

Attachment 19-1: BEEA Home Visit CAPI (Random Select and Recent Exposed Groups)

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

Location of Residence (County, State): _____

Date: ____/____/____
MM DD YYYY

OMB #: 0925-0406
Expiration date: 09/30/2016

Collection of this information is authorized by The Public Health Service Act (42 USC 285I). 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 90 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. **Not including** non-melanoma skin cancer, have you been diagnosed by a doctor with any type of cancer in the last three years? **[IF REG FOLLOW-UP VISIT SAY: Not including non-melanoma skin cancer, have you been diagnosed by a doctor with any type of cancer since your last visit?]**

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.

1st cancer _____ Date of diagnosis _____/_____/_____
MM DD YYYY

2nd cancer (if applicable) _____ Date of diagnosis _____/_____/_____
MM DD YYYY

Personal Information (PER):

1. How tall are you? **[IF REG FOLLOW-UP VISIT, DO NOT ASK. ENTER DK.]**

_____ 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, Anacin or Excedrin? (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 **or _____ minutes 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 **or _____ minutes ago**
5. Are you regularly taking any blood thinning medications, such as Heparin, Coumadin, or plavix?
Since we have already asked you about aspirin, you do not need to report that here.
 Yes _____ No _____ (Q7)
6. Which blood thinning medication(s) do you regularly take?
- a. HEPARIN
 - b. COUMADIN
 - c. PLAVIX
 - d. OTHER (SPECIFY) _____
7. **In the last 30 days, have you taken any prescribed medicines? [IF THIRD REG FOLLOW-UP VISIT SAY: Since your last visit, have you taken 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.

[IF REG FOLLOW-UP VISIT SAY: I have to ask these questions the same way each time, so I may ask you about something you already told me at a previous recent visit. Please bear with me.]

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. An autoimmune disease? (IF ASKED: multiple sclerosis, | 1 | 2 |

sarcoidosis, lupus, or Sjogren's disease)

- | | | |
|--|---|---|
| f. Hay fever, seasonal allergies or allergic rhinitis? | 1 | 2 |
| g. Eczema? | 1 | 2 |
| h. Asthma? | 1 | 2 |

The next series of questions deals with conditions or symptoms that you may have had within the **last 12 months**. If you need to, please use the calendar to help with your answers.

9. During the last 12 months, have you had any symptoms of hay fever, seasonal allergies or allergic rhinitis? Examples of symptoms include having a stuffy, itchy or runny nose or watery, itchy eyes. Please do not include symptoms related to a cold or the flu.

Yes _____ No _____ (Q9g)

- a. In the last 12 months, what allergy symptoms have you had? (select all that apply)

Stuffy, itchy or runny nose

Watery, itchy eyes

Sinusitis or sinus pain or pressure

Other symptoms: _____

- b. Were the symptoms worse after working with grains or hay?

Yes _____

No _____

Did not work with grains or hay _____

- c. Were the symptoms worse after working with animals?

Yes _____

No _____

Did not work with animals _____

- d. On how many days did you have symptoms of allergies within the last 30 days?

_____ days [0-30]

- e. On how many days did you have symptoms of allergies within the last 7 days?

_____ days [0-7]

- f. Have you had any symptoms of allergies yesterday or today?

Yes _____ No _____

- g. Did you use any medications to treat or prevent allergy symptoms?

Yes _____ No _____ (Q10)

- h. Please list the medications you used to treat your allergies.

Name of medication(s): _____

10. During the last 12 months, have you had any itching or other symptoms of eczema?

Yes _____ No _____ (Q10d)

- a. Have you had symptoms of eczema in the last 30 days?

Yes _____ No _____ (Q10d)

b. Have you had symptoms of eczema in the last 7 days?

Yes _____ No _____ (Q10d)

c. Have you had symptoms of eczema yesterday or today?

Yes _____ No _____

d. Did you use any medications to treat eczema?

Yes _____ No _____ (Q11)

e. Please list the medications you used to treat your eczema: _____

11. During the last 12 months, have you had an episode of asthma or an asthma attack?

Yes _____ No _____ (Q11d)

a. Have you had any symptoms of asthma or an asthma attack in the last 30 days?

Yes _____ No _____ (Q11d)

b. Have you had any symptoms of an asthma or asthma attack in the last 7 days?

Yes _____ No _____ (Q11d)

c. Have you had any symptoms of asthma or asthma attack yesterday or today?

Yes _____ No _____

d. Did you use any medications for asthma or asthma attack?

Yes _____ No _____ (Q12)

e. Please list the medications you used to treat your asthma.

Name of medication(s): _____

The next series of questions deals with conditions that you may have had within the **last 30 days**. [IF THIRD REG FOLLOW-UP VISIT SAY: The next series of questions deals with conditions that you may have had since your last visit.] If you need to, please use the calendar to help with your answers.

12. In the **last 30 days**, have you had [IF REG FOLLOW-UP VISIT SAY: **Since your last visit**, have you had]:

a. A Cold or flu? Yes _____ No _____ (Q12b)

When did symptoms begin? _____/_____/_____
MM DD YYYY

When did symptoms resolve? _____/_____/_____
MM DD YYYY

b. (In the **last 30 days/Since your last visit**, have you had) bronchitis or pneumonia?

Yes _____ No _____ (Q12c)

When did symptoms begin? _____/_____/_____
MM DD YYYY

When did symptoms resolve? _____/_____/_____
MM DD YYYY

c. (In the **last 30 days/Since your last visit**, have you had) sinusitis or sinus problems?

Yes _____ No _____ (Q12d)

When did symptoms begin? _____/_____/_____
MM DD YYYY

MM DD YYYY
 When did symptoms resolve? ____/____/____
 MM DD YYYY

d. Have you had any other type of infection (in the last 30 days/since your last visit)?
 Yes ____ No ____ (Q13)

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**. **[IF REG FOLLOW-UP VISIT SAY: Now I'm going to ask about medical or dental x-rays or any other radiologic procedures you may have had since your last visit.]**

13. **During the last 12 months/Since your last visit**, have you had (any/a):

Type of Procedure	IF YES: When did you have the [Type of Procedure]?
a) Medical x-rays?	(mm/dd/yyyy)
b) Dental x-rays?	(mm/dd/yyyy)
c) CT scan or CAT Scan?	(mm/dd/yyyy)
d) Fluoroscopy?	(mm/dd/yyyy)
e) PET scan?	(mm/dd/yyyy)
f) Diagnostic radioisotopes, for example a thallium stress test?	(mm/dd/yyyy)
g) Other type of radiologic procedure?	(mm/dd/yyyy)

14. 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: _____

IF NUMBER OF SERVINGS = 0 (NONE), GO TO Q16_INTRO.

15. 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.

16. Do you currently smoke cigarettes, a pipe, or cigars, or use other tobacco products such as chewing tobacco or snuff?

Yes ____ No ____ (OAG)

17. How often do you (smoke/use) [Product]? (Would you say every day, some days or not at all?)

Product	Every day	Some days	Not at all
Cigarettes			
A pipe			
Cigars			
Cigarillos			

Chewing tobacco			
Snuff			
Do you smoke or use any other type of 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.

18. At what age did you first live on a farm?

_____ [0-99]
Enter 99 for never lived on a farm

19. In total, how many years did you spend living on a farm?

- a. Before age 18:
- b. Over your entire lifetime:

20. In the last 12 months, have you personally performed farm work or farming activities? [IF REG FOLLOW-UP VISIT SAY: Since your last visit, have you personally performed farm work or farming activities?]

Yes _____ No _____ (Q36)

21. Excluding gardens for personal use, what crops, including fruits and vegetables, were raised on your farm in the last 12 months? [IF REG FOLLOW-UP VISIT SAY: Excluding gardens for personal use, what crops, including fruits and vegetables, were raised on your farm since your last visit?]

- | | | | |
|-----------------|---------------|--------------|----------------|
| 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 | |

If response in 21 = Cornfield, corn seed, oats, sorghum, soybeans, rye, barley, or wheat, ask questions 22 and 23.

If response in 21 = cotton then ask question 24 and 25.

If response in 21 = Alfalfa or Hay or Forage then go to question 26 and 27.

If Cornfield, corn seed, oats, sorghum, soybeans, rye, barley, wheat, cotton, alfalfa, hay, forage are not selected in 21 skip to question 29.

22. Have you spent any time in the past 12 months harvesting grain/soybeans/corn field/corn seed?

Yes _____ No _____ (Q23)

a. How many days have you spent harvesting grain/soybeans/corn field/corn seed in the last 12 months?

None _____ (Q23)
1-7 Days _____

8-20 Days _____
21 or More Days _____

b. How many days have you spent harvesting **grain/soybeans/corn field/corn seed** in the last 30 days?

None _____ (Q23)
1-3 Days _____
4-7 Days _____
8 or More Days _____

c. How many days have you spent harvesting **grain/soybeans/corn field/corn seed** in the last 7 days?

None _____
1-3 Days _____
4-7 Days _____

d. Did you harvest **grain/soybeans/corn field/corn seed** yesterday or today?

Yes _____ No _____

23. Have you spent any time in the past 12 months hauling **grain/soybeans/corn field/corn seed**?
Yes _____ No _____ (Q24)

a. How many days have you spent hauling **grain/soybeans/corn field/corn seed** in the last 12 months?

None _____ (Q24)
1-7 Days _____
8-20 Days _____
21 or More Days _____

b. How many days have you spent hauling **grain/soybeans/corn field/corn seed** in the last 30 days?

None _____ (Q23e)
1-3 Days _____
4-7 Days _____
8 or More Days _____

c. How many days have you spent hauling **grain/soybeans/corn field/corn seed** in the last 7 days?

None _____
1-3 Days _____
4-7 Days _____

d. Did you haul **grain/soybeans/corn field/corn seed** yesterday or today?

- i. Yes
- ii. No

e. On days when you hauled **grain/soybeans/corn field/corn seed** how many hours per day did you spend?

Less than 30 Minutes _____
30-60 Minutes _____
1-3 Hours _____

More than 3 hours _____

f. When you hauled **grain/soybeans/corn field/corn seed** did you load the wagon/truck yourself

Yes _____ No _____

24. Have you spent any time in the past 12 months harvesting **cotton**?

Yes _____ No _____ (Q25)

a. How many days have you spent harvesting **cotton** in the last 12 months?

None _____ (Q25)

1-7 Days _____

8-20 Days _____

21 or More Days _____

b. How many days have you spent harvesting **cotton** in the last 30 days?

None _____ (Q25)

1-3 Days _____

4-7 Days _____

8 or More Days _____

c. How many days have you spent harvesting **cotton** in the last 7 days?

None _____

1-3 Days _____

4-7 Days _____

d. Did you harvest cotton yesterday or today?

Yes _____ No _____

25. Have you spent any time in the past 12 months hauling **cotton**?

Yes _____ No _____ (Q26)

a. How many days have you spent hauling **cotton** in the last 12 months?

None _____ (Q26)

1-7 Days _____

8-20 Days _____

21 or More Days _____

b. How many days have you spent hauling **cotton** in the last 30 days?

None _____ (Q25e)

1-3 Days _____

4-7 Days _____

8 or More Days _____

c. How many days have you spent hauling **cotton** in the last 7 days?

None _____

1-3 Days _____

4-7 Days _____

d. Did you haul cotton yesterday or today?

Yes _____ No _____

e. On days when you hauled **cotton** how many hours per day did you spend?

- Less than 30 Minutes _____
- 30-60 Minutes _____
- 1-3 Hours _____
- More than 3 hours _____

f. When you hauled **cotton** did you load the wagon/truck yourself

Yes _____ No _____

26. Have you spent any time in the past 12 months baling **alfalfa or hay**?

Yes _____ No _____ (Q27)

a. How many days have you spent baling **alfalfa or hay** in the last 12 months?

- None _____ (Q27)
- 1-7 Days _____
- 8-20 Days _____
- 21 or More Days _____

b. How many days have you spent baling **alfalfa or hay** in the last 30 days?

- None _____ (Q26e)
- 1-3 Days _____
- 4-7 Days _____
- 8 or More Days _____

c. How many days have you spent baling **alfalfa or hay** in the last 7 days?

- None _____
- 1-3 Days _____
- 4-7 Days _____

d. Did you bale alfalfa or hay yesterday or today?

Yes _____ No _____

e. When you baled alfalfa or hay, do you usually make large (round) bales or small (square or rectangular) bales?

- Large, Round or _____
- Small, Square/Rectangular or _____
- Both Equally _____

27. Have you spent any time in the past 12 months hauling **alfalfa or hay**?

Yes _____ No _____ (Q28)

a. How many days have you spent hauling **alfalfa or hay** in the last 12 months?

- None _____ (Q28)
- 1-7 Days _____
- 8-20 Days _____
- 21 or More Days _____

b. How many days have you spent hauling **alfalfa or hay** in the last 30 days?

None _____ (Q27e)

- 1-3 Days _____
- 4-7 Days _____
- 8 or More Days _____

c. How many days have you spent hauling **alfalfa or hay** in the last 7 days?

- None _____
- 1-3 Days _____
- 4-7 Days _____

d. Do you haul alfalfa or hay yesterday or today?

- Yes _____ No _____

e. On days when you hauled **alfalfa or hay** how many hours per day did you spend?

- Less than 30 Minutes _____
- 30-60 Minutes _____
- 1-3 Hours _____
- More than 3 hours _____

f. When you hauled **alfalfa or hay** did you load the wagon/truck yourself

- Yes _____ No _____

Now we are going to ask you about livestock, poultry, or other animals you may have raised on your farm.

28. In the last 12 months, have you raised poultry, livestock, or other animals for income on your farm?

[IF REG FOLLOW-UP VISIT SAY: Since your last visit, have you raised poultry, livestock, or other animals for income on your farm?]

- Yes _____ No _____ (Q35)

29. How many [Type] were raised for income on your farm?

TYPE	NUMBER
Beef cattle	
Dairy cattle	
Hog/swine	
Poultry	
Poultry for eggs	
Sheep or goats	
Horses	
Other animals (SPECIFY)	

30. Have you mixed feed with antibiotics in the past 12 months?

- Yes _____ No _____ (Q33)

31. Have you mixed feed with antibiotics in the past 30 days?

- Yes _____ No _____ (Q33)

32. Have you mixed feed with antibiotics in the past 7 days?

- Yes _____ No _____

33. (IF YES TO RAISING POULTRY OR POULTRY FOR EGGS) Have you spent time in a poultry confinement area within the last 30 days? [IF THIRD REG FOLLOW-UP VISIT SAY: Have you spent time in a poultry confinement area since your last visit?]

Yes___ No___ (Q34)

If Yes, How much time did you spend in the poultry confinement area?

In the past 30 days? None, <= 7 hours, >7-20 hours, >20-40 hours, >40 hours

In the past 7 days? None, <= 7 hours, >7-20 hours, > 20 hours

Yesterday or today? None, <30 min, 30-60 min, 1-2 hours, > 2 hours

If Yes, How much time did you spend **cleaning** the poultry confinement area?

In the past 30 days? None, <= 7 hours, >7-20 hours, >20-40 hours, >40 hours

In the past 7 days? None, <= 7 hours, >7-20 hours, > 20 hours

Yesterday or today? None, <30 min, 30-60 min, 1-2 hours, > 2 hours

If Yes, How much time did you spend mixing poultry feed and feeding poultry?

In the past 30 days? None, <= 7 hours, >7-20 hours, >20-40 hours, >40 hours

In the past 7 days? None, <= 7 hours, >7-20 hours, > 20 hours

Yesterday or today? None, <30 min, 30-60 min, 1-3 hours, > 3 hours

34. (IF YES TO SWINE) Have you spent time in swine confinement area within the last 30 days? [IF THIRD REG FOLLOW-UP VISIT SAY: Have you spent time in a swine confinement area since your last visit?]

Yes___ No___ (Q35)

If Yes, How much time did you spend in the swine confinement area?

In the past 30 days? None, <= 7 hours, >7-20 hours, >20-40 hours, >40 hours

In the past 7 days? None, <= 7 hours, >7-20 hours, > 20 hours

Yesterday or today? None, <30 min, 30-60 min, 1-2 hours, > 2 hours

If Yes, How much time did you spend **cleaning** the swine confinement area?

In the past 30 days? None, <= 7 hours, >7-20 hours, >20-40 hours, >40 hours

In the past 7 days? None, <= 7 hours, >7-20 hours, > 20 hours

Yesterday or today? None, <30 min, 30-60 min, 1-2 hours, > 2 hours

If Yes, How much time did you spend mixing swine feed and feeding swine?

In the past 30 days? None, <= 7 hours, >7-20 hours, >20-40 hours, >40 hours

In the past 7 days? None, <= 7 hours, >7-20 hours, > 20 hours

Yesterday or today? – None, <30 min, 30-60 min, 1-3 hours, > 3 hours

35. In the last month, how many times have you performed the following activities? [IF THIRD REG FOLLOW-UP VISIT SAY: Since your last visit, how many times have you performed the following activities?]

Activity	Responses
35a. How often have you worked with or around stored seed or grain on your farm or elsewhere (such as grain elevators or feed mills)?	Not at all (Q35b)
aa. If >Not at all, How many times have you worked with or around stored seed or grain in the last 7 days? Not at all, 1-3 times, 3-7 times, >7 times	1-3 times 4-20 times >20 times
bb. If > Not at all in prev. 7 days, Did you work with or around stored seed or grain yesterday?	
Yes No	

<p>cc. If >Not at all to aa, Each time you did this, on average how long did you spend working with or around stored seed or grain? <10 min; 10-30 min, 30 min-1hr, >1 hr</p>	
<p>35b. How often have you ground animal feed? Would you say (READ RESPONSES): aa. If >Not at all, How many times have you ground animal feed in the last 7 days? Not at all, 1-3 times, 3-7 times, >7 times bb. If > Not at all in prev. 7 days, Did you grind animal feed yesterday or today? Yes No cc. If >Not at all to aa, Each time you did this, on average how long did you spend grinding animal feed? <10 min; 10-30 min, 30min-1hr, >1 hour</p>	<p>Not at all (Q35c) 1-3 times 4-20 times >20 times</p>
<p>35c. (How about) cleaning grain bins? aa. If >Not at all, How many times have you cleaned grain bins in the last 7 days? Not at all, 1-3 times, 3-7 times, >7 times bb. If > Not at all in prev. 7 days, Did you clean grain bins yesterday or today? Yes No cc. If >Not at all to aa, Each time you did this, on average how long did you spend cleaning grain bins? Not at all, <10 min; 10-30 min, 30min-1hr, >1 hour</p>	<p>Not at all (Q35d) 1-3 times 4-20 times >20 times</p>
<p>35d. (How about) working with or around moldy hay or straw? aa. If >Not at all, How many times have you worked with or around moldy hay or straw in the last 7 days? Not at all, 1-3 times, 3-7 times, >7 times bb. If > Not at all in prev. 7 days, Did you work with or around moldy hay or straw yesterday or today? Yes No cc. If >Not at all to aa, each time you did this, on average how long did you spend working with or around moldy hay or straw? <10 min; 10-30 min, 30min-1hr, >1 hour</p>	<p>Not at all (Q35e) 1-3 times 4-20 times >20 times</p>
<p>35e. How about milking cows or other animals? Would you say: aa. If >Not at all, How many times have you milked cows or other animals in the last 7 days? Not at all, 1-3 times, 3-7 times, >7 times bb. If > Not at all in prev. 7 days, Did you milk cows or other animals yesterday or today? Yes No cc. If >Not at all to aa, Each time you did this, on</p>	<p>Not at all (Q35f) 1-3 times 4-20 times >20 times</p>

average how long did you spend milking cows or other animals? <30 min; 30-60 min, 1-3 hours, >3 hour	
35f. (How about) cleaning barns, animal confinements or replacing animal bedding in other indoor facilities? aa. If >Not at all, How many times have you cleaned barns or other animal facilities in the last 7 days? Not at all, 1-3 times, 3-7 times, >7 times bb. If > Not at all in prev. 7 days, Did you work clean barns or other animal facilities yesterday or today? Yes No cc. If >Not at all in aa, Each time you did this, on average how long did you spend cleaning barns or other animal facilities? <10 min; 10-30 min, 30min-1hr, >1 hour	Not at all (Q36 Intro) 1-3 times 4-20 times >20 times

[IF REG FOLLOW-UP VISIT, ASK IF THERE HAS BEEN ANY CHANGE IN THE NUMBER OF NON-INCOME GENERATING ANIMALS ON PT FARM, SUCH AS SUCH AS DOGS, CATS, OR HORSES. IF PT SAYS YES, THEN ASK Q36. IF PT SAYS NO, ENTER DK.]

36. Are there currently any (other) non-income generating animals on your farm, such as dogs, cats, or horses?
Yes _____ No _____ (Q38)

37. How many [Type] are (in your home/on your farm)?

Type	NUMBER:
Dogs	
Cats	
Horses	
Other animals (SPECIFY)	
Poultry	
Poultry for eggs	

38. In the last 12 months, have you worked around wood dust, such as at a saw mill, in furniture-making, or other wood-working activities? Yes _____ No _____

a. If Yes, How many hours in the past 30 days? None, <= 7 hours, >7-20 hours, >20-40 hours, >40 hours

b. If >0, How many hours in the past 7 days? None, <= 7 hours, >7-20 hours, > 20 hours

c. If >0 How many hours yesterday or today? None, <30 min, 30-60 min, 1-3 hours, > 3 hours

39. In the last 12 months, have you performed veterinarian services on animals on your farm or for other farmers? Yes _____ No _____

a. If Yes, How many hours in the past 30 days? None, <= 7 hours, >7-20 hours, >20-40 hours, >40 hours

b. If >0, How many hours in the past 7 days? None, <= 7 hours, >7-20 hours, > 20 hours

c. If >0 How many hours yesterday or today? None, <30 min, 30-60 min, 1-3 hours, > 3 hours

40. In the last 7 days, have you done any welding? Yes _____ No _____

41. In the last 7 days, have you done any painting, varnishing, or staining? Yes _____ No _____

42. In the last 7 days, have you repaired engines? Yes _____ No _____

[IF REG FOLLOW-UP VISIT, ASK IF PT HAS GOTTEN A NEW JOB OTHER THAN WORKING ON FARM SINCE LAST VISIT. IF PT SAYS YES, THEN ASK Q43. IF PT SAYS NO, ENTER DK.]

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

Yes _____ No _____ (GO TO **Occupation 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. [IF REG FOLLOW-UP VISIT SAY: I would now like to ask about your use of pesticides since your last visit.] 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/Since your last visit, 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? We will ask you separately about the use of pesticides in your home and garden.
Yes _____ No _____ (Go to HOM)

2. Which products have you used (in the last 12 months/since your last visit)? 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.]

IF OTHER: Please give the product trade name, if possible. _____

IF OTHER: If label is available, what is the active ingredient in [OTHER]? _____

IF OTHER: What is the EPA Registration number for [OTHER]? _____

3. In the last 12 months, on how many days did you mix, load or apply [insert pesticide name]? [IF REG FOLLOW-UP VISIT SAY: Since your last visit, on how many days did you mix, load or apply [insert pesticide name].]

Total number of days: _____

Don't know

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

(What is the most/What was the next most) recent date you mixed, loaded or applied [insert pesticide name]? (The time before [Date]).

	Date	How many hours did you spend mixing, loading, or applying [insert pesticide name] on [Date]?
1	(mm/dd/yy)	
2	(mm/dd/yy)	
3	(mm/dd/yy)	

5. In the last 12 months/Since your last visit, 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:
- NONE
 - 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 _____

6. In the last 12 months/Since your last visit, 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 applied [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 applying [insert pesticide name]? Did you wear:
- NONE
 - 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 _____

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/Since your last visit, 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/since your last visit)? 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.]

IF OTHER: Please give the product trade name, if possible. _____

IF OTHER: If label is available, what is the active ingredient in [OTHER]? _____

IF OTHER: What is the EPA Registration number for [OTHER]? _____

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. HIGH QUALITY
2. GENERALLY RELIABLE
3. QUESTIONABLE
4. UNSATISFACTORY

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