

Form D-20  
OMB # 2539-0012  
Expires: 4/30/2001

HU # \_\_\_\_\_

Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
Time Begun: \_\_\_\_\_ (AM/PM)

Interviewer Name: \_\_\_\_\_

**U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES  
NATIONAL SURVEY OF LEAD HAZARDS AND ALLERGENS IN HOUSING**

**RESIDENT QUESTIONNAIRE**

**INTRODUCTION:** Hello. We made an appointment to do some environmental testing here today. Is (MR./MS. NAME OF CONTACT) here?

My name is (INTERVIEWER NAME). This is (NAME OF TECHNICIAN). We are with Westat. We spoke to (you/MR. /MS. NAME OF RESPONDENT, SEE CONTACT RECORD) last week and invited your household to participate in a research study for the United States Department of Housing and Urban Development and the National Institute of Environmental Health Sciences. (SHOW ID BADGE, ASK TO GO INSIDE)

**Box A**

IF THE CONTACT IS NOT AT HOME, ATTEMPT TO CONDUCT THE SURVEY WITH THE PERSON ANSWERING THE DOOR, IF AT LEAST 18 YEARS OLD AND A RESIDENT OF THE HOME.

- IF THE RESIDENT SPEAKS MAINLY SPANISH, READ THE SPANISH QUESTIONNAIRE.
- IF THE RESIDENT HAS ANY COMMUNICATION PROBLEM (E.G., AUDITORY OR VISUAL DISABILITY, OR SPEAKS A LANGUAGE OTHER THAN ENGLISH OR SPANISH), ASK TO SPEAK WITH ANOTHER ADULT IN THE HOUSEHOLD. IF NOT, ASK PERMISSION TO GET A NEIGHBOR OR NEARBY FRIEND OR RELATIVE TO ASSIST.
- IF THE PERSON WILL NOT ALLOW THE SURVEY, ASK WHEN THE CONTACT WILL BE HOME:

TIME: \_\_\_\_\_ DAY: \_\_\_\_\_

IF LATER THE SAME DAY, PLAN TO RETURN THEN. IF ANOTHER DAY, RE-ARRANGE THE APPOINTMENT BY TELEPHONE.

NEW APPOINTMENT DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

COMPLETE THE RECORD OF CONTACT TO DOCUMENT THIS/THESE ACTIVITY(IES).

Before we can begin our work I would like to ask you to please read and sign the informed consent form which explains the study in detail and gives us permission to collect dust and soil samples in this home. I will go over each item of the form with you so that you know exactly what we are going to do. You will be given a copy of the informed consent to keep. (NAME OF TECHNICIAN) will be preparing our sampling equipment and forms in the meantime.

**Box B**

WAIT FOR THE RESPONDENT TO READ EACH ITEM ON THE CONSENT FORM. ANSWER ANY QUESTIONS THEY MAY HAVE REGARDING THE STUDY AND WORK YOU ARE DOING. THEN SIGN BOTH COPIES AND ASK THE RESPONDENT TO ALSO SIGN AND DATE BOTH COPIES OF THE CONSENT FORM. AFTER CHECKING THE SIGNATURE AND DATE, PROVIDE RESPONDENT WITH ONE COPY AND PROCEED. DO NOT BEGIN ANY WORK UNTIL RESPONDENT GIVES PERMISSION.

We would like to save time and do the data collection in the most efficient way. We do not have to sample in every room in the house, so it would be best to select the rooms for the dust collection now. I need to record on the room inventory list the number and types of rooms you have. After that, I will ask you a few questions about your house/apartment, while [NAME OF TECHNICIAN] uses this list to determine which rooms we will need for the dust and data collection. Is that all right with you?

**Box C**

INTERVIEWER: COMPLETE THE ROOM INVENTORY FORM WITH THE RESPONDENT. BE SURE THAT YOU ASK THE RESPONDENT TO VERIFY THE NUMBER OF ROOMS RECORDED FOR EACH FLOOR. ALSO VERIFY AGE(S) OF CHILD/REN IF PRESENT FOR EACH CHILD'S BEDROOM.

Now I would like to begin with some questions about your house/apartment.

Q1. What year was your residence/apartment built?

YEAR OF CONSTRUCTION..... |\_\_|\_\_|\_\_|\_\_| → (SKIP TO Q3)

DON'T KNOW..... 9998

HAND RESPONDENT CARD WITH BUILDING DATE CATEGORIES.

Q2. Which category of years on this card do you think most closely matches when the building was built?

- 1978 TO 1998..... 1
- 1961 TO 1977..... 2
- 1946 TO 1960..... 3
- 1940 TO 1945..... 4
- 1939 OR BEFORE ..... 5
- DON'T KNOW..... 8

Q3. How long have you or anyone in your household lived in this home?

- NUMBER ..... |\_\_|\_\_|
  - YEARS ..... 1
  - WEEKS ..... 2
  - MONTHS ..... 3
- } (CIRCLE UNIT)

Q4. How many stories are in the house/building, including the basement? (IF SPLIT LEVEL, OR PARTIAL BASEMENT, COUNT THE GREATEST NUMBER OF STORIES ON TOP OF EACH OTHER.)

NUMBER OF STORIES ..... |\_\_|\_\_|

Q5. How many apartments/housing units are in this building?

NUMBER OF HOUSING UNITS ..... |\_\_|\_\_|\_\_|\_\_| → (Q7)

DON'T KNOW..... 9998

Q6. Would you say that there are 4 or fewer units, or 5 units or more, in the building?

4 OR FEWER UNITS ..... 1

5 UNITS OR MORE ..... 2

DON'T KNOW..... 8

**BOX D**

INTERVIEWER: IF THE RESPONDENT DOES NOT KNOW HOW MANY UNITS ARE IN THE BUILDING, VERIFY BY SOME OTHER MEANS (E.G. BY LOOKING AT THE MAILBOXES FOR THE BUILDING). RECORD DK IF YOU CANNOT DETERMINE THE NUMBER.

RECORD NUMBER OF HOUSING UNITS IN THE BUILDING: \_\_\_\_\_

The next series of questions are to collect information that can affect the levels of allergens in your home.

Q7. What is the main heating source in your home? Is it (READ CATEGORIES AND CIRCLE ONE)

Radiators (steam or hot water)..... 01

Gas-heated forced air (vents)..... 02

Electric-heated forced air (vents) ..... 03

Gas stove/fireplace/wall furnace ..... 04

Electric space heater ..... 05

Kerosene space heater..... 06

Wood burning stove/fireplace..... 07

Some other source ..... 08

(SPECIFY \_\_\_\_\_ )

No source of heat..... 09

DON'T KNOW ..... 98

Q8. Are there any other sources you use for heat? (READ CATEGORIES ONLY IF RESPONDENT DOES NOT KNOW THE ANSWER. CIRCLE ALL THAT APPLY)

Radiators (steam or hot water)..... 01

Gas-heated forced air (vents)..... 02

Electric-heated forced air (vents) ..... 03

Gas stove/fireplace/wall furnace ..... 04

Electric space heater ..... 05

Kerosene space heater..... 06

Wood burning stove/fireplace..... 07

Some other source ..... 08

(SPECIFY \_\_\_\_\_ )

No other heating source ..... 09

DON'T KNOW ..... 98

Q9a. What kind of air conditioning system does your home have? Do you have...

- Central air conditioning, ..... 1 (GO TO Q9d)
- Window units, or ..... 2
- No air conditioning? ..... 3 (GO TO Q10)
- DON'T KNOW..... 8

Q9b. Which rooms in your house/apartment have window air conditioning units? (CIRCLE ALL THAT APPLY)

- Common living area(s)..... 1
- Bedroom(s) ..... 2
- Kitchen ..... 3
- Bathroom(s) ..... 4
- Some other room..... 5
- (SPECIFY)\_\_\_\_\_
- DON'T KNOW ..... 8

Q9c. How many total window air conditioning units do you have in this house?

\_\_\_\_\_  
(NUMBER OF UNITS)

Q9d. How often have you used air conditioning in the past month? Would you say...

- Everyday, ..... 1
- 20 to 30 days, ..... 2
- 10 to 20 days, ..... 3
- 1 to 9 days, or ..... 4
- Not at all? ..... 5
- DON'T KNOW ..... 8

Q10. In the past month, approximately how many hours a day did you keep the windows or doors open in your home? Was it...

- Less than 1 hour per day ..... 1
- 1-3 hours per day, ..... 2
- 4-12 hours per day, ..... 3
- more than 12 hours per day, or ..... 4
- not at all? ..... 5
- DON'T KNOW ..... 8

Q11. What kind of cooking stove do you have?

- Gas ..... 1
  - Electric ..... 2
  - NO STOVE ..... 3
  - OTHER ..... 4
- (SPECIFY \_\_\_\_\_ )
- } (GO TO Q13a)

Q12. Is there a fan that draws air from the stove out of the building?

YES ..... 1  
NO ..... 2  
DON'T KNOW ..... 8

Q13a. Do you have an air filtration device in your home, such as a HEPA filtration system or some other special filter?

YES ..... 1  
NO ..... 2 (GO TO Q14)  
DON'T KNOW ..... 8

Q13b. Please describe your filtration system and where it is located.

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Q13c. How often do you change or wash the air filter(s)? Is it every...

Once a week, ..... 1  
1 – 4 months, ..... 2  
5 – 12 months, or ..... 3  
more than 12 months? ..... 4  
DON'T KNOW ..... 8

Q14. During the past 12 months, has there been water or dampness in your home from broken pipes, leaks, heavy rain, or floods?

YES ..... 1  
NO ..... 2  
DON'T KNOW ..... 8

Q15. Does your home frequently have a mildew odor or musty smell?

YES ..... 1  
NO ..... 2  
DON'T KNOW ..... 8

Q16. Do you use a dehumidifier in your home?

YES ..... 1  
NO ..... 2  
DON'T KNOW ..... 8

Q17. In the past six months have you had any of the following pets living in your home? Please answer Yes or No for each type of pet.

	YES	NO	DK
a. Cat.....	1	2	8
b. Dog.....	1	2	8
c. Hamster.....	1	2	8
d. Gerbil.....	1	2	8
e. Guinea pig .....	1	2	8
f. Rabbit.....	1	2	8
g. Bird .....	1	2	8
h. Any other pets .....	1	2	8
(Specify)_____			

**IF Q17A – Q17H ARE ALL NO, THEN SKIP TO Q19**

Q18. Of the pets you just mentioned, which are currently living in your home?

None.....	01
Cat.....	02
Dog.....	03
Hamster.....	04
Gerbil.....	05
Guinea pig .....	06
Rabbit.....	07
Bird .....	08
Other? .....	09
(SPECIFY)_____	
DON'T KNOW .....	98

Q19. Do you use any specific methods to “allergy-proof” your home? Please answer Yes or No to each method listed.

	YES	NO	DK
a. Tannic acid or other acaracide .....	1	2	8
b. Impermeable mattress and or pillow covers .	1	2	8
c. Any other methods (specify) .....	1	2	8
_____			

Q20a. In the last 12 months, have you had any problems with cockroaches?

YES .....	1	} (GO TO Q22)
NO .....	2	
DON'T KNOW .....	8	

Q20b. When was the last time you saw cockroaches inside your home? Was it...

- Within the last week, ..... 1
  - Within the last month, ..... 2
  - 2 to 4 months ago ..... 3
  - 5 – 12 months ago ..... 4
  - DON'T KNOW ..... 8
- } (GO TO Q21a)

Q20c. Approximately how many cockroaches do/did you see per day on average?

- Less than 5, ..... 1
- 5 to 50, or ..... 2
- more than 50 ..... 3

Q21a. In the past 12 months, have you used any insecticides or bug sprays in your home to control cockroaches?

- YES ..... 1
- NO ..... 2
- DON'T KNOW ..... 8

Q21b. In the past 12 months, have you used a professional exterminator in your home to control cockroaches?

- YES ..... 1
- NO ..... 2
- DON'T KNOW ..... 8

Q22. In the past 12 months have you had any problems with mice or rats?

- YES ..... 1
  - NO ..... 2
  - DON'T KNOW ..... 8
- } (GO TO Q24)

Q23a. In the past 12 months, have you used any traps, bait stations or rodenticides in your home to control mice or rats?

- YES ..... 1
- NO ..... 2
- DON'T KNOW ..... 8

Q23b. In the past 12 months, have you used a professional exterminator in your home to control mice or rats?

- YES ..... 1
- NO ..... 2
- DON'T KNOW ..... 8

Now I need to ask a few questions about the people who live in this home.

Q24. How many people live in this household?

- NUMBER OF PEOPLE |\_\_| |\_\_|
- REFUSED..... 97
- DON'T KNOW..... 98

**Q25.** For each person, please tell me his or her first name, gender, and age. I will then need to record whether each person is Hispanic or Latino, his or her race, level of education and finally if each person has allergies. Let's begin with you. (ASK ALL QUESTIONS ACROSS A ROW FOR EACH PERSON BEFORE PROCEEDING THE NEXT PERSON)

	a.	b.	c.	d.	e.	f.	g.	h.	i.	j.	k.
	First Name	Gender	Age	Ethnicity H/L      Non- H/L	Race Code(s)	Level of Education Codes	Has a Doctor ever diagnosed you/(next) with any allergies?	Do you/does (next) have Allergic Rhinitis (Hay Fever)?	Do you/does (next) have skin allergies?	Do you/does (next) have food allergies?	Do you /does (next) have any other allergies?
1.		Male 1 Female 2		1      2			Y 1 N 2 DK 8      }      ↙	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8
2.	<input type="checkbox"/> No other person – Go to Q26	Male 1 Female 2		1      2			Y 1 N 2 DK 8      }      ↙	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8
3.	<input type="checkbox"/> No other person – Go to Q26	Male 1 Female 2		1      2			Y 1 N 2 DK 8      }      ↙	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8
4.	<input type="checkbox"/> No other person – Go to Q26	Male 1 Female 2		1      2			Y 1 N 2 DK 8      }      ↙	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8
5.	<input type="checkbox"/> No other person – Go to Q26	Male 1 Female 2		1      2			Y 1 N 2 DK 8      }      ↙	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8
6.	<input type="checkbox"/> No other person – Go to Q26	Male 1 Female 2		1      2			Y 1 N 2 DK 8      }      ↙	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8
7.	<input type="checkbox"/> No other person – Go to Q26	Male 1 Female 2		1      2			Y 1 N 2 DK 8      }      ↙	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8
8.	<input type="checkbox"/> No other person – Go to Q26	Male 1 Female 2		1      2			Y 1 N 2 DK 8      }      ↙	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8
9.	<input type="checkbox"/> No other person – Go to Q26	Male 1 Female 2		1      2			Y 1 N 2 DK 8      }      GO TO Q26	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8



Q26. Has a doctor ever diagnosed anyone in your household with asthma? [INCLUDE ADULTS THAT HAD CHILDHOOD ASTHMA]

YES.....1  
 NO.....2  
 DON'T KNOW.....8 } (GO TO Q28.)

Q27. Please tell me the names of the people in your household who have been diagnosed with asthma. For each person I have some questions concerning the severity of his or her asthma.

	a.	b.	c.	d.	e.	f.	g.
	Name	Does (name) currently have asthma or had asthma in the past year?	Does (name) currently take medication for asthma?	How often has (name) been hospitalized for asthma in the past year?	How often has (name) visited an emergency room for asthma in the past year?	How often does (name) awaken from sleep with asthma or wheezing?	How often is (name's) activity limited because of asthma
1.		Y 1 N 2 DK 8 } ↙	Y 1 N 2 DK 8	Never 1 1 – 2 times 2 3 – 10 times 3 >10 times 4 DK 8	Never 1 1 – 2 times 2 3 – 10 times 3 >10 times 4 DK 8	Every night 1 A few times a week 2 A few times a month 3 A few times a year 4 Never 5 DK 8	Every day 1 A few times a week 2 A few times a month 3 A few times a year 4 Never 5 DK 8
2.	<input type="checkbox"/> No other person – Go to Q28	Y 1 N 2 DK 8 } ↙	Y 1 N 2 DK 8	Never 1 1 – 2 times 2 3 – 10 times 3 >10 times 4 DK 8	Never 1 1 – 2 times 2 3 – 10 times 3 >10 times 4 DK 8	Every night 1 A few times a week 2 A few times a month 3 A few times a year 4 Never 5 DK 8	Every day 1 A few times a week 2 A few times a month 3 A few times a year 4 Never 5 DK 8
3.	<input type="checkbox"/> No other person – Go to Q28	Y 1 N 2 DK 8 } SKIP TO Q 28	Y 1 N 2 DK 8	Never 1 1 – 2 times 2 3 – 10 times 3 >10 times 4 DK 8	Never 1 1 – 2 times 2 3 – 10 times 3 >10 times 4 DK 8	Every night 1 A few times a week 2 A few times a month 3 A few times a year 4 Never 5 DK 8	Every day 1 A few times a week 2 A few times a month 3 A few times a year 4 Never 5 DK 8

Q28. Do any of the people who live here use any of the following tobacco products in the home? Please answer Yes or No for each product.

	<u>YES</u>	<u>NO</u>	<u>DK</u>
a. Cigarettes .....	1	2	8
b. Cigars .....	1	2	8
c. Pipes.....	1	2	8
d. Snuff .....	1	2	8
e. Chewing tobacco .....	1	2	8

Q29. I am going to read a list of work activities. For each activity, please tell me Yes or No if you or anyone in your household participates in that activity at work. In the last six months or since you moved to this address, did you or anyone in your household work on (at their work place) . . .

	<u>YES</u>	<u>NO</u>	<u>DK</u>
a. Paint removal including scraping and sanding.....	1	2	8
b. Building demolition .....	1	2	8
c. Welding or torch cutting .....	1	2	8
d. Plumbing .....	1	2	8
e. Sandblasting .....	1	2	8
f. Glass work .....	1	2	8
g. Lead smelter work .....	1	2	8
h. Foundry work .....	1	2	8
i. Oil refinery work.....	1	2	8
j. Car radiator repair .....	1	2	8
k. Battery manufacturing or salvage work .....	1	2	8
l. Work at a firing range or police work .....	1	2	8
m. Making or splicing cable.....	1	2	8
n. Explosive or ammunition work.....	1	2	8
o. Other lead-related industry work .....	1	2	8
p. Extermination of pests .....	1	2	8
q. Animal care worker/veterinarian.....	1	2	8

IF ALL ARE "NO" (2) ABOVE, SKIP TO Q32.

Q30. How often does anyone who does this work wear or bring his or her work clothes home?

NEVER .....	1	→ (Q32)
RARELY .....	2	
OFTEN .....	3	
ALWAYS .....	4	
DON'T KNOW .....	8	→ (Q32)

Q31. Do you usually wash or clean these work clothes here at the home?

YES.....	1
NO .....	2
DON'T KNOW .....	8

Q32. In the last six months or since you moved to this address, have you or anyone in your household participated in any of the following activities here at home?

Please answer Yes or No to each type of activity I read to you. Did you or anyone in your household . . .

	<u>YES</u>	<u>NO</u>	<u>DK</u>
a. Remove paint from furniture .....	1	2	8
b. Remove paint from any part of the house .....	1	2	8
c. Sand or paint any part of the house .....	1	2	8
d. Paint cars or bicycles .....	1	2	8
e. Solder pipes or metal .....	1	2	8
f. Solder electronic parts .....	1	2	8
g. Work with stained glass .....	1	2	8
h. Use artists' paint (jewelry, pictures) .....	1	2	8
i. Work with pottery or glazes .....	1	2	8
j. Reload bullets, target shoot, or hunt .....	1	2	8
k. Make bullets or fishing sinkers .....	1	2	8

My last few questions are general questions to categorize your home for the survey.

Q33. Do you own or rent this home?

OWN .....	1	→ (Q35)
RENT .....	2	
REFUSED .....	7	
DON'T KNOW .....	8	

Q34. Is this house/apartment privately owned or does a public housing authority own it?

OWNED PRIVATELY .....	1	
PUBLIC HOUSING .....	2	→ (Q36)
REFUSED .....	7	
DON'T KNOW .....	8	

Q35. Does the government pay some of the cost of the unit?

YES .....	1	
NO .....	2	→ (Q37)
REFUSED .....	7	
DON'T KNOW .....	8	

Q36. Do the people living here have to report the household's income to some agency every year so they can set the rent or mortgage?

YES .....	1
NO .....	2
REFUSED .....	7
DON'T KNOW .....	8

Q37. I need to ask about your 1997 household income. This information will never be associated with your household. Was the total 1997 income for the household below or above \$35,000?

- BELOW \$35,000..... 1 → (INCOME CARD A)
- \$35,000 OR MORE ..... 2 → (INCOME CARD B)
- DON'T KNOW..... 8

HAND RESPONDENT CARD WITH INCOME CATEGORIES AS SPECIFIED IN Q37 ABOVE.

Q38. Which category on the card should I circle? (Was your household income in 1997 . . .)

- Up to \$ 4,999 ..... 01
- \$ 5,000 to \$ 9,999 ..... 02
- \$ 10,000 to \$ 14,999 ..... 03
- \$ 15,000 to \$ 19,999 ..... 04
- \$ 20,000 to \$ 29,999 ..... 05
- \$ 30,000 to \$ 34,999 ..... 06
  
- \$ 35,000 to \$ 39,999 ..... 07
- \$ 40,000 to \$ 59,999 ..... 08
- \$ 60,000 to \$ 79,999 ..... 09
- \$ 80,000 to \$ 99,999 ..... 10
- \$100,000 to \$119,999 ..... 11
- \$120,000 or more ..... 12
  
- REFUSED ..... 97
- DON'T KNOW ..... 98

We have just a few more questions about the rooms where we will sample dust and paint: (TECHNICIAN WILL NAME THE SELECTED ROOMS – INTERVIEWER WILL WRITE IN THE ROOM NUMBER CODES ON THE QUESTION 39 MATRIX)

THE FOLLOWING QUESTIONS CONCERN THE SELECTED ROOMS.  
 ASK EACH QUESTION ABOUT THE SELECTED ROOMS AND EACH PERSON IN THE HOUSEHOLE LISTED IN Q25.

Q39. We are trying to understand how long people are likely to be exposed to lead hazards or allergens in their homes.  
 On average, how many hours per day does [NAME OF HH MEMBER] spend in [NAME OF ROOM]?  
 [INCLUDE TIME SLEEPING – HAND RESPONDENT THE TIME CODES CARD AND HAVE THEM SELECT THE APPROPRIATE CATEGORY.]

		a.	b.	c.	d.	e.	f.	g.
		KITCHEN	COMMON LIVING AREA	BEDROOM #1	OTHER ROOM #1	BASEMENT	BEDROOM #2	OTHER ROOM #2
	ROOM INVENTORY AND SELECTION FORM CODE	1__	2__	3__	4__	49	3__	4__
	HOUSEHOLD MEMBER NAME							
1								
2								
3								
4								
5								
6								
7								
8								
9								
	When was the floor/carpet last cleaned?							
	How was the floor/carpet last cleaned? (SHOW CARD)							
	When was the last time the carpet/rug was shampooed or steamed cleaned?							
	When was the last time the upholstered sofa/chair was shampooed or steam cleaned?							
	When was the bedding last washed?			___ Days ___ Weeks			___ Days ___ Weeks	
	What was the wash water temperature?			Hot 1 Warm 2 Cold 3			Hot 1 Warm 2 Cold 3	

Thank you, now we will begin sampling dust and paint. We would very much appreciate it if you could accompany us.

TIME ENDED: \_\_\_\_\_ (AM/PM)