RESIDENTIAL FARM EXPOSURES MODULE

I am going to ask you about your experiences living on a farm. First we will focus on the time from your birth to age 18.

- FE1. Did you live on a farm for 12 months or more at any time from your birth up until age 18? This could be 12 months in a row, or a few months per year over several years.
- FE2. In total, on how many farms have you lived from your birth to age 18?
- FE3. About how many years and/or months in total did you live on [*this farm/these farms*] before age 18?
- FE4. Which of the following were raised on the farm[s] where you lived?

| YES | |
|-----|------------|
| NO | . [FE30]2 |
| REF | . [FE30]7 |
| DK | . [FE30] 8 |





| | | Y | Ν |
|----|--|---|---|
| a. | grains, such as wheat, corn, or rice | 1 | 2 |
| b. | soybeans or other oilseeds | 1 | 2 |
| c. | vegetables | 1 | 2 |
| | orchard fruits, such as apples, | | |
| | grapes, or oranges | 1 | 2 |
| e. | other fruits such as berries or melons | | 2 |
| f. | cotton | 1 | 2 |
| g. | tobacco | 1 | 2 |
| - | other cash crops | | 2 |
| | * | | |

<IF NO TO ALL IN FE4a-h, GO TO FE20>

<ASK FE5a-5b ONLY IF FE2 (#FARMS) > 1; IF FE2 = 1, GO TO FE5c>

| FE5a. About how many acres of crops were planted on the <u>smallest</u> of the farms you have lived on? Was it | less than 5 acres. 1 5 to 9 acres 2 10 to 49 acres 3 50 to 199 acres 4 200 acres or more 5 |
|--|--|
| FE5b. About how many acres of crops were planted on the <u>largest</u> of the farms you have lived on? Was it | less than 5 acres. 1 5 to 9 acres 2 10 to 49 acres 3 50 to 199 acres 4 200 acres or more 5 |
| FE5c. About how many acres of crops were planted, <u>on</u> <u>average</u> , on the farm[s] where you lived? Was it | less than 5 acres. 1 5 to 9 acres 2 10 to 49 acres 3 50 to 199 acres 4 200 acres or more 5 |
| FE6. Were pesticides ever used on the crops grown on [<i>this farm/any of these farms</i>]? Pesticides include insecticides, herbicides, fungicides and fumigants. | YES1 NO |

| Di | FE7. d you ever | | FE8. For how many years in total did you do this for any part of the year? | FE9. On average, about how many days per year did you do this? (year = 365 days) |
|----|--|--|---|--|
| a. | personally mix any pesticides at [<i>this farm</i> / <i>any of these farms</i>], or help others do the mixing? | YES1 NO[FE7b]2 REF[FE7b]7 DK[FE7b]8 | UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU | UAYS PER YEAR |
| b. | personally load pesticides at [<i>this farm</i> <i>any of these farms</i>]? | YES1 NO[FE7c]2 REF[FE7c]7 DK[FE7c]8 | U J # YEARS | # DAYS PER YEAR |
| c. | personally apply pesticides at [<i>this farm</i> <i>any of these farms</i>]? | YES1 NO[FE7d]2 REF[FE7d]7 DK[FE7d]8 | # YEARS | # DAYS PER YEAR |
| d. | clean or help clean the pesticide mixing or application equipment used on [<i>this farm/these</i> <i>farms</i>]? | YES 1 NO [*] 2 REF [*] 7 DK [*] 8 | # YEARS | # DAYS PER YEAR |

<* IF NO TO ALL IN FE7 (a, b, c, d) - GO TO FE13>

- FE10. When you mixed, loaded, or applied pesticides, or cleaned pesticide equipment at [*this farm/these farms*], did you <u>usually</u> wear any of the following protective items: (By usually we mean most of the time.)
 [IF 'R' SAYS "ONLY SOMETIMES" OR "RARELY" CODE AS NO]
- FE11. Did you <u>ever</u> get an unusually high amount of pesticides on your skin or clothing while mixing, loading, or applying pesticides, or repairing pesticide equipment, for example, from a spill or a break in a hose?

FE12. How many times did this happen in total?

FE13. Did you ever work in the fields at [*this farm/any of these farms*]?

| | Y | Ν |
|----|---|---|
| a. | chemically resistant gloves1 | 2 |
| b. | other gloves, such as cloth or leather1 | 2 |
| c. | respirator or gas mask1 | 2 |
| d. | dust mask1 | 2 |
| e. | goggles or a face shield1 | 2 |
| f. | a hat1 | 2 |
| g. | long sleeves and long pants1 | 2 |
| h. | chemically resistant boots1 | 2 |
| i. | an apron1 | 2 |
| j. | chemically resistant disposable | |
| | outer clothing, such as a Tyvek suit1 | 2 |
| | | |

| YES | | 1 |
|-----|--------|---|
| NO | [FE13] | 2 |
| | [FE13] | |
| | [FE13] | |

TIMES

X7 X7

| YES | | 1 |
|-----|--------|---|
| NO | [FE17] | 2 |
| REF | [FE17] | 7 |
| DK | [FE17] | 8 |

- FE14. For how many years did you work in the fields for <u>any</u> part of the year at [*this farm/these farms*]?
- FE15. On average, about how many days per week, per month, or per year did you work in the fields?



| | # D. | AYS |
|-----------|-------|-----|
| PER WEEK | | 1 |
| PER MONTH | [15b] | 2 |
| PER YEAR | [16] | 3 |

FE15a. How many weeks per year did you work in the fields?

FE15b. How many months per year did you work in the fields?

FE16. On average, about how many hours per day did you work in the fields?

<IF FE6 = NO (PESTICIDES NOT USED) — GO TO FE19x>

- FE17. Were you ever present in the fields at the same time or on the same day as when pesticides were being applied to the crops?
- FE18. How many years in total did this happen, even just once?
- FE19. About how many days per year did this happen?
- FE19x. Were chemical fertilizers ever used on the farm[s] where you lived?

FE19xa. Did you ever personally apply chemical fertilizers at the farm[s] where you lived?

- FE19xb. For how many years in total did you do this for any part of the year?
- FE19xc. On average, about how many days per year did you do this?







| YES | 1 |
|-----|----------|
| NO | [FE19x]2 |
| REF | [FE19x]7 |
| DK | [FE19x]8 |



YEARS

DAYS/YEAR

| YES | | 1 |
|-----|----------|---|
| NO | [FE19x1] | 2 |
| | [FE19x1] | |
| | [FE19x1] | |

| YES | | 1 |
|-----|----------|---|
| NO | [FE19x1] | 2 |
| REF | | |
| DK | FE19x1 | |





| FE19x1. Were natural fertilizers, such as manure, ever used on the | YES | | 1 |
|--|-----|--------|---|
| farm[s] where you lived? | NO | [FE20] | 2 |
| | DEE | [FF20] | 7 |

FE19x1a. Did you ever personally apply natural fertilizers at the farm[s] where you lived?

| NO | [FE20] | 2 |
|----|--------|---|
| | [FE20] | |
| DK | [FE20] | |

FE19x1b. For how many years in total did you do this for any part of the year?

YEARS

DAYS PER YEAR

FE19x1c. On average, about how many days per year did you do this?

| FE20. Were [<i>animal</i>] raised on the farm where you lived? | | FE21. On average, about how many [<i>animal</i>] were kept at [<i>this farm/these farms</i>]? Was it |
|---|--|--|
| a. poultry birds, such as chickens, turkeys, and so forth | YES1 NO [FE20b]2 REF [FE20b]7 DK [FE20b]8 | 1 to 241 25 to 492 50 to 993 100 to 3994 400 or more5 REF7 DK8 |
| b. beef or dairy cows | YES1 NO [FE20c]2 REF [FE20c]7 DK [FE20c]8 | 1 to 901 10 to 1902 20 to 4903 50 to 9904 100 to 19905 200 or more06 REF97 DK98 |
| c. hogs or pigs | YES1 NO [FE20d]2 REF [FE20d]7 DK [FE20d]8 | 1 to 241 25 to 492 50 to 993 100 to 1994 200 or more5 REF7 DK8 |
| d. other livestock | YES1 NO[*]2 REF[*]7 DK[*]8 | 1 to 241 25 to 492 50 to 993 100 to 1994 200 or more5 REF7 DK8 |

<* IF NO TO ALL IN FE20 (a-d) — GO TO FE30>

- FE22. Did you feed, clean, herd, milk, shear, slaughter, or have any other contact with livestock on [this farm/any of these farms]?
 - FE23. Were livestock animals, or the buildings where livestock were kept ever treated with pesticides?
 - FE24. Did you personally apply pesticides to the animals or buildings where livestock were kept?
 - FE25.For how many years in total did you personally apply pesticides to the animals or buildings where livestock were kept, for any part of the year?
 - FE26. On average, about how many days per year did you apply the pesticides?
 - FE27. When you mixed, loaded, or applied pesticides, or cleaned pesticide equipment at [*this farm/these farms*], did you <u>usually</u> wear any of the following protective items: (By usually we mean most of the time.)
 [IF 'R' SAYS "ONLY SOMETIMES" OR "RARELY" CODE AS NO]

YES 1

YES......1

DAYS/YEAR

| | Y | Ν |
|----|---|---|
| a. | chemically resistant gloves1 | 2 |
| b. | other gloves, such as cloth or leather1 | 2 |
| c. | respirator or gas mask1 | 2 |
| d. | dust mask1 | 2 |
| e. | goggles or a face shield1 | 2 |
| f. | a hat1 | 2 |
| g. | long sleeves and long pants1 | 2 |
| h. | chemically resistant boots1 | 2 |
| i. | an apron1 | 2 |
| j. | chemically resistant disposable | |
| - | outer clothing, such as a Tyvek suit1 | 2 |

FE29. How many times did this happen in total?

<IF FE1 = NO, REF, OR DK, DO NOT INCLUDE INTRO TEXT.>

[Now we are going to focus on the time you were age 19 to the present.]

FE30. Have you lived on a farm for 12 months or more since the age of 19? This could be 12 months in a row, or a few months per year over several years.



| YES | | 1 |
|-----|---------|---|
| NO | [RS243] | 2 |
| | [RS243] | |
| | [RS243] | |

FE31. In total, on how many farms have you lived since the age of 19?



| FE32. About how many years and/or months in all did you live |
|--|
| on [this farm/these farms] since the age of 19? |



Y N

| | 1 | - 1 |
|----|---|------------|
| a. | grains, such as wheat, corn, or rice1 | 2 |
| b. | soybeans or other oilseeds1 | 2 |
| c. | vegetables1 | 2 |
| d. | orchard fruits, such as apples, | |
| | grapes, or oranges1 | 2 |
| e. | other fruits such as berries or melons1 | 2 |
| f. | cotton1 | 2 |
| g. | tobacco1 | 2 |
| h. | other cash crops1 | 2 |

<IF NO TO ALL IN FE33a-h, GO TO FE57>

FE33. Which of the following were raised on the

farm[s] where you lived since the age of 19?

<ASK FE34a-34b ONLY IF FE31 (#FARMS) > 1; IF FE31 = 1, GO TO FE34c>

| FE34a. About how many acres of crops were planted on the | less than 5 acres | 1 |
|--|-------------------|---|
| smallest of the farms you have lived on? Was it | 5 to 9 acres | 2 |
| · | 10 to 49 acres | |
| | 50 to 199 acres | 4 |
| | 200 acres or more | 5 |
| FE34b. About how many acres of crops were planted on the | less than 5 acres | 1 |
| largest of the farms you have lived on? Was it | 5 to 9 acres | 2 |
| · | 10 to 49 acres | |
| | 50 to 199 acres | 4 |
| | 200 acres or more | 5 |
| FE34c. About how many acres of crops were planted, on | less than 5 acres | 1 |
| average, on the farm[s] where you lived? Was it | 5 to 9 acres | |
| | 10 to 49 acres | |
| | 50 to 199 acres | 4 |
| | 200 acres or more | |
| FE35.Were pesticides ever used on the crops grown on | YES | 1 |
| [this farm/any of these farms]? Pesticides include | NO [FE42] | 2 |
| insecticides, herbicides, fungicides and fumigants. | REF [FE42] | |
| | DK [FE42] | |

| Di | FE36. d you ever | | FE37. For how many years in total did you do this for any part of the year? | FE38. On average, about how many days per year did you do this? (year = 365 days) |
|----|--|---|--|---|
| a. | personally mix any pesticides at [<i>this farm</i> / <i>any of these farms</i>], or help others do the mixing? | YES1 NO[FE36b]2 REF[FE36b]7 DK[FE36b]8 | # YEARS | ULUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU |
| b. | personally load pesticides at [<i>this farm</i> <i>any of these farms</i>]? | YES1 NO[FE36c]2 REF[FE36c]7 DK[FE36c]8 | # YEARS | # DAYS PER YEAR |
| c. | personally apply pesticides at [<i>this farm</i> <i>any of these farms</i>]? | YES1 NO[FE36d]2 REF[FE36d]7 DK[FE36d]8 | # YEARS | # DAYS PER YEAR |
| d. | clean or help clean the pesticide mixing or application equipment used on [<i>this farm/these</i> <i>farms</i>]? | YES 1 NO [*] 2 REF [*] 7 DK [*] 8 | UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU | # DAYS PER YEAR |

<* IF NO TO ALL IN FE36 (a, b, c, d) - GO TO FE42>

- FE39. When you mixed, loaded, or applied pesticides, or cleaned pesticide equipment at [*this farm/these farms*], did you <u>usually</u> wear any of the following protective items: (By usually we mean most of the time.)
 [IF 'R' SAYS "ONLY SOMETIMES" OR "RARELY" CODE AS NO]
- FE40. Did you <u>ever</u> get an unusually high amount of pesticides on your skin or clothing while mixing, loading, or applying pesticides, or repairing pesticide equipment, for example, from a spill or a break in a hose?

FE41. How many times did this happen in total?

FE42. Did you ever work in the fields at [*this farm/any of these farms*]?

| | Y | Ν |
|----|---|---|
| a. | chemically resistant gloves1 | 2 |
| b. | other gloves, such as cloth or leather1 | 2 |
| c. | respirator or gas mask1 | 2 |
| d. | dust mask1 | 2 |
| e. | goggles or a face shield1 | 2 |
| f. | a hat1 | 2 |
| g. | long sleeves and long pants1 | 2 |
| h. | chemically resistant boots1 | 2 |
| i. | an apron1 | 2 |
| j. | chemically resistant disposable | |
| - | outer clothing, such as a Tyvek suit1 | 2 |
| | | |

| YES | | 1 |
|-----|--------|---|
| | [FE42] | |
| | [FE42] | |
| | [FE42] | |

TIMES

.. ..

| YES | | 1 |
|-----|--------|---|
| NO | [FE46] | 2 |
| REF | [FE46] | 7 |
| DK | [FE46] | 8 |

| FE43. For how many years did you work in the fields for <u>any</u> part of the year at [<i>this farm/these farms</i>]? | U VEARS |
|--|------------------------------------|
| FE44. On average, about how many days per week, per month, or per year did you work in the fields? | # DAYS PER WEEK |
| FE44a. How many weeks per year did you work in the fields? | # WEEKS < GO TO FE45 > |
| FE44b. How many months per year did you work in the fields? | # MONTHS |
| FE45. On average, about how many hours per day did you work in the fields? | # HOURS/DAY |
| | YES |
| FE47. How many years in total did this happen, even just once? | U YEARS |
| FE48. About how many days per year did this happen? | # DAYS/YEAR |
| FE49. Were chemical fertilizers ever used on the farm[s] where you lived? | YES 1 NO [FE53] 2 REF [FE53] |
| FE50. Did you ever personally apply chemical fertilizers at the farm[s] where you lived? | YES |
| FE51. For how many years in total did you do this for any part of the year? | # YEARS |
| FE52. On average, about how many days per year did you do this? | # DAYS PER YEAR |

| FE53. Were natural fertilizers, such as manure, ever used on the | |
|--|--|
| farm[s] where you lived? | |

- FE54. Did you ever personally apply natural fertilizers at the farm[*s*] where you lived?
- FE55. For how many years in total did you do this for any part of the year?

| YES | | 1 |
|-----|--------|---|
| NO | [FE57] | 2 |
| REF | [FE57] | 7 |
| DK | [FE57] | 8 |

YEARS

DAYS PER YEAR

| FE57. Were [<i>animal</i>] raised on the farm where you lived? | | FE58. On average, about how many [<i>animal</i>] were kept at [<i>this farm/these farms</i>]? Was it |
|---|---|--|
| a. poultry birds, such as chickens, turkeys, and so forth | YES 1 NO [FE57b]2 REF [FE57b]7 DK [FE57b]8 | 1 to 241 25 to 492 50 to 993 100 to 3994 400 or more5 REF7 DK8 |
| b. beef or dairy cows | YES 1 NO [FE57c]2 REF [FE57c]7 DK [FE57c]8 | 1 to 901 10 to 1902 20 to 4903 50 to 9904 100 to 19905 200 or more06 REF97 DK98 |
| c. hogs or pigs | YES 1 NO [FE57d]2 REF [FE57d]7 DK [FE57d]8 | 1 to 241 25 to 492 50 to 993 100 to 1994 200 or more5 REF7 DK8 |
| d. other livestock | YES1 NO[*]2 REF[*]7 DK[*]8 | 1 to 241 25 to 492 50 to 993 100 to 1994 200 or more5 REF7 DK8 |

FE56. On average, about how many days per year did you do this?

<* IF NO TO ALL IN FE57 (a-d) — GO TO RS243>

- FE59. Did you feed, clean, herd, milk, shear, slaughter, or have any other contact with livestock on [this farm/any of these farms]?
 - FE60. Were livestock animals, or the buildings where livestock were kept ever treated with pesticides?
 - FE61. Did you personally apply pesticides to the animals or buildings where livestock were kept?
 - FE62.For how many years in total did you personally apply pesticides to the animals or buildings where livestock were kept, for any part of the year?
 - FE63. On average, about how many days per year did you apply the pesticides?
 - FE64. When you mixed, loaded, or applied pesticides, or cleaned pesticide equipment at [*this farm/these farms*], did you <u>usually</u> wear any of the following protective items: (By usually we mean most of the time.) [IF 'R' SAYS "ONLY SOMETIMES" OR "RARELY" CODE AS NO]

| YES1 NO[RS243]2 REF[RS243]7 DK[RS243]8 | |
|---|--|
| YES1 NO[RS243]2 REF[RS243]7 DK[RS243]8 | |
| YES1 | |

| YES | | I |
|-----|---------|---|
| NO | [RS243] | 2 |
| | | |
| DK | [RS243] | |



DAYS/YEAR

| | | Y | Ν |
|----|--|---|---|
| a. | chemically resistant gloves | 1 | 2 |
| b. | other gloves, such as cloth or leather | 1 | 2 |
| c. | respirator or gas mask | 1 | 2 |
| | dust mask | | 2 |
| e. | goggles or a face shield | 1 | 2 |
| f. | a hat | 1 | 2 |
| g. | long sleeves and long pants | 1 | 2 |
| | chemically resistant boots | | 2 |
| | an apron | | 2 |
| | chemically resistant disposable | | |
| 5 | outer clothing, such as a Tyvek suit | 1 | 2 |
| | | | |

| FE65. Did you ever get an unusually high amount of | YES 1 |
|--|-------|
| pesticides on your skin or clothing while applying | NO2 |
| pesticides to the animals or buildings where | REF |
| livestock were kept at [this farm/these farms]? | DK |

FE66. How many times did this happen in total?



<GO TO RS243>