----------------------------------|-------|--------|
| When was the last time you ate fish?   | Days                             | Weeks | Months |
| Have you used any herbal supplements or remedies imported from India (containing ayurvedic medicine) or imported from South Asia in the {past X} days? | Yes<br>If yes, please list them: | No    |        |
| Do you or your family members use mercury for medicinal or ceremonial purposes?  | Yes                              | No    |        |

#### PCBs

|   |      |       |        |       |
|---|------|-------|--------|-------|
| When was the last time you ate seafood (finfish, shellfish like oysters, crabs, mussels, lobster, or other like octopus, squid, etc)? | Days | Weeks | Months | Years |
|---|------|-------|--------|-------|

#### PAHs

|  |        |        |         |          |              |  |
|--|--------|--------|---------|----------|--------------|--|
| In the last month, have you eaten any food that was <b>grilled</b> , blackened, charred, <b>smoked</b> or roasted through cooking? | Yes    |        |         | No       |              |  |
| How many servings?   | 1-2    | 3-5    | 6-10    | 11-19    | 20+          |  |
| In the last [INSERT TIMEFRAME], have you had any drinks that were roasted through cooking? (e.g., roasted coffee)?                 | Yes    |        |         | No       |              |  |
| If so, how many servings?  | 1 to 2 | 3 to 5 | 6 to 10 | 11 to 19 | More than 20 |  |

#### Naphthalene

|  |     |    |
|--|-----|----|
| {Do you/Does she/Does he} use toilet bowl deodorizers inside {your/her/his} home?  |     |    |
| [Some toilet bowl deodorizers clip onto the toilet rim, others, such as deodorant blocks and gels, are placed inside the tank or hang inside the wall of the tank. Brand names include Bully, 2000 Flushes, Vanish, X-14, Ty-D-Bol, Toilet Duck, Clorox, Lime-A-Way, and Sno Bol.] | Yes | No |
| [NOTE: Naphthalene is also used for in fungicides, lubricants, explosives, and wood preservatives. There are questions for those under Confounders/Other Possible Sources of Exposure Questions.]  |     |    |
| {Do you/Does she/Does he} use moth balls or crystals inside {your/her/his} home?   | Yes | No |

#### Fluoride, other Chemicals?

|  |     |    |
|--|-----|----|
| Do you or your family members drink tea? | Yes | No |
|--|-----|----|

#### Lead

|  |                                  |    |
|--|----------------------------------|----|
| Have you eaten candies produced in Mexico in the past 2 months?  | Yes                              | No |
| Have you used any herbal supplements or remedies imported from India (containing ayurvedic medicine) or imported from South Asia in the {past X} days? | Yes<br>If yes, please list them: | No |

|   |  |          |
|---|--|----------|
| (Note: <i>Bint al Thahab</i> , some calcium supplements, Chinese herbal medicine, surma)  |  |          |
| <b>Lifestyle Questions</b><br><br><i>Script: Sometimes our lifestyle can contribute to an increase or decrease in the chemical levels found in our body. Answer the following questions about lifestyle.</i>  |  |          |
| <b>Cadmium</b><br>Cadmium is a heavy metal that is found in cigarette smoke, semiconductor manufacturing, welding, battery manufacturing, and metal smelting operations.  |  |          |
| Have you or could you have had contact with Cadmium at your job?  | Yes  | No       |
| Do you smoke cigarettes now?  | Yes  | No       |
| How often do you smoke cigarettes?  | Daily  | Weekly   |
| How many cigarettes do you smoke per day?   | 1-5 day  | 6-10 day |
| Does anyone smoke cigarettes inside your home including household members and frequent guests?  | Yes  | No       |
| How often do household members or guests smoke cigarettes in your home?   | Daily  | Weekly   |
| <b>PAHs</b>   |  |          |
| Do you smoke cigarettes now?  | Yes  | No       |
| How often do you smoke cigarettes?  | Daily  | Weekly   |
| How many cigarettes do you smoke per day?   | 1-5 day  | 6-10 day |
| Does anyone smoke cigarettes inside your home including household members and frequent guests?  | Yes  | No       |
| How often do household members or guests smoke cigarettes in your home?   | Daily  | Weekly   |
| <b>Health Conditions</b><br><br>....may be used for lead, uranium, cadmium, benzene<br><br><i>Script: Sometimes a health condition can contribute to an increase or decrease in the chemical levels found in our body. Answer the following questions about your health conditions.</i> |  |          |
| Do you or have you had any of the medical problems below?   | Diabetes type I or II<br>Kidney disease<br>High Blood Pressure<br>Anemia, from low iron<br>Bone problems or disease (like osteoporosis or "brittle bones")<br>Chronic Respiratory Illness such as Asthma and Chronic Obstructive Pulmonary Disease (COPD)<br><b>Sickle Cell Anemia or Trait</b><br><b>G-6-P-D deficiency</b> |          |
| If yes, give details  |  |          |
| Are there times when your condition gets worse? (e.g., night, day weekend, weekday)   | When? Yes  | No       |
| Are there any places when your conditions get worse? (e.g., home, work, school)   | When? Yes  | No       |
| Are there any seasons when your conditions get worse? (e.g., spring, summer, fall, winter)  | When? Yes  | No       |