

**Study of Biomarkers of Exposures and Effects in Agriculture Collection Questionnaire  
Agricultural Health Study**

Location of Residence (County, State): \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
MM DD YYYY

OMB #: 0925-0406

Expiration date: xx/xx/2016

Collection of this information is authorized by The Public Health Service Act (42 USC 285l). Rights of study participants are protected by The Privacy Act of 1974. Participation is voluntary, and there are no penalties for not participating or withdrawing from the study at any time. Refusal to participate will not affect your benefits in any way. The information collected in this study will be kept private to the extent provided by law. Names and other identifiers will not appear in any report of the study. Information provided will be combined for all study participants and reported as summaries. You are being contacted by mail to complete this health follow-up survey because as a member of the Agricultural Health Study your continued involvement can help us learn more about how agricultural and environmental factors may affect the health of farmers and their families.

Public reporting for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. **An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.** Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: NIH, Project Clearance Branch, 6705 Rockledge Drive, MSC 7974, Bethesda, MD 20892-7974, ATTN: PRA (0925-0406). Do not return the completed form to this address.

**PRE-INTERVIEW PREPARATION:**

1. ASK PARTICIPANT FOR SHOWCARD WITH PESTICIDE INFORMATION.
2. ASK PARTICIPANT FOR ASSEMBLED PRESCRIPTION MEDICATIONS.
3. PROVIDE CALENDAR TO PARTICIPANT FOR REFERENCE.

**[Display subject ID and Participant information on CAPI “face sheet”]**

**Screening Questions To Ask Prior To Consent (SCR):**

1a. Is your name ^DSP.Respondent\_Fullname and is your date of birth ^STN.Respondent\_Birthdate?

Yes \_\_\_\_ (Q2) No \_\_\_\_

1b. What is your correct date of birth? \_\_\_\_/\_\_\_\_/\_\_\_\_  
MM DD YYYY

1c. [INTERVIEWER] IS IT POSSIBLE THAT THE NUMBERS IN THE DATE OF BIRTH FROM OUR RECORDS (BIRTHDATE), COMPARED TO THE BIRTHDATE GIVEN (RESPONDENT BIRTHDATE) COULD HAVE BEEN TRANSPOSED, MISREAD, OR ARE REVERSED?

YES \_\_\_\_ (Q2a) NO \_\_\_\_

1d. Does another person with a similar name but a different date of birth live here?

Yes \_\_\_\_

No \_\_\_\_ (Skip to Q1g)

1e. May I please speak to the other (FULL NAME)?

Yes \_\_\_\_\_ THANK INITIAL/INCORRECT RESPONDENT; WAIT TO RECORD "YES" WHEN THE RESPONDENT IS READY TO BEGIN.

No \_\_\_\_\_

1f. Do you know a better time when we can reach the other (FULL NAME)?

\_\_\_\_\_

RECORD INFORMATION ON AND BEST TIME TO REACH; THEN GO TO CLOSINGS.

1g. Do you know how we can reach the other (FULL NAME)?

\_\_\_\_\_

RECORD INFORMATION ON HOW TO REACH (COLLECT PHONE AND BEST TIME TO REACH); THEN GO TO CLOSINGS.

2a. According to your birthdate that we have on record, you should be ^DSP\_Respondent\_Age years old. Is this accurate?

YES \_\_\_\_\_ (Q3) NO \_\_\_\_\_

2b. What is your correct age? \_\_\_\_\_

IF <50 GO TO INELIGIBLE1

3. Do you have a blood clotting disorder such as hemophilia?

Yes \_\_\_\_\_ (GO TO INELIGIBLE2) No \_\_\_\_\_

4. Other than non-melanoma skin cancer, have you been diagnosed by a doctor with any type of cancer in the last three years?

Yes \_\_\_\_\_ No \_\_\_\_\_ (GO TO PER)

a. In what organ or part of the body did your cancer start? (If you are not sure of the answer, please give me your best guess).

b. In what year were you first diagnosed by a doctor with this cancer?

ENTER EACH CANCER AND DATE OF DIAGNOSIS.

1<sup>st</sup> cancer \_\_\_\_\_ Date of diagnosis \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
MM DD YYYY

2<sup>nd</sup> cancer (if applicable) \_\_\_\_\_ Date of diagnosis \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
MM DD YYYY

GO TO INELIGIBLE3

**Personal Information (PER):**

1. How tall are you? \_\_\_\_\_ feet / inches

2. How much do you weigh now? \_\_\_\_\_ pounds

3. **In the last 7 days**, have you used aspirin or aspirin-containing products, such as Bayer, Bufferin, or Anacin? (Please do not include aspirin-free products such as Tylenol and Panadol.)  
Yes \_\_\_\_\_ No \_\_\_\_\_ (Q4)

- a. What is the product name?: \_\_\_\_\_
- b. What is the product strength? Would you say:  
Adult strength (usually 325mg), \_\_\_\_\_  
Baby strength (usually 81mg), \_\_\_\_\_  
Or some other strength? (SPECIFY) \_\_\_\_\_
- c. How many pills of aspirin or aspirin-containing products have you taken in the **last 7 days**? \_\_\_\_\_
- d. When did you last take aspirin or aspirin-containing products?  
\_\_\_\_\_ days ago or \_\_\_\_\_ hours ago

4. **In the last 7 days**, have you used ibuprofen-containing products, such as Advil, Nuprin, or Motrin?  
Yes \_\_\_\_\_ No \_\_\_\_\_ (Q5)

- a. What is the product name: \_\_\_\_\_
- b. How many pills of ibuprofen-containing products have you taken **in the last 7 days**?  
\_\_\_\_\_
- c. When did you last take ibuprofen-containing products?  
\_\_\_\_\_ days ago or \_\_\_\_\_ hours ago

5. Are you regularly taking any blood thinning medications, such as Heparin, Coumadin, plavix or aspirin?  
Yes \_\_\_\_\_ No \_\_\_\_\_ (Q7)

6. Which blood thinning medication(s) do you regularly take?

- a. HEPARIN
- b. COUMADIN
- c. PLAVIX
- d. ASPIRIN
- e. OTHER (SPECIFY) \_\_\_\_\_

7. Do you regularly take any prescribed medicines? Yes \_\_\_\_\_ No \_\_\_\_\_ (Q8)

- a. Can you please tell me the name or names of the each prescription medication you are taking? REFER TO BOTTLES ASSEMBLED BY PARTICIPANT. REVIEW TOGETHER AND ENTER.  
\_\_\_\_\_

Next, I'm going to ask you about different conditions with which you may have been diagnosed. Please answer yes or no for each one.

8. Has a doctor or other medical professional ever told you you had:
- |  | YES | NO |
|--|-----|----|
| a. Heart disease?  | 1   | 2  |
| b. High blood pressure or hypertension?  | 1   | 2  |
| c. Diabetes?   | 1   | 2  |
| d. Rheumatoid arthritis?   | 1   | 2  |
| e. Any other autoimmune diseases? (IF ASKED: multiple sclerosis, sarcoidosis, lupus, or Sjogren's disease) | 1   | 2  |

The next series of questions deals with conditions that you may have had within the **last 30 days**. If you need to, please use the calendar to help with your answers.

9. In the **last 30 days**, have you had:
- a. A Cold or flu? Yes \_\_\_\_ No \_\_\_\_ (Q9b)  
 When did symptoms begin? \_\_\_\_/\_\_\_\_/\_\_\_\_  
 MM DD YYYY  
 When did symptoms resolve? \_\_\_\_/\_\_\_\_/\_\_\_\_  
 MM DD YYYY
- b. (In the **last 30 days**, have you had) bronchitis or pneumonia?  
 Yes \_\_\_\_ No \_\_\_\_ (Q9c)  
 When did symptoms begin? \_\_\_\_/\_\_\_\_/\_\_\_\_  
 MM DD YYYY  
 When did symptoms resolve? \_\_\_\_/\_\_\_\_/\_\_\_\_  
 MM DD YYYY
- c. (In the **last 30 days**, have you had) sinusitis or sinus problems?  
 Yes \_\_\_\_ No \_\_\_\_ (Q9d)  
 When did symptoms begin? \_\_\_\_/\_\_\_\_/\_\_\_\_  
 MM DD YYYY  
 When did symptoms resolve? \_\_\_\_/\_\_\_\_/\_\_\_\_  
 MM DD YYYY
- d. Have you had any other type of infection in the last 30 days?  
 Yes \_\_\_\_ No \_\_\_\_ (Q10)  
 List type(s) \_\_\_\_\_  
 When did symptoms begin? \_\_\_\_/\_\_\_\_/\_\_\_\_  
 MM DD YYYY  
 When did symptoms resolve? \_\_\_\_/\_\_\_\_/\_\_\_\_  
 MM DD YYYY

Now I'm going to ask about medical or dental x-rays or any other radiologic procedures you may have had during the **last 12 months**.

10. During the last 12 months, did you have a:

Type of Procedure	IF YES: When did you have this procedure? (mm/dd/yyyy)
a) Medical x-ray?	
b) Dental x-ray	
c) CT scan or CAT Scan?	
d) Fluoroscopy?	

e) PET scan?	
f) Diagnostic radioisotopes, for example a thallium stress test?	
g) Another type of radiologic procedure?	

11. How many servings of alcoholic beverages did you drink in the last seven days? A serving of an alcoholic beverage is defined as 12 fluid ounces of beer, 5 fluid ounces of wine, and 1.5 fluid ounces of hard liquor. Number of servings: \_\_\_\_\_
12. How many servings of alcoholic beverages did you drink in the last 24 hours? A serving of an alcoholic beverage is defined as 12 fluid ounces of beer, 5 fluid ounces of wine, and 1.5 fluid ounces of hard liquor. Number of servings: \_\_\_\_\_

The next series of questions deals with your tobacco use.

13. How often do you currently smoke or use the following tobacco products? Please tell me if you smoke or use these products: every day, some days, or not at all.

Product	Every day	Some days	Not at all
Cigarettes			
A pipe			
Cigars			
Cigarillos			
Chewing tobacco			
Snuff			
Other tobacco products (Specify): _____			

**Other agricultural exposures section (OAG)**

Now I would like to ask you a few questions about your activities at work and on your farm.

14. In the last 12 months, have you personally performed farm work or farming activities?  
Yes \_\_\_\_\_ No \_\_\_\_\_ (Q19)
15. Excluding gardens for personal use, what crops, including fruits and vegetables, were raised on your farm in the last 12 months?

- |                 |               |              |                |
|-----------------|---------------|--------------|----------------|
| None            | Corn pop      | Peaches      | Sweet potatoes |
| Apples          | Corn seed     | Peanuts      | Tomatoes       |
| Alfalfa         | Corn sweet    | Peppers      | Tobacco        |
| Barley          | Cotton        | Potatoes     | Wheat          |
| Bermuda grass   | Cucumbers     | Rye          | Nursery crops  |
| Blueberries     | Grapes        | Snap beans   | Pumpkins       |
| Cabbage         | Hay or forage | Sorghum      | Other:         |
| Christmas trees | Melons        | Soybeans     | _____          |
| Corn field      | Oats          | Strawberries |                |

16. In the last 12 months, how many (TYPE) were raised on your farm?

Type	Number
None	
Beef cattle	
Dairy cattle	
Hog/swine	
Poultry	
Poultry for eggs	
Sheep or goats	
Horses	
Other	

17. (IF YES TO RAISING POULTRY OR POULTRY FOR EGGS) Have you spent time in a poultry confinement area within the last month?

Yes \_\_\_ No \_\_\_

18. (IF YES TO SWINE) Have you spent time in swine confinement area within the last month?

Yes \_\_\_ No \_\_\_

19. In the last month, how many times have you performed the following activities?

a. How often have you ground animal feed? Would you say (READ RESPONSES):	Not at all 1-3 times 4-20 times >20 times
b. How about milking cows? Would you say:	Not at all 1-3 times 4-20 times >20 times
c. (How about) cleaning grain bins?	Not at all 1-3 times 4-20 times >20 times
d. (How about) working with or around moldy hay or straw?	Not at all 1-3 times 4-20 times >20 times

20. In the last 7 days, have you done any welding? Yes \_\_\_ No \_\_\_

21. In the last 7 days, have you done any painting? Yes \_\_\_ No \_\_\_

22. In the last 7 days, have you repaired engines? Yes \_\_\_ No \_\_\_

23. Do you currently have a job other than working on a farm?

Yes \_\_\_ No \_\_\_ (GO TO **Occupational Intro**)

- a. What is your current job other than farming? \_\_\_\_\_
- b. What type of business is this job in? Would you say:  
 Manufacturing?  
 A retail store?  
 Wholesale or distributor?  
 A service provider?  
 Construction?  
 Mining?  
 Farming, fishing, or forestry?  
 Government or military?  
 A shipyard?  
 Or some other type of business (SPECIFY)? \_\_\_\_\_
- c. How long have you had this job? \_\_\_\_\_ months / years
- d. Is this job year round or seasonal?  
 Year round \_\_\_\_\_ Seasonal \_\_\_\_\_

### Occupation Information (OCC)

I would now like to ask about your use of pesticides in the last 12 months. This includes the use of herbicides, insecticides, fungicides, fumigants, or other chemicals used to kill plants, insects, fungi, molds, or rodents. Please do not include the use of antibiotics, sanitizers, antimicrobial soaps or fertilizers.

- In the last 12 months, have you personally mixed, loaded, handled or applied these chemicals for use on crops, animals, or any other purpose NOT including home and garden use? I will ask you separately about the use of pesticides in your home and garden.  
 Yes \_\_\_\_\_ No \_\_\_\_\_ (Go to HOM)
- Which products have you used in the last 12 months? Please give the product trade name, if possible:  
 \_\_\_\_\_

[IF SHOWCARD IS COMPLETED, REVIEW WITH PARTICIPANT AS YOU ENTER DATA;  
 IF SHOWCARD IS NOT COMPLETED, PROBE FOR PRODUCT NAMES ONLY.]

What is the active ingredient in (PRODUCT)? \_\_\_\_\_

What is the (PRODUCT) EPA Registration #: \_\_\_\_\_

- In the last 12 months, on how many days did you mix, load or apply [insert pesticide name]?

Total number of days: \_\_\_\_\_

Don't know

- I would like to ask you about the dates of the three most recent uses of [insert pesticide name] within the last 12 months and the amount of time that you spent mixing, loading or applying [insert pesticide name] on each date.

(Please start with your most/Now tell me about your next most) recent use of [insert pesticide name]. .

	Date	Time spent (hours)
1		
2		
3		

5. In the last 12 months, did you personally mix and/or load [insert pesticide name]?

Yes \_\_\_\_\_ No \_\_\_\_\_ (Q6)

a. Was the [insert pesticide name] that you mixed and/or loaded a:

Liquid,

Powder,

Granule,

Dissolvable packet,

Or something else? OTHER: SPECIFY \_\_\_\_\_

b. When you mixed and/or loaded [insert pesticide name] did you normally wear gloves?

Yes \_\_\_\_\_ No \_\_\_\_\_ (Q5e)

c. What type of glove did you normally wear when you mixed and/or loaded [insert pesticide name]? Was it a:

Chemical resistant glove like nitrile?

Rubber or plastic waterproof glove?

Thin disposable glove like latex?

Fabric or leather?

Another type of glove? (SPECIFY): \_\_\_\_\_

d. What (other) personal protective equipment did you normally wear when mixing and/or loading [insert pesticide name]? Did you wear:

Goggles?

Face shield?

Disposable coveralls, like Tyvek?

Chemical-resistant jacket and pants?

Chemical-resistant apron?

Rubber boots?

Respirator? Which type? (SPECIFY) \_\_\_\_\_

Dust mask?

Long-sleeved shirt?

Something else? OTHER: SPECIFY \_\_\_\_\_

NONE

6. In the last 12 months, did you personally apply [insert pesticide name]?

Yes \_\_\_\_\_ No \_\_\_\_\_ (Next pesticide; else skip to **Home and Garden Pesticide Use Questions**)

a. Was [insert pesticide name] applied to:

Crop(s)? To which crops was it applied? (SPECIFY) \_\_\_\_\_

Animals or animal confinement areas?



Anything else? OTHER (SPECIFY): \_\_\_\_\_

- b. Was [insert pesticide name] applied as a liquid, powder, granule or something else?  
 LIQUID  
 POWDER  
 GRANULE  
 SOMETHING ELSE: SPECIFY \_\_\_\_\_
- c. What application method(s) was used? Was it:  
 Broadcast or boom spray?  
 Hand spray?  
 Air blast?  
 Or something else? OTHER (SPECIFY) \_\_\_\_\_
- d. When you mixed and/or loaded [insert pesticide name] did you normally wear gloves?  
 Yes \_\_\_\_\_ No \_\_\_\_\_ (Q6f)
- e. What type of glove did you normally wear when you mixed and/or loaded [insert pesticide name]? Was it a:  
 Chemical resistant glove like nitrile?  
 Rubber or plastic waterproof glove?  
 Thin disposable glove like latex?  
 Fabric or leather?  
 Another type of glove? (SPECIFY): \_\_\_\_\_
- f. What (other) personal protective equipment did you normally wear when mixing and/or loading [insert pesticide name]? Did you wear:  
 Goggles?  
 Face shield?  
 Disposable coveralls, like Tyvek?  
 Chemical-resistant jacket and pants?  
 Chemical-resistant apron?  
 Rubber boots?  
 Respirator? Which type? (SPECIFY) \_\_\_\_\_  
 Dust mask?  
 Long-sleeved shirt?  
 Something else? OTHER: SPECIFY \_\_\_\_\_  
 NONE

### Home and Garden Pesticide Use Questions (HOM)

I would now like to ask about your use of pesticides in your home and garden in the last 12 months. This includes the use of herbicides, insecticides, fungicides, fumigants, or other chemicals used to kill plants, insects, fungi, molds, or rodents. Please do not include the use of antibiotics, sanitizers, antimicrobial soaps or fertilizers.

1. In the last 12 months, have you personally used pesticides in your home and garden?

Yes \_\_\_\_\_ No \_\_\_\_\_ (END)

2. Which products have you used in your home and garden in the last 12 months? Please give the product trade name, if possible:
- 

[IF SHOWCARD IS COMPLETED, REVIEW WITH PARTICIPANT AS YOU ENTER DATA;  
IF SHOWCARD IS NOT COMPLETED, PROBE FOR PRODUCT NAMES ONLY.]

What is the active ingredient in (PRODUCT)? \_\_\_\_\_

What is the (PRODUCT) EPA Registration #: \_\_\_\_\_

### Closings

#### COMPLETE INTERVIEW

This concludes the interview portion of the visit. I appreciate your taking the time with me to answer these questions. Now I am going to get set up for the blood draw.

#### Interviewer Remarks

- R1. PARTICIPANT'S COOPERATION WAS:
1. VERY GOOD
  2. GOOD
  3. FAIR
  4. POOR
- R2. THE OVERALL QUALITY OF THIS INTERVIEW IS:
1. UNSATISFACTORY
  2. QUESTIONABLE
  3. GENERALLY RELIABLE
  4. HIGH QUALITY

#### NO INTERVIEW1

Ok, then. Thank you very much.

#### NO INTERVIEW2

I'm sorry for the confusion. That is all the questions I have for you at this time. Thank you for speaking with me today.

#### NO INTERVIEW3

That is all the questions I have for you at this time. Thank you for speaking with me today.

**INELIGIBLE 1:** I apologize. Our records indicated that you were within the age range we are including in the study. However, based on this updated information on your age, you are not eligible for this part of the Agricultural Health Study. Thank you for your time today.

**INELIGIBLE 2:** Unfortunately, you are not eligible for this part of the Agricultural Health Study: we are looking for a group of men who are able to provide blood samples. Thank you for your time today

**INELIGIBLE 3:** Unfortunately, you are not eligible for this part of the Agricultural Health Study: we are looking for a group of men who have never been diagnosed with cancer. Thank you for your time today