
**Appendix D. Columbia Center for Children’s
Environmental Health—Mothers and
Newborns Study**

14-Day Exposure Assessment	D-1
48 –Hour Exposure Assessment	D-10

Date __/__/____
Center Subject ID # _____
EPA Subject ID # _____

Subject's initials _____

Columbia Center for Children's Environmental Health
Mothers & Newborns Study
EPA Subset Study

14-Day Exposure Assessment

1st questionnaire _____
2nd questionnaire _____
3rd questionnaire _____
4th questionnaire _____
5th questionnaire _____ Prenatal / Postnatal

1. **Have you been employed outside the home during the last 14 days?**
(Durante los ultimos 14 dias, has trabajado fuera de su casa?)

Yes (Ask A-C) 01
No (skip to 2) 02
DK 88
NR 99

- A. If yes, for how many days during the last 14 days did you work outside the home?
(Por cuantos dias durante los ultimos 14 dias trabajo fuera de su casa?)

Number of days

DK 88
NR 99

- B. For how many hours during each of those days on average were you away from your home for your work (including travel)?
(Por cuantas horas durante cada dia estuvo fuera de su casa incluyendo en transito?)

Number of hours

DK 88
NR 99

Date __/__/____
Center Subject ID # _____
EPA Subject ID # _____

Subject's initials _____

- C. For any jobs you have held during the last 14 days, please tell me the type of business, your position, dates of your employment, and your employer's address.
(Por todos los empleos que tuvo durante los ultimos 14 dias, favor de decirme el tipo de negocio, su posicion, la fecha, y la direccion de empleo.)

Job 1: Type of business _____
Your position _____
Dates of employment _____
Employer's Address _____

Job 2: Type of business _____
Your position _____
Dates of employment _____
Employer's Address _____

2. **Thinking back over the last 14 days, for how many hours on average each day were you away from your home (including time spent at work, shopping, travelling, picking up children, at a friend's home, taking a walk, etc.).**

(Durante los ultimos 14 dias, cuantas horas por dia, en promedio, estuvo fuera de su casa?)

Number of hours

--	--	--

DK	88
NR	99

3. **Excluding the time you spent away at work (if any), during the last 14 days was there any single day when you were away from your apartment for 5 or more hours (including travel)?**

(No incluyendo los dias que trabajo, hubo algun dia que paso 5 horas o mas fuera de su casa(incluyendo en transito)

Yes (Ask A-B)	1
No (skip to 4)	2
DK	88
NR	99

- A. If yes, for how many days in the last 14 days were you away from the house for 5 or more hours excluding the time you spent at work?

(Cuantos dias estuvo fuera de su casa por 5 horas o mas?)

Number of days

--	--	--

DK	88
NR	99

Date __/__/____
 Center Subject ID # _____
 EPA Subject ID # _____

Subject's initials _____

B. Excluding your work location, was there any other single location outside your home where you spent 5 or more hours on any day during the last 14 days.
 (No incluyendo donde trabajo hubo otro lugar donde paso cinco horas o mas?)

- Yes (Ask 3C) 1
- No (skip to 4) 2
- DK 88
- NR 99

C. Please tell me the type of location (relative's home, friend's home or other location) and the persons name and address if known. (Favor de decirme la locasion, el nombre de la persona, y direccion)

Location 1: Type of location
 Relative's home _____
 Friend's home _____
 Other (specify) _____
 Name _____
 Address _____

Location 2: Type of location
 Relative's home _____
 Friend's home _____
 Other (specify) _____
 Name _____
 Address _____

Location 3: Type of location
 Relative's home _____
 Friend's home _____
 Other (specify) _____
 Name _____
 Address _____

4. In the last 14 days, how many hours a day on average would you say you spent outdoors? (**PROBE: Time spent outdoors could include sitting in the park, time spent running errands, but not time spent at work or inside a friend's or relative's house). Would you say you spent.** .
 (En los ultimos 14 dias, no incluyendo el tiempo que trabajo, cuantas horas por dia en promedio, paso afuera en la calle en aire libre? (Tiempo en parque, haciendo mandados)

- ≤--1hr 1
- 2-4 hrs 2
- 5-6 hrs 3
- 7 or more hrs 4
- DK 88
- NR 99

5-8. In the past 14 days, while in your home, have you smoked a [INSERT TOBACCO]

Date ___/___/___
 Center Subject ID # _____
 EPA Subject ID # _____

Subject's initials _____

(En los ultimos 14 dias, fumo usted en su casa [INSERT TOBACCO]?)

	A. Yes = 1 (ask B-C) No = 2 DK = 88 NR = 99	B. How many days did you smoke in your home? B. Cuantos dias?	C. # tobacco items smoked per day in your home C. # de tabacco diario
5. Cigarette Cigarillo			
6. Pipe Pipa			
7. Cigar Cigarro			
8. Marijuana			

B. For how many days during the last 14 days did you smoke in your home?
 (Cuantos dias fumo en su casa?)

C. During the days you smoked, how many [INSERT TOBACCO] per day on average did you smoke in your home?
 (Cuantos [INSERT TOBACCO] fumo cada dia?)

9-12. In the last 14 days, has someone else smoked [INSERT TOBACCO] inside your home?
 (En los ultimos 14 dias, fumo otra persona en su casa?)

Tobacco	A. Yes = 1 (ask B-D) N0 = 2 DK = 88 NR = 99	B. # of people per day that smoked in your home last 14 days (# de las personas)	C. # hours per day someone else smoked in your home last 14 days (Cuantas horas por dia fumaron en su casa)	D. # tobacco items per day smoked in your home last 14 days (# de tabacco por dia que se fumo en su casa)
9. Cigarette Cigarillo				
10. Pipe Pipa				
11. Cigar Cigarro				
12. Marijuana				

B. How many other people smoked in your home each day?
 (Cuantas personas fumaron en su casa?)

C. How many hours a day was your home exposed to someone elses smoke?
 (Cuantas horas por dia fumo otra persona en su casa?)

D. About how many total (tobacco) per day were smoked in your home?
 (Cuantos (tabacco) fumaron en su casa cada dia?) (mas o menos)

13-16. Over the last 14 days, have you noticed any [INSERT PEST] in your home?

Date __/__/____
 Center Subject ID # _____
 EPA Subject ID # _____

Subject's initials _____

(En los ultimos 14 dias, has notado [INSERT PEST] en su casa?)

B. If yes, how frequently have you observed [INSERT PEST] in your home?
 (Con que frecuencia has notado [INSERT PEST] en su casa?)

PEST	A. Yes = 01 (ask B) No = 02 DK = 88 NR = 99	B. Frequency < once/week =1 1-3 times/week =2 4-6 times/week =3 Daily =4
13. Cockroaches Cucarachas		
14. Mice Ratones		
15. Rats Ratas		
16. Other Otro (specify)		

17. During the last 14-days has an exterminator (i.e. anyone other than your super) sprayed chemicals or any other material in your home to get rid of insects or animal pests? (Probe: Did someone/an exterminator from a company come to your home to spray for pests?)
 (Durante los ultimos 14 dias, a venido un exterminador a fumigar su casa?)

Yes	1
No	2
DK	88
NR	99

18. During the last 14 days have you, your super, or anyone else (not an exterminator) used any pest control measures (pesticides, traps, etc.) to control pests (insects, rodents) in your household?
 (Durante los ultimos 14 dias, usted, el super, o otra persona (no el exterminador) han usado algun metodo para controlar insectos o roedores en su casa?)

Yes	1
No	2
DK	88
NR	99

Date __ / __ / __
 Center Subject ID # _____
 EPA Subject ID # _____

Subject's initials _____

19-26. During the last 14 days [RECORD ANSWERS IN TABLE BELOW]
 (Durante los ultimos 14 dias)

- A. Were any of the following pest control methods used?
 (Has usado los siguiente metodos para controlar pestilences?)
- B. What pests were they used for?
 (Para cual pestilence fue usado?)
- C. Who used them (exterminator, super, yourself, other person)?
 (Quien lo uso?)
- D. How frequently were they used?
 (Con que frecuencia se uso?)
- E. What brand or type of traps or pesticide (i.e. spray or powder) were used?
 (Que marca o tipo de trampa o pesticida fue usado?)

[RECORD ANSWERS IN TABLE BELOW]

	A. Type Yes = 1 No = 2 DK = 88 NR = 99	B. Pests Used For Roaches(Cucaracha) = 1 Mice(Ratones) = 2 Rats(Ratas) = 3 Ants(Ormigas) = 4 Roaches & Rodents = 5 Roaches & Ants = 6 Other = 7	C. Who Used Exterminator = 1 Super = 2 Participant = 3 Other (specify) = 4	D. Frequency 1 time = 1 2 times = 2 3 times = 3 4 times = 4 5 times = 5 > 5 times = 6	E. Brand or type used DK =8 NR =9
19. Sticky traps (La Pega)					_____
20. Bait traps (Discos Negros) (e.g. Combat)					_____
21. Boric Acid (Acido Borico)					_____
22. Gel (La gelatina)					
23. Spray by an exterminator					
24. Can sprays (Rociada de lata)					
25. The bomb (La bomba)					
26. (Street Pesticides) Tempo,3 pasitos					

Date ___/___/___
 Center Subject ID # _____
 EPA Subject ID # _____

Subject's initials _____

27-30. In the last 14 days, was your home exposed to (i.e. did you have smoke or fumes from [enter source] in your home [INSERT EXPOSURE]. . .

(En los ultimos 14 dias, ha sido su hogar expuesto a) [INSERT EXPOSURE]

Exposure	A. Exposed in last 14 days Yes = 1 No = 2 DK = 88 NR = 99	B. Was the source: Inside your home(dentro de su casa)= 01 Inside your building(dentro de su edificio) = 02 Outside within 1 block(dentro de una cuadra) = 03 Outside within 2-3 blocks(a 2 o 3 cuadras) = 04 Outside > 3 blocks away(mas de 3 cuadras) = 05 DN = 88 NR = 99	C. Frequency ≤ 1 hours = 1 2-4 hours = 2 5-7 hours = 3 7-9 hours = 4 ≥ 9 hours = 5 DN = 88 NR = 99
27. Hot asphalt or tar roofing material (Asfalto caliente o brea o petrolio)			
28. Incinerator smoke (Humo de Incinerador)			
29. Smoke from a building or other type of structure fire (Humo de un edificio o otro tipo de fuego)			
30. Wood smoke from a wood stove or fireplace (Humo de madera o chimenea)			

B. If yes, indicate location of exposure.
(Indique de donde vino la exposicion)

C. How many hours did your home receive exposures over the last 14 days?
(Por cuantas horas fue expuesta en los ultimos 14 dias?)

31. In the last 14 days, have you, or anyone in your home burned food while cooking in your home?

(En los ultimos 14 dias, usted o alguien en su casa ha quemado comida mientras cocinaba en su casa ?)

Yes (ask A)	1
No	2
DK	88
NR	99

A. If yes, how many times have you or someone burned food in your home in the last 14 days?
 (Cuantas veces an quemado comida en su casa en los ultimos 14 dias?)

Number of times

<input type="text"/>	<input type="text"/>	
DK		88
NR		99

32. In the last 14 days, how many times, if at all, have candles been burned in your home?

(En los ultimos 14 dias, cuantas veces ha encendido velas o velones en su casa?)

Number of times (put zero if candles were not burned)

<input type="text"/>	<input type="text"/>	
DK		88
NR		99

33. In the last 14 days, how many times, if at all, has incense been burned in your home?

(En los ultimos 14 dias, cuantas veces an encendido insencio en su casa?)

Number of times (put zero if incense was not burned)

<input type="text"/>	<input type="text"/>	
DK		88
NR		99

34. In the last 14 days, has your home been heated with a...

(En los ultimos 14 dias, su casa fue calentada con calentador de)

a) radiator	1
b) kerosene, or(kerosena)	2
c) coal heater? (carbon)	3
d) electric heater (electrico)	4
e) other type of heater (otro tipo)	5
(specify _____)	
f) None of the above	6
g) DK	88
h) NR	99

**Columbia School of Public Health
Mothers & Newborns Study**

48 –Hour Exposure Assessment

1-4.

A. I'd just like to ask you some questions about the last 48 hours. In the last 48 hours, were you exposed to [INSERT EXPOSURE]. . .

IF YES ASK B-D

B. Was your exposure direct?
(PROBE: Did you handle [INSERT EXPOSURE]?)

C. How long were you exposed to [INSERT EXPOSURE] ? Would you say. . .

Check to see if participant is employed, If NOT, Skip to Question 5

D. Did the exposure to [INSERT EXPOSURE] occur while you were at work?

EXPOSURE	A. Exposed in last 48 hrs. Yes= 1 No = 2 DK = 888 NR = 999	B. Direct Exposure Yes = 01 No = 02 i.e. Doing it yourself or direct contact w/ the substance.	C. Frequency ≥8hours = 1 5-7 hrs.= 2 2-4 hrs.= 3 ≤ 1 hr = 4	D. At work Yes = 01 No = 02
1. Coal products from hot asphalt or tar roofing material				
2. Black carbon from copying or printing machines				
3. Incinerator				
4. Wood smoke from a wood stove or fireplace,				

5. In the last 48 hours, was there a fire in your . . .

- a) building or (Ask B) 01
- b) neighborhood? (Ask A-B) 02
- c) no 03
- d) DK 888
- e) NR 999

A. Was the fire . . .

- a) in your block, 01
- b) 2-3 blocks away, or 02
- c) > 3 blocks away? 03
- d) INAP 777
- e) DK 888
- f) NR 999

B. Were you exposed to smoke from the fire?

- Yes 01
- No 02
- INAP 777
- DK 888
- NR 999

6-9. In the past 48 hours, have you smoked a [INSERT TOBACCO]?

	Exposure in last 48 hours Yes = 1 No = 2 DK = 888 NR = 999	A. Number	B. Last smoked (# of Hours)
6) Cigarette	01 Ask A		
7) Marijuana joint	01 Ask A		
8) Pipe	01 Ask A		
9) Cigar	01 Ask A		

A. In the last 48 hours, how many [INSERT TOBACCO] did you smoke?

B. How many hours ago did you smoke your last[INSERT TOBACCO]?

10. In the last 48 hours, have you been exposed to someone else’s cigarette, pipe, marijuana, or cigar smoke?

- Yes (ASK A) 01
- No 02
- DK 888
- NR 999

11-14. In the last 48 hours – in your [INSERT PLACE] -- about how many hours a day were you exposed to second hand smoke from [INSERT TOBACCO] ? ...about how many [INSERT TOBACCO] were you exposed to (PROBE: About how many hours are you exposed to someone else’s smoke?)

TOBACCO	A. # hrs exposed at HOME last 48 hours	B. # tobacco item exposed at HOME last 48 hours	C. # hrs exposed at WORK last 48 hours	D # tobacco item exposed at WORK last 48 hours	E # hrs Exposed elsewhere last 48 hours Specify	F # tobacco item Exposed elsewhere last 48 hours Specify
11) Cigarette						
12) Marijuana						
13) Pipe						
14) Cigar						

15.

- A. In the last 48 hours, have you fried or sauteed food for a meal? [RECORD ANSWER BELOW]
- B-E. In the last 48 hours, how many times did you use your stove to fry or sautee food for [INSERT MEAL] . . .
- F-I. In the last 48 hours, how many minutes did it take you to fry or sautee your [INSERT MEAL] ?

16.

- A. In the last 48 hours, have you broiled food for a meal? [RECORD ANSWER BELOW]
- B-E. In the last 48 hours, how many times did you broil food for [INSERT MEAL] . . .
- F-I. In the last 48 hours, how many minutes did it take you to broil your [INSERT MEAL] ?

17.

- A. In the last 48 hours, did you cook anything on a charcoal grill? [RECORD ANSWER BELOW]
- B-E. In the last 48 hours, how many times did use a charcoal grill to cook [INSERT MEAL] . . .
- F-I. In the last 48 hours, how many minutes did you spend charcoal grilling your [INSERT MEAL] ?

Codes
INAP= 777
DK=888
NR=999

	A. In Home				Number of Times Used				Minutes of use per meal			
	Yes	No	DK	NR	B. Breakfast	C. Lunch	D. Dinner	E. Other	F. Breakfast	G. Lunch	H. Dinner	I. Other
15. Fry/Sautee	01 Ask A- B	O2	888	999								
16. Broiling	01 Ask A- B	O2	888	999								
17. Charcol Grill	01 Ask A- B	O2	888	999								

18. In the last 48 hours, have you, or someone in your presence burned food while cooking?

Yes 01
 No 02
 DK 888
 NR 999

19-24 In the last 48 hours, how many times have you eaten [INSERT MEAT] that was [INSERT COOKING METHOD].

Would you say...
 Once 01
 2-3 times 02
 4-5 times 03
 >5 times 04
 DK 888
 NR 999

Cooking Method	Meat					
	19. Poultry	20. Hamburger	21. Steak	22. Pork (not including sausage/ bacon)	23. Sausage/ Bacon	24. Fish
A. Fried B. Broiled C. Barbequed/ Charcoal Broiled D. Combing all cooking methods, cooked so that it is browned or blackened on the outside						

25. In the last 48 hours, how many times have you burned candles?

DK 888
 NR 999

26. In the last 48 hours, how many times have you burned incense?

DK 888
 NR 999

27. In the last 48 hours, have you heated your home with a . . .

- | | |
|-----------------|-----|
| a) kerosene, or | 01 |
| b) coal heater? | 02 |
| c) No | 03 |
| d) DK | 888 |
| e) NR | 999 |

28. In the last 48 hours, was the heat in your building on. . .

- | | |
|------------------------------|-----|
| a) all of the time, | 01 |
| b) half the time (= 24 hrs), | 02 |
| c) < 24 hours, or | 03 |
| d) not at all? | 04 |
| e) DK | 888 |
| f) NR | 999 |

29. In the last 48 hours, how many hours a day would you say you spent outdoors? (PROBE: Time spent outdoors could include sitting in the park, time spent running errands, but not time spent inside a friend's or relative's house).

Would you say you spent. . .

- | | |
|---------------|-----|
| ≤ 1hr | 01 |
| 2-4 hrs | 02 |
| 5-6 hrs | 03 |
| 7 or more hrs | 04 |
| DK | 888 |
| NR | 999 |

30. In the last 48 hours, how many hours did you spend in transit? (PROBE: How many hours were you traveling back and forth from place to place?).

Would you say you spent. . .

- | | |
|---------------|-----|
| ≤ 1hr | 01 |
| 2-4 hrs | 02 |
| 5-6 hrs | 03 |
| 7 or more hrs | 04 |
| DK | 888 |
| NR | 999 |

Version Y/N

31. In the last 48 hours, please tell me your 3 most common means of transportation. Start by telling me what mode of transport you take the most, then the 2nd most, and finally, your 3rd most.

<u>CODES</u>	
Subway	01
Bus	02
Drive	03
Walk/bike	04
Taxi/gypsy cab	05
Other (SPECIFY) _____	06

A. Most Common _____ (Insert Code here) **B.** 2nd Most _____ (Insert Code here)

C. 3rd Most _____ (Insert Code here)

32. During the last 48-hours has an exterminator (i.e. anyone other than your super) spray chemicals or any other material in your home to get rid of insects or animal pests? (Probe: Did someone/an exterminator from a company come to your home to spray for pests?)

Yes (ask 34-41)	01
No	02
DK	888
NR	999

33. During the last 48-hours have you, your super, or anyone else (not an exterminator) used any pest control measures (pesticides, traps, etc.) to control pests (insects, rodents) in your household?

Yes (ask 34-41)	01
No	02
DK	888
NR	999

Date ___/___/_____ Interviewer Initials _____ Subject Initials _____ Subject ID _____

Given on Final Version Y/N

Version Y/N

34–41. [RECORD ANSWERS IN TABLE BELOW]

During the last 48-hours

- A. What kind of traps or pesticides were used?
- B. What pests were they used for?
- C. What brand or type of traps or pesticide (i.e. spray or powder) were used?

[RECORD ANSWERS IN TABLE BELOW]

	A. Type Yes = 1 No = 2 DK = 8 NR = 9	B. Pest(s) Used For Roaches = 1 Mice = 2 Rats = 3 Ants = 4 Other = 5 (Specify)	C. Brand(s) or Type(s) Used
34. Sticky traps			
35. Bait traps (e.g. Combat)			
36. Boric Acid			
37. Gel			
38. Spray by an exterminator			
39. Can Sprays			
40. The Bomb			
41. Other (specify) _____			

42. **In the last 48 hours how much total time did you spend not moving (i.e. *sitting, resting or sleeping*) with the air monitor close to you? (Probe, on the first day? Second? Third?) (= *total time at rest*)**

0-8 hours	01
8-16 hours	02
16-24 hours	03
24-32 hours	04
32-40 hours	05
DK	88
NR	99

43. **How much you total time did you spend *moving or walking around* with the air monitor? Probe: On the first day? Second? Third? Either at home or in the street? (= *total time wearing it while moving*)**

0-8 hours	01
8-16 hours	02
16-24 hours	03
24-32 hours	04
32-40 hours	05
DK	88
NR	99

44. **Was the air monitor *not* near you for any period of time? (Probe: For example did you at any point go out and forget to bring it along? Or go to sleep without it next to you?)**

0-8 hours	01
8-16 hours	02
16-24 hours	03
24-32 hours	04
32-40 hours	05
DK	88
NR	99