Appendix C
Socio-Demographics and Land Use and Activity Patterns Report

FINAL

SOCIO-DEMOGRAPHICS, AND LAND USE AND ACTIVITY PATTERNS OMAHA - NEBRASKA

Prepared For

Black and Veatch Special Projects Corp.

U.S. Enviromental Protection Agency
Region VII

By

Shireen S. Rajaram, Ph.D.
Associate Professor, Sociology
University of Nebraska - Omaha

March 2004

Table of Contents

Purpose....2

Background....2

Objectives....2

Sample Size and Sampling Procedure....3

Data Collection Process....3

Data Entry and Analysis....5

Results....5

- Age, Race/Ethnicity of the Respondent and other Adult....6
- Garden Crops....6
- Pet Ownership....7
- Source of Water for Drinking and Cooking....7
- Hobbies/Activities of the Respondent....7
- Occupation....8
- Exposure to Lead in Occupation....8
- Activities away from Home....8
- Volunteer Work....8
- Age of House and Ownership Status....9
- Home Renovation and Remodeling....9
- Location of Home....9
- Location and Ground Cover of the Yard....9
- Data on Children....9
- Socio-Demographic Data on Children....10
- Time Spent Indoors and Outdoors....10
- Play Activity of Children....11
- Daycare, Preschool and School....11
- Activities at Daycare....12
- Activities at School or Preschool....12
- Child's Food Consumption....12
- Blood-Lead Testing....13
- Child's Mouthing Behavior....13
- Missing Child Data....13

Conclusion....14

Figures

Figure 1: Language Interview Conducted.....15
Figure 2: Age Range of Respondents.....16
Figure 3: Gender of Respondents.....17
Figure 4: Race/Ethnicity of Respondents.....18
Figure 5: Year House Built.....19
Figure 6: Own or Rent Home.....20
Figure 7: Children under age 7.....21

Tables

Table 1: Interviewers.....22
Table 2: Zip Codes.....23

Appendices

Appendix -1 Demographic and Land-Use Survey (English and Spanish)

Appendix – 2 Omaha Lead Site, RI/FS Access Agreement, EPA, Region VII

Assessment of Exposure to Lead Poisoning
Demographic and Land Use and Activity Patterns

Purpose:

The purpose of this project is to gather site-specific information on the extent of exposure of residents within the Omaha Superfund Lead Site to lead poisoning in the soil through their daily activities in their home environment. The Environmental Protection Agency's (EPA) on-going soil testing for lead contamination within the Omaha Lead Site indicates elevated levels of lead.. This study is part of the Risk Assessment study to determine public health risks to lead exposure in the Omaha Lead Site.

Background:

In Omaha, the main source of lead contamination in the soil is from industries such as ASARCO and others that were located in the downtown area close to the Missouri River. The Environmental Protection Agency (EPA), Region VII has designated the approximate boundaries of the Omaha Lead Site to be south of Ames Street, north of L Street and east of 45th St. Black and Veatch Special Projects (BVSPC) was issued a work assignment by the U.S. Environmental Protection Agency (EPA) to determine if wide spread metals contamination exists around the ASARCO facility. BVSPC's responsibilities under the work assignment include obtaining access agreements from property owners within a three-mile radius of the ASARCO facility, collecting and analyzing soil samples from the owners, and conducting an indoor dust sampling study as part of the Risk Assessment study.

Objectives:

The main objectives of this study are to:

a) Gather Socio-demographic data;

b) Gather information on current land use and activity patterns; and

c) Obtain information on exposure frequency, duration, and type of outdoor activities in the home environment, particularly among children below the age of seven.

Sample Size and Sampling Procedure:

The sample size, sampling procedure, and the specific homes sampled were determined by BVSPC as part of the indoor-dust sampling study. In this study 158 homes were sampled.

Data Collection Process:

A University of Nebraska-Omaha (UNO) personnel constructed the survey questionnaire to gather demographic information and activity patterns at the Omaha site. In the construction of the survey questionnaires, similar questionnaires used at other lead sites and relevant research studies were reviewed. Input was obtained on several drafts of the questionnaire from Nebraska Health and Human Services personnel. Several modifications were made in the questionnaire in the course of data collection based on the field-experiences of outreach workers. UNO personnel requested feedback on the questionnaire from key community leaders through BVSPC but did not receive any feedback. The questionnaire was translated into Spanish. A copy of the questionnaire for adults and children in Spanish and English is shown in Appendix 1.

Outreach workers were hired by UNO to conduct door-to-door surveys. The outreach workers made visits to homes with the BVSPC indoor-dust sampling team to gather the demographic data. BVSPCC obtained written permission though an access agreement from the residents prior to the door-to-door visits to conduct indoor dust sampling (See Appendix 2). The access agreement did not include information relating to the demographic survey.

UNO hired three bilingual, outreach workers, fluent in Spanish. Bilingual interviewers were essential since there has been a dramatic increase in first generation immigrants from

Mexico and other parts of Latin America in South Omaha. Many lack a high school education (U.S. Census, 2000) and do not speak and/or read English.

UNO personnel trained the outreach workers in:

a) Epidemiology, of lead poisoning in the U.S., and issues specific to Omaha (e.g., EPA Superfund listing, local resources for screening and education information, for example from the Douglas County Health Department (DCHD), Lead Safe Omaha Coalition (LSOC), etc.). Workers were given an hour-long power-point presentation on the lead problem in Omaha. They were also given two research articles on lead, and educational booklets and pamphlets by the EPA, Nebraska Health and Human Services, DCHD, and the LSOC.

b) Community-based survey research and face-to-face interview techniques. Survey research techniques stress the uniform and objective presentation of questions and timely clarification of issues that might arise. UNO personnel stressed issues pertaining to confidentiality. Workers were required to read and follow the ethical conduct of non-therapeutic research as outlined by the UNO Institutional Review Board (see www.unmc.edu/irb) that oversees all research related activities at UNO. It should be noted that this project did not require approval by the Institutional Review Board since the primary aim of the study was not research but service to the community. The initial training was carried out over a period of four hours over the course of two days. In addition, UNO personnel had on-going discussions of the lead problem in Omaha and confidentiality and ethical issues with the UNO workers throughout the project. Training of workers is essential to ensure the integrity of the study and to maintain consistency, validity, and confidentiality of the data.

The data collection process was carried out over a 31 workday period – from November 19th, 2003 to January 10th, 2004. BVSPC directly made appointments with residents for home

visits by the BVSPC indoor dust sampling team accompanied by the UNO outreach workers. UNO personnel were informed of the date, time and location of these appointments. UNO workers met the BVSPC team outside the respective homes at the scheduled time to conduct the demographic survey.

The interview schedules varied from day to day. Initially, there were only two dust-sampling teams and the three UNO outreach workers were able to cover the interviews. Over the course of the project, more dust-sampling teams were added. During the final week of the project there were four dust teams in operation each day with a high volume of interviews, despite several cancellations. BVSPC workers gathered the demographic data when UNO workers were unavailable to cover the appointment.

Data Entry and Analysis:

Two part-time graduate assistants were hired to enter and analyzeze the data. The raw data was first entered into *Statistical Package for the Social Science* (SPSS), a commonly used program in the social and behavioral sciences in data management and analysis. Frequencies were run on all variables. The data was then exported into *Microsoft Excel*. Unlike SPSS, Excel is unable to accommodate a data set with a large number of variables. Hence, the SPSS files were broken down into several Excel files. The code-book that is part of the SPSS program was exported into a *Microsoft Word* file.

Results:

Survey data were collected from 158 homes. Demographic data such as age, and race/ethnicity were collected for all residents of the household from the respondent. Data on occupation, length of residence, and hobbies were collected from the respondent and only one other adult above the age of 18 in the household. Detailed activity of children age 7 and under were

collected to provide information on weekday and weekend land-use and activity patterns during the different seasons of the year. Eighty-five percent of the interviews (n=134) were conducted in English and 25% (n=24) of the interviews were conducted in Spanish (See Figure 1). About half of the interviews (n=79) were conducted by UNO workers and half (n=77) were conducted by BVSPC workers (See Table 1). Three of the workers who conducted 47% of the interviews by BVSPC were briefly trained (one hour) in demographic, face-to-face interviews by UNO personnel. There are missing data for most variables pertaining to adults and percentages reported were adjusted for these missing data.

Age, Race/Ethnicity of the Respondent and other Adult. The age of the respondents ranged from 19 to 93 years (see Figure 2). The majority of the respondents (65%) were female (see Figure 3). Thirty-nine (25%) of the respondents were African American, thirty-eight (24%) were Hispanic/Latino, seventy-two (46%) were White/Caucasian, and six (4%) were Asian American (see Figure 4). The age of the other adult in the house ranged from 10 to 90 years and the majority (57%) were female. Forty-three percent of the other adult in the house were White/Caucasian, 25% were African American, 25% were Latino, 5% were Asian American and 2% were of mixed race/ethnicity. The majority of the other adult in the house (61%) were married to the respondent. The rest of the people in the house were either children, grandchildren, nephews, siblings, parents or friends/roommates of the respondent.

Garden Crops. Thirty-eight percent of the respondents did have a vegetable garden. Of these homes, 92% reported that tomatoes were their primary crop in terms of quantity. Bell peppers were the primary crop for 7% of the respondents with a garden, cucumbers and jalapenos were the primary crop for 5% of respondents, and green beans, okra, turnips and radishes were the

primary crop for 3% of respondents. Other primary crops in order of quantity include cantaloupe, watermelon, potatoes, pumpkins, eggplant and zucchini.

Pet Ownership. Twenty-five percent of the respondents had cats and 33% of the respondent had dogs. The number of cats per house ranged from 1 to 6 and the majority of respondents had only one cat. The number of dogs per house ranged from 1 to 5 and the majority of respondents had only one dog. Cats were more likely to be indoor cats compared to outdoor or both indoor and outdoor cats. Dogs were more likely to be both indoor and outdoor dogs, compared to either an indoor or outdoor dog. Other indoor pets include birds (4% of the respondents), fish (4%), turtles and tortoise (2%), and lizards, guinea pigs, rats and ferrets.

Source of Water for Drinking and Cooking. The main type of water used at home for drinking purposes was tap water (63% of the respondents), followed by filtered tap water (19%), bottled water (16%), and both tap and bottled water (2%). The main type of water used at home for cooking purposes was tap water (87%), followed by filtered tap water (9%) and bottled water (4%).

Hobbies/Activities of the Respondent. Respondents reported that either themselves or the another adult in the house participated in the following activities: making or repairing of stained glass windows at home (3%); making or repairing of lead sinkers and/or bullets at home (1%); manufacturing or salvaging of batteries at home (2%); making or decorating of pottery or ceramics at home (4%); artistic or industrial painting at home (18%); indoor or outdoor target shooting (4%); metal work involving salvaging, sanding, cutting or welding (10%); collecting, polishing or sanding of brass, bronze or pewter (6%); automobile service including batteries or radiators (6%); electrical work, soldering or welding (9%); carpentry, construction, renovation or

demolishing (27%); power cleaning using sand or water (7%); chemical or electrical work (8%); working in a glass factory (2%); and work in an oil refinery (1%).

Occupation. Twenty-one percent of the respondents were retired; 12% worked at home as housewives; 6% were health professionals; 5% were on disability; 3% were carpenters; and 3% were machine operators; 3% were cooks; and 3% were unemployed. The rest of the respondents were mainly in the blue-collar (construction, steel worker, forklift driver, etc.) or the service sector (customer service, bartender, etc) of the economy. Sixty-one percent of respondents and 82% of the other adult in the home worked full-time. The number of hours worked per week ranged from 3 to 115 hours per week for the respondent and from 20 to 80 hours for the other adult in the home. The majority of both the respondents (60%) and the other adult in the house (81%) worked 40 hours or more per week.

Exposure to Lead in Occupation. Five percent of the respondents and 9% of the other adult in the home reported that they had exposure to lead in their occupation.

Activities away from Home. Sixty-nine percent of respondents and 65% of the other adult in the home spent time away (vacation and work related) from Omaha during the year. The number of days per year spent away from Omaha ranged from one to 185 days with a median of 14 days. The number of days the other adult in the home spent away from Omaha ranged from one to 270 days.

Volunteer Work. Twenty-seven percent of the respondents, and 23% of the other adult in the house volunteered outside the home. The number of hours respondents volunteered per year outside the home ranged from 4 to 624 hours with a median of 100 hours. The number of hours the other adult volunteered per year outside the home ranged from 7 to 520 hours.

Age of House and Ownership Status. The majority of the respondents (49%) lived in housing built before 1950 (see Figure 5). Also, the majority of the respondents (89%) rented their home (see Figure 6). The majority of respondents (51%) lived in their house for over 8 years and the majority of the other adult in the home (59%) lived in the house for over 5 years. Among the 16 respondents who lived in their house for less than a year, 13 of them previously lived in a home east of 45th Street. Similarly, the other adult in the home who lived there for less than a year was more likely to have lived at a prior residence located east of 45th Street rather than west of 45th Street.

Home Renovation and Remodeling. Sixty percent of respondents reported recent renovation or remodeling of their home. The most frequent remodeling activity was painting (30%), and construction of a new room, wall, or floor (26%). Other remodeling activities included heating repairs; carpeting; and building/renovating deck, fence, windows, roofs, and door. Sixty-six respondents (43%) stated that there structures of homes next door had been renovated, repainted, demolished or sand/water blasted.

Location of Home. Thirty-two percent of the households surveyed were in zip code 68105, 21% were in zip codes 68111 and 68108 respectively, and 13% were in zip code 68107 (see Table 2).

Location and Ground Cover of the Yard. Approximately, 86% of the respondents reported that at least 50% of their property was in the front yard, and 97% of the respondents reported that at least 50% of their front yard was dirt covered. About 12% of the respondents reported that at least 50% of their property was in the back yard, and 90% of the respondents reported that at least 50% of their back yard was dirt covered.

Data on Children. Detailed data on socio-demographics and duration of play activities during the different seasons in the year were collected on a total of 69 children, age 7 and below. There

were missing data and the percentages reported have been adjusted for these missing data. Possible explanations for missing data are discussed below under, "Missing Child Data."

Socio-Demographic Data on Children. Of the sixty-nine children age 7 and below, eight were less than one year, 19 were between 1-2 years old, 24 were between 3-4 years old and 18 were between 5-6 years old (see Figure 7). The relationship to the respondent was as follows: daughter (n=25), son (n=22), grandchild (n=12), great grandchild (n=4), nephew (n=2), niece (n=3), and sibling (n=1).

Time Spent Indoors and Outdoors. The number of hours per week that the child spent at home indoors and outdoors during the weekday in the *summer* (June to August) ranges from 0 to 120 hours and 0 to 80 hours, respectively. The number of hours per week that the child spent at home indoors and outdoors during the weekend in the *summer* ranges from 0 to 48 hours and 0 to 80 hours, respectively. The number of hours per week that the child spent at home indoors and outdoors during the weekday in the *fall* (September to November) ranges from 0 to 120 hours and 0 to 70 hours, respectively. The number of hours per week that the child spent at home indoors and outdoors during the weekend in the *fall* ranges from 0 to 60 hours and 0 to 120 hours, respectively. The number of hours per week that the child spent at home indoors and outdoors during the weekday in the *winter* (December to February) ranges from 0 to 120 hours and 0 to 80 hours, respectively. The number of hours per week that the child spent at home indoors and outdoors during the weekend in the *winter* ranges from 0 to 148 hours and 0 to 50 hours, respectively. The number of hours per week that the child spent at home indoors and outdoors during the weekday in the *spring* (March to May) ranges from 0 to 120 hours and 0 to 70 hours, respectively. The number of hours per week that the child spent at home indoors and

outdoors during the weekend in the *spring* ranges from 0 to 60 hours and 0 to 40 hours, respectively.

Play Activity of Children. The respondent reported that 92% of the children age 7 and below living at the house did play outside in the yard. These children were more likely to play in the back yard (48%) compared to the front yard (29%) or both in the front and back yard (23%). Children were more likely to play in the sandbox in the summer, spring, and fall than in winter. The number of hours per week that children played in the sandbox ranged from 0 to 14 hours per week during the summer and the spring, and 0 to 11 hours in the fall. The number of hours per week that the child played in the grass-covered area on the property ranged from 0 to 70 hours in summer and spring, 0 to 60 hours in the fall, and 0 to 20 hours in winter. The primary type of activity in grass-covered area was playing ball or biking. The number of hours per week that the child played in soil or dirt-covered area on the property ranged from 0 to 30 hours in summer, 0 to 24 hours in fall and spring, and 0 to 3 hours in winter. Activities involved biking, and digging in the dirt. The number of hours per week that the child assisted in planting and gardening ranged from 0 to 15 hours in summer, fall and spring, and 0 to 1 hour in winter. The number of hours per week that the child plays on a swing set or a similar structure ranged from 0 to 30 hours in summer, 0 to 6 hours in spring, 0 to 5 hours in fall, and 0 to 2 hours in the winter.

Daycare, Preschool and School. Forty percent of the children spent time at a daycare during the day. The majority of the daycare's (78%) were located east of 45th St. The number of hours spent at the daycare per day on a weekday ranged from 3 to 12 hours per day, and 0 hours on the weekend. Thirteen children were in school and eight children were in preschool. The majority of schools and preschools were located east of 45th St.

Activities at Daycare. The maximum number of hours per week that the child spent indoors and outdoors during the *summer* is 50 and 15 hours, respectively. The maximum number of hours per week that the child spent indoors and outdoors during the *fall* is 44 and 27 hours, respectively. The maximum number of hours per week that the child spent indoors and outdoors during the *winter* is 50 and 5 hours, respectively. The maximum number of hours per week that the child spent indoors and outdoors during the *spring* is 50 and 10 hours, respectively. The maximum number of hours per day the child spent in the sandbox at the daycare is 7 hours during the summer, one hour each during the fall, winter and spring. The maximum number of hours per day the child spent in a grass-covered area at the daycare is 6 hours during the summer, 2 hours in the fall, one hour in winter, and 2 hours in spring. The maximum number of hours per day the child spent in a dirt-covered area at the daycare is 5 hours, during the summer, and none during the rest of the year. The maximum number of hours per day the child spent on a swing-set or similar structure at the daycare is 3 hours during the summer, and 2 hours each during the fall and spring.

Activities at School or Preschool. The maximum number of hours per week that the child spent indoors and outdoors during the *summer* at school or preschool are 30 hours each. The maximum number of hours per week that the child spent indoors and outdoors during the *fall* is 39 and 30 hours, respectively. The maximum number of hours per week that the child spent indoors and outdoors during the *winter* is 40 and 15 hours, respectively. The maximum number of hours per week that the child spent indoors and outdoors during the *spring* is 30 hours each.

Child's Food Consumption. The respondent reported that 10% percent of the children ate fruits and 21% ate vegetables grown in the garden at home, 1% of the children took a Mexican home remedy, *Greta*, none of the children took a Mexican home remedy of *Arzcon*, 10% of the

children took other home remedies or herbal treatment such as organic teas -- chamomile, manzanilla, mint, cinnamon and *Herba Buenos*. One per-cent ate foods from pottery or ceramic-ware made in Mexico, 16% of children ate canned food or drinks made in Mexico or any other county, and 24% of children ate candy made in other country.

Blood-Lead Testing. Forty-two percent of the children age 7 and below were tested for blood-lead levels. Among those that provided a date when blood tests were done, 27% were tested in 2003, 9% tested in 2002, 4% in 2001, and 2% in 2000. Only one child was reported to have a high blood lead level. The other health problems that the children had included asthma and bronchitis.

Child's Mouthing Behavior. The following are details of objects that the child chewed or sucked on: toys, 46% of the children; fingers and thumb, 43% of the children; pacifier, 19%; blanket, 19%; newspaper or magazine, 12%; crayon or art supply, 19%; cosmetics, 6%; matches, none; jewelry or keys, 19%; dirt, rocks or sticks, 14%; pewter or brass, 2%; mini-blinds, 4%; knick-knacks, 4%; furniture, 6%; window-sills, 4%; woodwork or rails, 2%; doors, 2%; and paint chips. Eight percent of children picked at paint, and 17% of children played with baby powder.

Missing Child Data. Possible explanations for the missing data are several: a) respondents might have been unable to properly estimate the time the child spent on the different activities at home and the daycare for the different seasons; b) the access agreement did not alert respondents that they would be required to provide detailed information on the activities of their children. When faced with the questions, respondents might have found the questions to be too time-consuming, tedious, difficult, intrusive or unnecessary; c) respondent might have been unwilling to provide certain data such as the name and phone number of day care or school; d) the lengthy questionnaire might have resulted in fatigue at the end of the survey when data on children were

solicited; e) the lack of any compensation for their time in providing information might have made respondents reluctant to be forthcoming with the information; f) frequent cancellations of interviews and the wait outside the homes in the cold to join the BVSPC team might have resulted in fatigue and carelessness among UNO workers affecting their effectiveness in data collection; g) UNO outreach workers had to serve as interpreters at Spanish speaking households for the BVSPC indoor dust sampling team since the latter did not have Spanish-English interpreter in the first half of the project. The data collection process of the demographic survey might have been disrupted on account of the distraction of interpreting for the dust sampling team; h) the lack of adequate training and/or experience among some BVSPC workers might have affected their effectiveness in data collection; and i) data was collected during the holiday seasons of Thanksgiving, Christmas, and New Year. Respondents may have been short on time on account of holiday activities.

Conclusion:

The Demographic and Land Use Survey is an effective tool for collecting important information on the socio-demographic background of adults and children age 7 and below. It provides useful information on occupation, work-hours, hobbies, location of residence, home ownership status of the adults in the household, and indoor and outdoor activity patterns of children age 7 and below. This information will provide data on exposure to lead among adults and children and helps in the determination of the public health risks in a community.

Figure 1

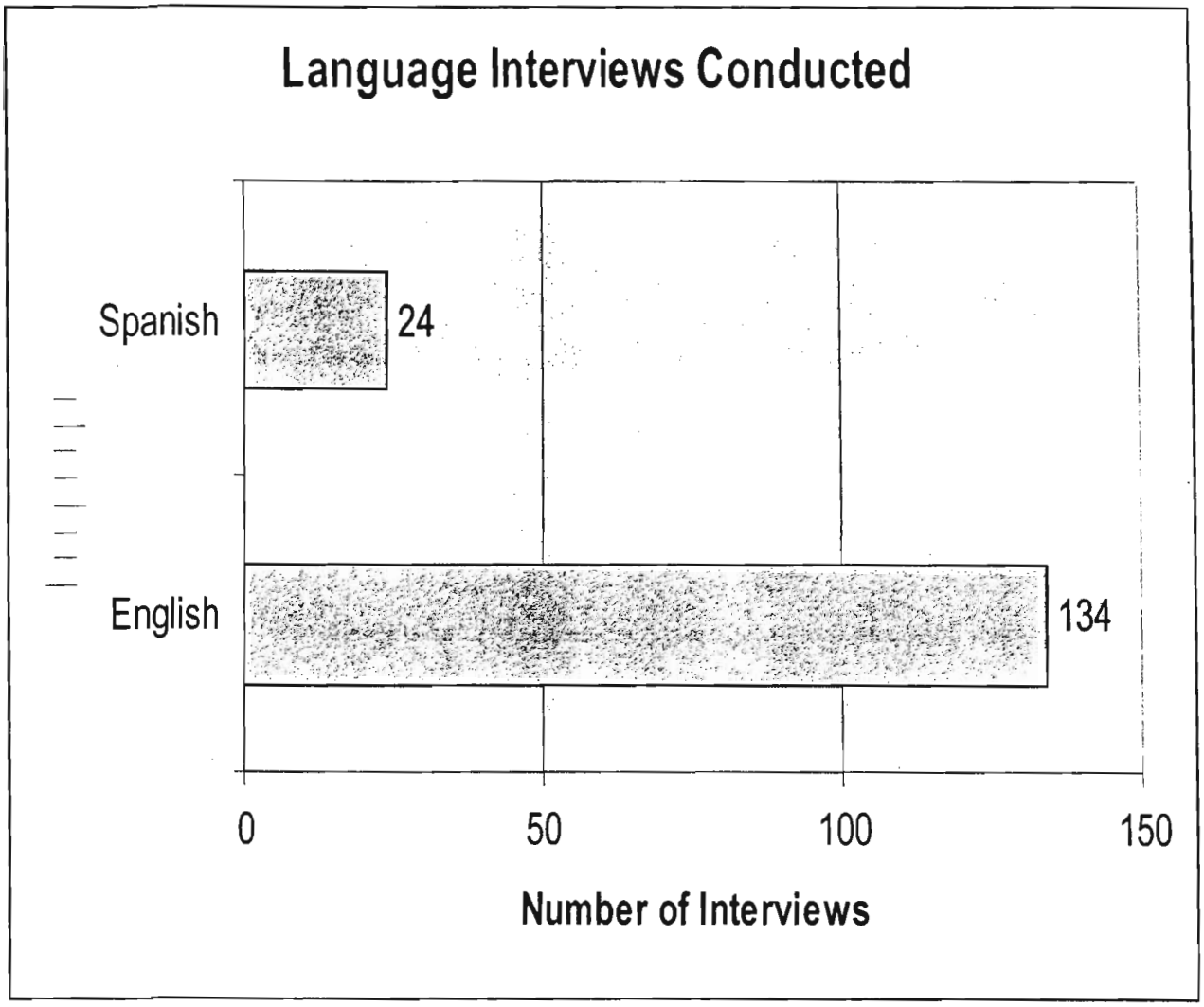
Language Interviews Conducted
Spanish
24
English
134
0
50
100
150
Number of Interviews

Figure 2

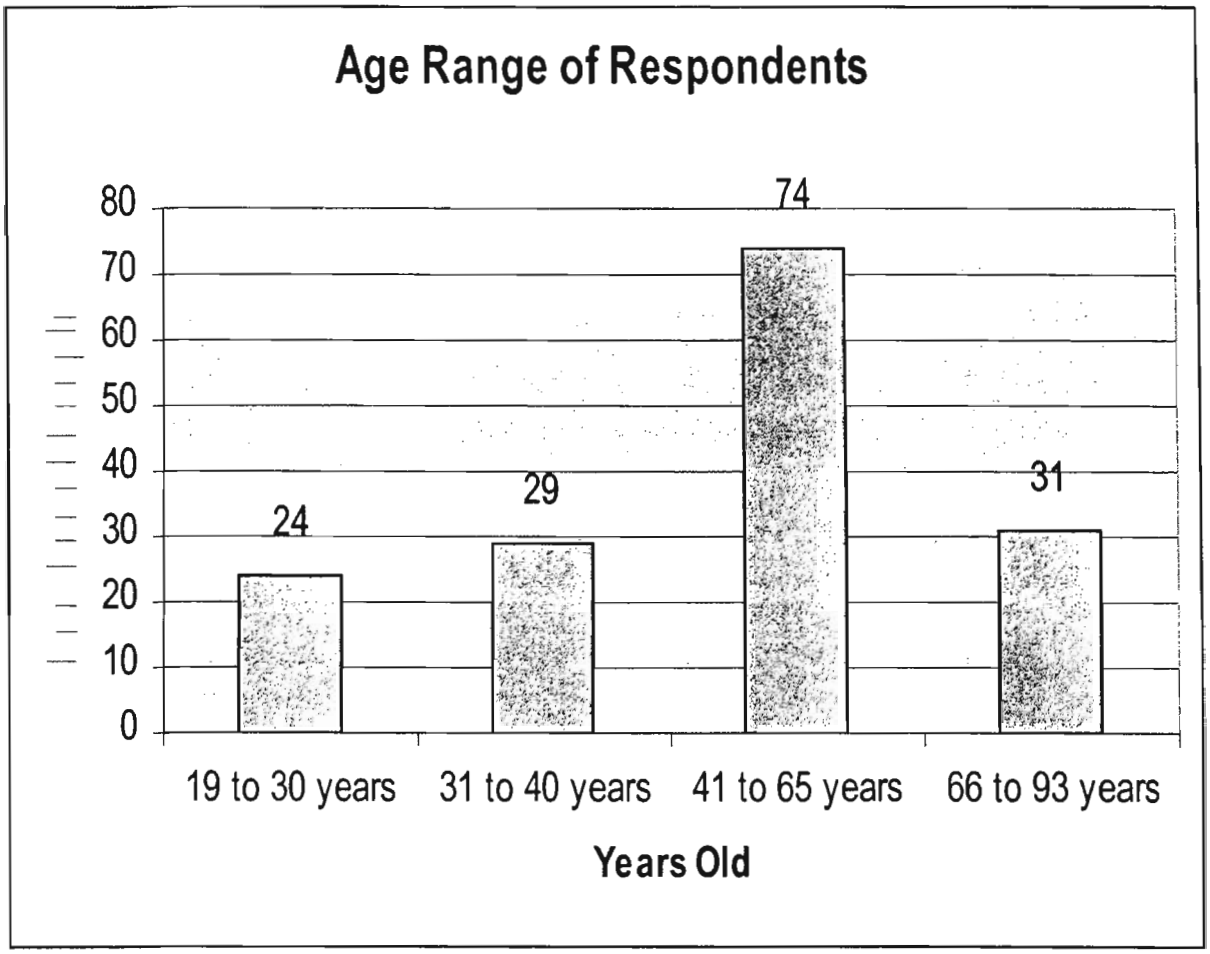
Age Range of Respondents
80
70
60
50
40
30
20
10
0
24
29
74
31
19 to 30 years
31 to 40 years
41 to 65 years
66 to 93 years
Years Old

Figure 3

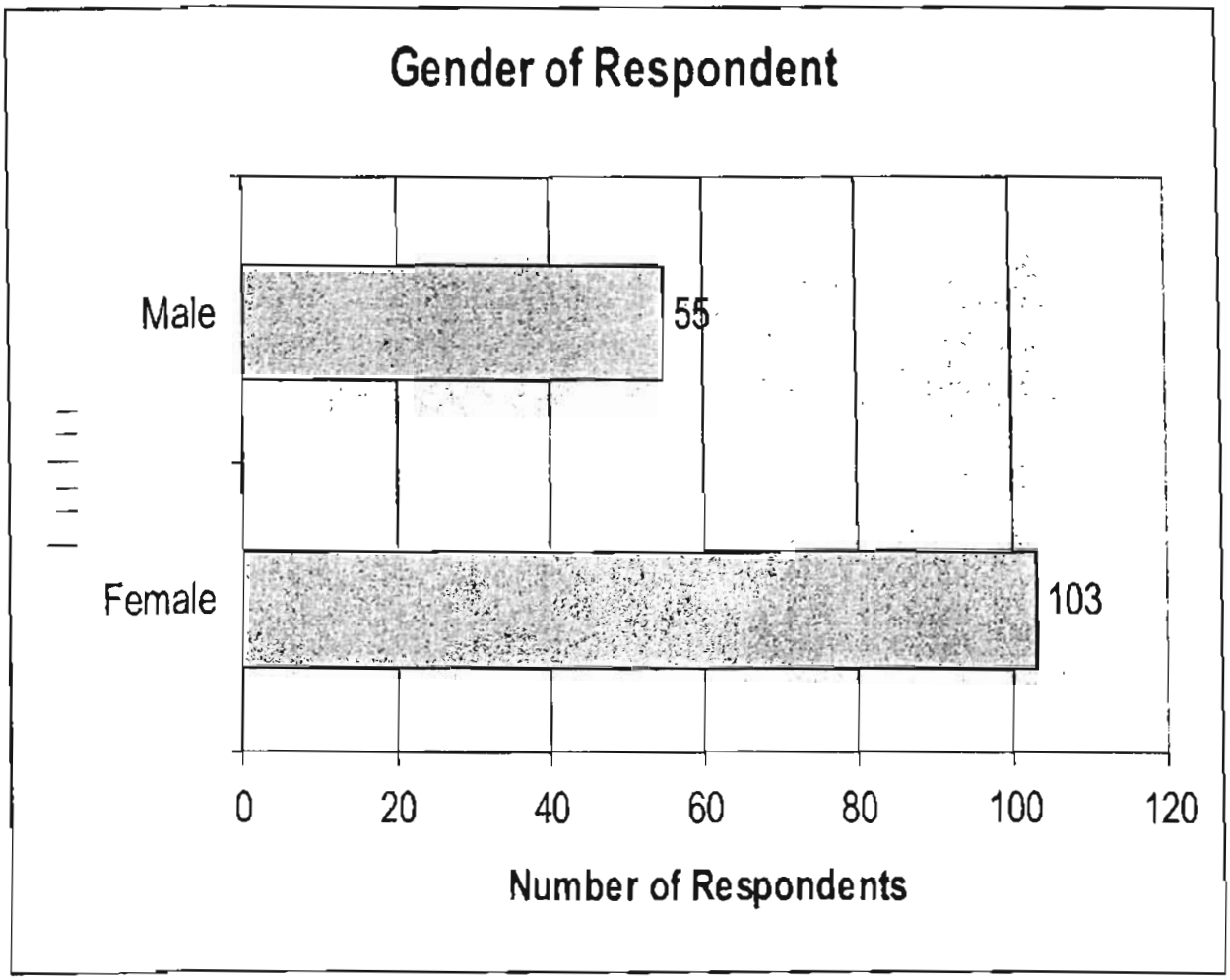
Gender of Respondent
Male
55
Female
103
0
20
40
60
80
100
120
Number of Respondents

Figure 4

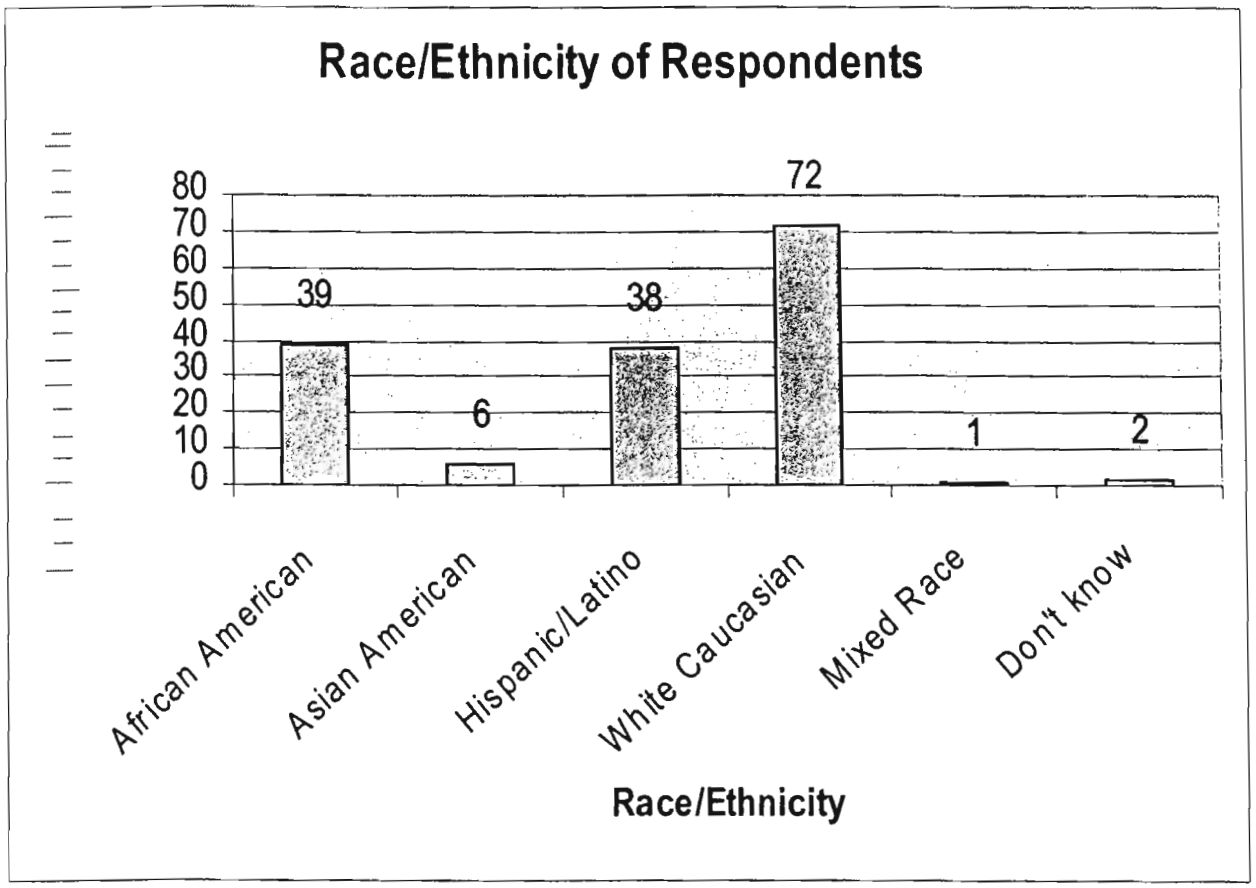
Race/Ethnicity of Respondents
80
70
60
50
40
30
20
10
0
39
6
38
72
1
2
African American
Asian American
Hispanic/Latino
White Caucasian
Mixed Race
Don't know
Race/Ethnicity

Figure 5

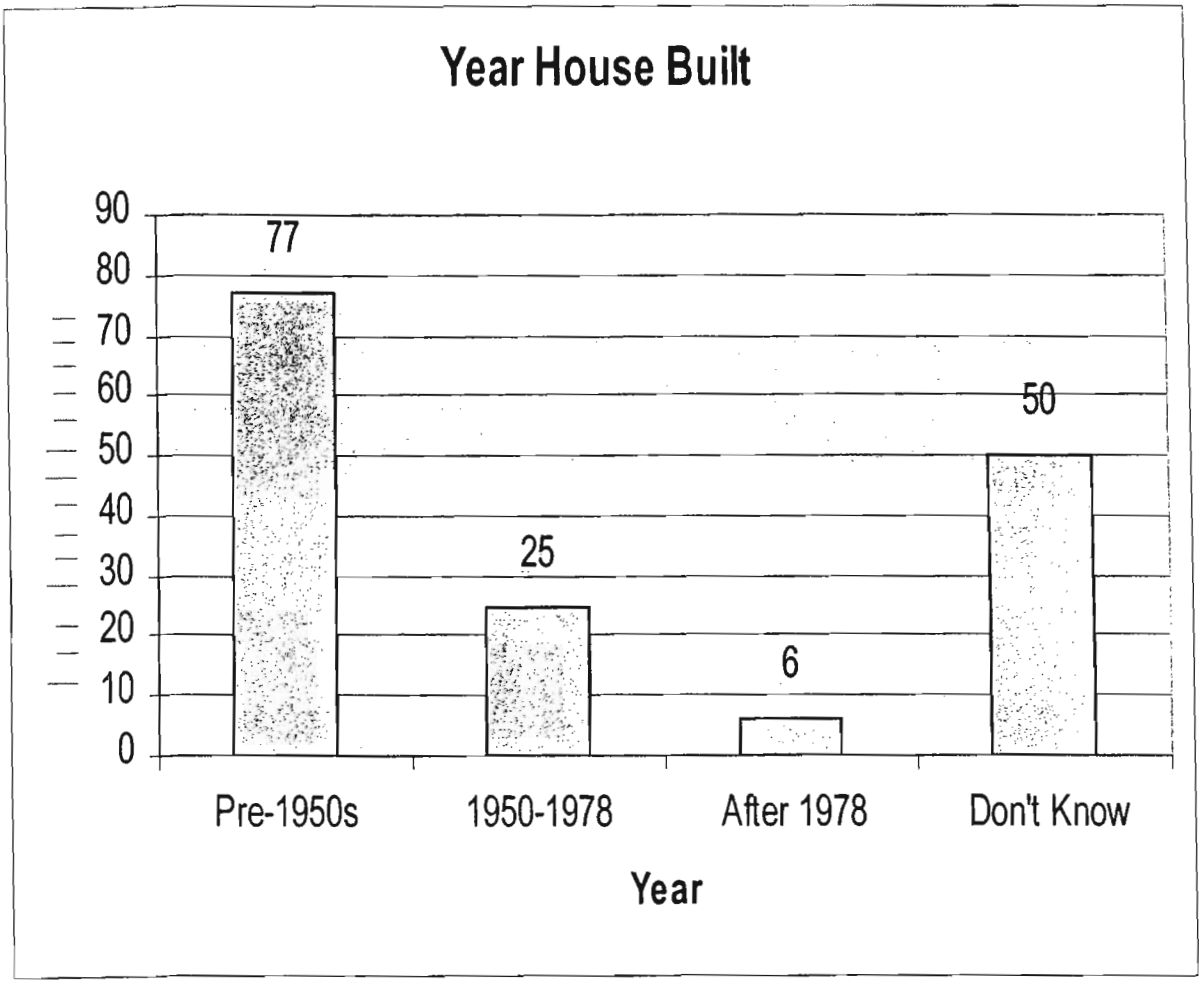
Year House Built
90
80
70
60
50
40
30
20
10
0
77
25
6
50
Pre-1950s
1950-1978
After 1978
Don't Know
Year

Figure 6

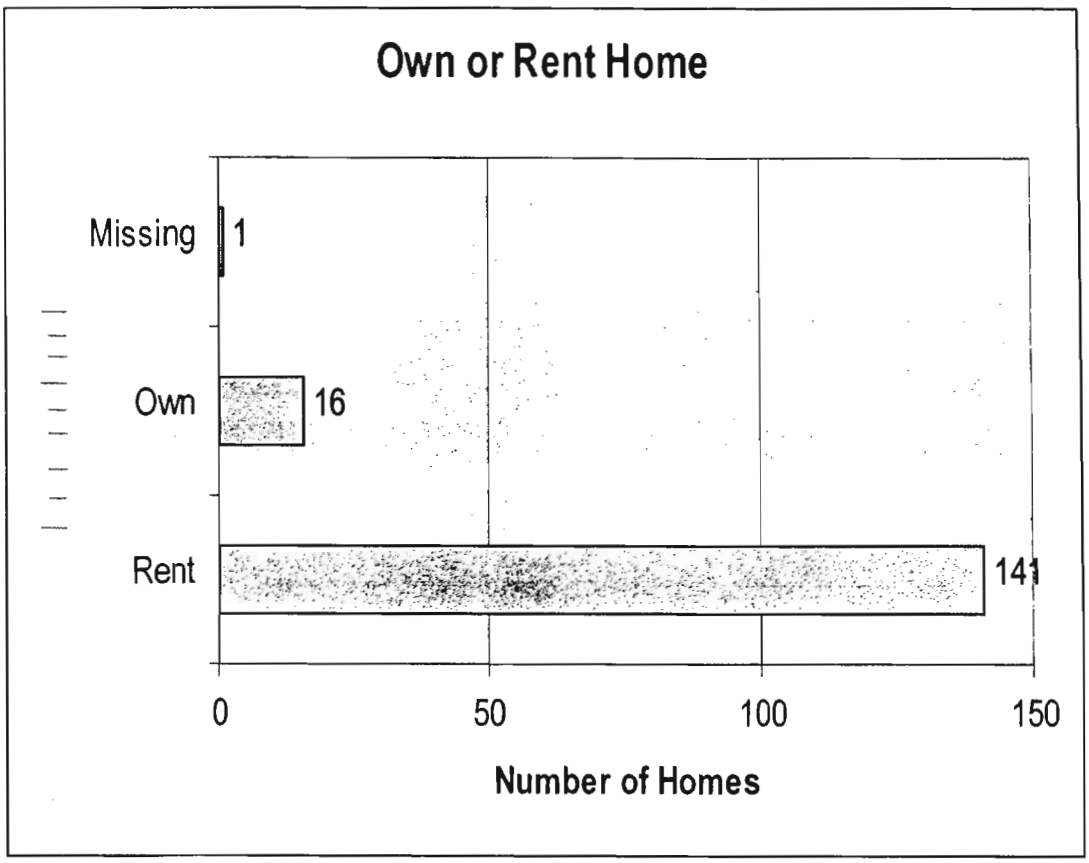
Own or Rent Home
Missing
1
Own
16
Rent
141
0
50
100
150
Number of Homes

Figure 7

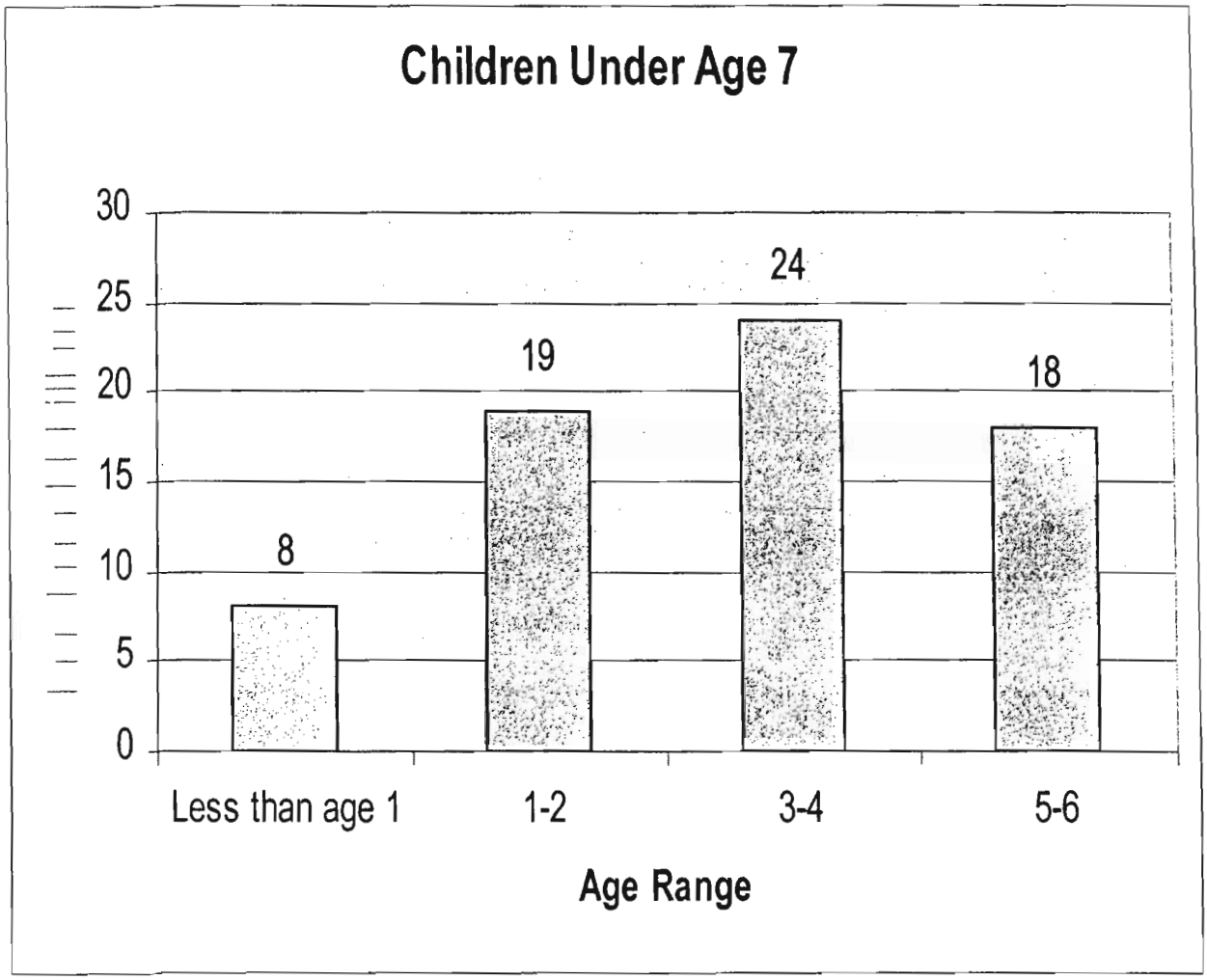
Children Under Age 7
30
25
20
15
10
5
0
8
19
24
18
Less than age 1
1-2
3-4
5-6
Age Range

Table 1

Interviewers

Name	Number of Interviews
Megan (UNO)	52
Cesar (UNO)	10
Katrina (UNO)	17
Claudia (Black & Veatch)	23
Leah (Black & Veatch)	16
Ramita (Black & Veatch)	7
Melina (Black & Veatch)	12
Don (Black & Veatch)	10
Steve (Black &Veatch)	8
Schrick (Black & Veatch)	1
Missing	2
Total	**158**

Table 2

Zip Codes

Zip Codes	Frequency	Percent
68104	1	0.6
68105	51	32.3
68106	2	1.3
68107	21	13.3
68108	34	21.5
68110	9	5.7
68111	34	21.5
68131	5	3.2
Missing	1	0.6

APPENDIX - 1

DEMOGRAPHIC AND LAND USE SURVEY
Omaha Superfund Site
Omaha, Nebraska

By

Shireen S. Rajaram, Ph.D.
Associate Professor; Sociology
University of Nebraska – Omaha
August 2003

For
The Nebraska Health and Human Services
System – Risk Assessment Program

Under a Cooperative Agreement with the
U. S. Environmental Protection Agency, Region VII
and
Black & Veatch

(IEUBK – Omaha Super Fund Site)

(PLEASE DROP OFF COMPLETED SURVEYS IN DR. RAJARAM'S MAIL-BOX IN ROOM, ASH 383, DEPARTMENT OF SOCIOLOGY, UNIVERSITY OF NEBRASKA- OMAHA, WITHIN A WEEK OF COMPLETION OF THE SURVEY)

All information obtained during the course of this survey and the project needs to be kept strictly confidential at all times.

Interview Number: _____

Date _____ Time: _____
Interviewer's Name (Print): _____

House Address: _____

We are doing a survey of people in neighborhoods east of 45th street, to better understand the daily activities and background of the community. This information will help us determine people's risk for exposure to lead.

We have a few questions to ask you. I will read out the question to you and will make a note of your answers on these forms. The information you provide will be held confidential.

First,
1. How many individuals live in this home: _____
2. How many:
   Adults (above 18) : _____
   Children below age 7: _____
   Children between 7 and 18: _____

3. Please tell me more about the age, gender and Ethnic/Racial background of the people who live in the house.

Person	**Age (Years)**	**Gender (M/F)**	****Race/Ethnicity (and country of origin) (Interviewer see categories below)**
Respondent			
Spouse/Partner			
Child 1			
Child 2			
Child 3			
Child 4			
Others (specify relationship to respondent):			

** Race/Ethnicity (Interviewer, please ask country of origin, if applicable, for #1,2,3,5. For example: Guatemala, Sudan, Vietnam, etc.):

1. African American
2. Asian American
3. Latino(a)/Hispanic
4. Native American/Alaskan
5. White/Caucasian (non Hispanic)

ADULTS

First, let me ask you a few questions about yourself and any other adult (age 21 and above) that lives in the house (restrict questions to only 2 adults), before we move on to some questions on your children's play activity. First,

1. Do you have a vegetable garden at home (check one)? ___ Yes ____ No

2. What are your primary crops in order of quantity?
   a) Tomatoes (rank #)____
   b) Bell Peppers (rank #) ____
   c) Green Beans (rank #) ____
   d) Okra (rank #)____
   e) Other: Specify _____

3. Animals in the household. Do you have:
Any cats? ____Yes ____No If so, how many?____
Check one: ____ Indoor; ____ Outdoor; _____ Both Indoors and Outdoors

Any dogs ____Yes ____No If so, how many?____
Check one: ____ Indoor; ____ Outdoor; _____ Both Indoors and Outdoors

Other animals (specify): _____

4. At home, do you mainly consume water directly from the tap or do you filter it or do you use bottled water (check one)?
For drinking purposes: ____ tap water; ____ filtered tap water; ____ bottled water
For cooking purposes: ____ tap water; ____ filtered tap water; ____ bottled water

5. Do you or any adults in the home participate in any of the following ACTIVITIES and/or HOBBIES at home?

Hobbies/Activities	YES	NO
Stained-glass; make or repair		
Lead sinkers, bullets; make or repair		
Batteries; manufacture, salvage		
Pottery/Ceramics; make or decorate		
Painting; artistic or industrial		

Hobbies/Activities	YES	NO
Target Shooting; indoor/outdoor		
Metal Work; salvage, sand, cut, weld		
Brass, Bronze, Pewter; collect, polish, sand		
Auto services; batteries, radiators		
Electrical Work; soldering, welding		
Carpentry; construct, renovate, demolish		
Power cleaning; sand, water		
Chemical/Electrical		
Glass factory		
Oil refinery		
Others: Specify _____		

6. What is your primary occupation: _____.
Please describe: _____

7. Do you have lead exposure in your occupation:
_____Yes; _____ No; _____ Don't know
8. Do you work full- or part-time (check one): ___ full-time ___ part-time
9. Approximately, how many hours per week do you work? _____
10. Approximately, how many vacation or work-days per year do you spend away from Omaha (home)? _____
11. Do you do volunteer outside the home (check one)? ____ Yes ____ No
12. If yes, how many hours per year do you volunteer outside the home? _____

Now we have some questions about your where you live.
13. What year was your house built: _____
14. Do you Own or Rent your home (check one): _____ Own; ____ Rent
15. Has there been any recent renovations or remodeling? ____ Yes; ____ No
If yes, describe _____
16. Have any structures of homes next door been renovated, repainted, demolished, sand/water blasted? ____ Yes; ____ No
17. How long have you lived in this house (number of years): _____.
18. If less than one year, did you previously live East of 45th St or West:
_____ West of 45th Street. Go to NEXT ADULT. If no other adult lives in the house, but children below age 7 live in the house go to #28. Or go to END.
_____ East of 45th Street. How many years _____. Go to NEXT ADULT. If no other adult lives in the house, but children below age 7 live in the house go to #28. Or go to END.

NEXT ADULT

Age: _____; Gender: _____; Relationship to respondent: _____

19. What is the occupation of this adult: _____.

Please describe: _____

20. Does this person have lead exposure in his/her occupation: _____Yes; _____ No

21. Does this person work full- or part-time (check one): ___ full-time ___ part-time

22. Approximately, how many hours per week does this person work? _____

23. Approximately, how many vacation or work-days per year does this person spend away from Omaha (home)? _____

24. Does this person volunteer outside the home (check one)?

____ Yes ____ No

25. If yes, how many hours per year does this person volunteer or work outside the home? _____

26. How long has this person lived in this house (number of years): _____

27. If less than one year, did this person previously live East of 45th St or West:

_____ West of 45th Street. If no children below age 7 live in the house, GO TO END. If there are children below age 7, GO TO #28

_____ East of 45th Street.. How many years _____. If no children below age 7 live in the house GO TO END. If there are children below age 7, GO TO #28.

END. Thank you very much for your time. The information that you have provided will help us in determining the level of exposure of people to lead in the community.

28. As you know, children are the ones at the greatest risk for lead poisoning. So now, we would like to ask you some questions about the daily activities of the children (below age 7) in the home at different times in the year, for example in spring, summer, etc. (Interviewer, now GO TO "CHILD" questionnaires).

++

Interviewer, please visually inspect the yard and provide a percentage estimate of the property in:

_____ Front Yard; _____ Back Yard

(note that the total needs to add up to 100)

Percentage of Front Yard comprising (total needs to add up to 100):

_____ grass-covered area _____ sandbox area

_____ dirt covered area _____ asphalt or paved area

_____ other, specify

Percentage of Back Yard comprising (total needs to add up to 100):

_____ grass-covered area _____ sandbox area

_____ dirt covered area _____ asphalt or paved area

_____ other, specify

CHILD (only for children below age 7)

Interview Number: _____

Date _____ Time: _____
Interviewer's Name (Print): _____

House Address: _____

Child # ____ Age ____; Relationship to the respondent: _____

4. How many hours PER WEEK does your child (0 to 6 years only) spend at HOME, both indoors and outdoors? ("Indoors," refers to waking hours, and "Outdoors" refers to time spent outdoors in the yard).

Home Location	Hours/week (Summer: June-Aug)		Hours/week (Fall: Sep – Nov)		Hours/week (Winter: Dec –Feb)		Hours/week (Spring: Mar-May)	
	Week day	Week End	Week day	Week End	Week day	Week End	Week day	Week End
Indoors:								
Outdoor:								

5. If the child does not play outdoors (in the yard), skip to question #8.
6. Where is your child's outdoor primary play area (check one):

____ Front yard; ____ Back yard; _____ Not applicable (explain) _____

7. Please describe the nature of your child's (0-6 years only) outdoor activity. How many hours would you estimate that your child is involved in the following activities?

Outdoor HOME Activity	Hours/week (Summer: June-Aug)	Hours/week (Fall: Sep – Nov)	Hours/week (Winter: Dec –Feb)	Hours/week (Spring: Mar-May)
Play in the sand-box				
Play in grass-covered areas on the property (participating in activities such as soccer, catch, etc.). Identify primary types				

of activities **close** (1-2 feet) to the house: _____				
	Hours/week (Summer: June-Aug)	**Hours/week (Fall: Sep – Nov)**	**Hours/week (Winter: Dec –Feb)**	**Hours/week (Spring: Mar-May)**
Play in exposed soil or dirt area (non grass-covered area) (such as digging in the dirt with trucks, etc.). Identify primary types of activities in this area: _____				
Assist with planting or gardening				
Play on swing set or similar structure. (Interviewer should determine percent of cover in this area)				

8. Next, we would like to know this child's activity outside of the home.

Does this child attend day-care, pre-school or school?

_____ Day-care. Name and address _____ ; Phone: _____
Located (check one): ____ East of 45th Street; ____ West of 45th Street.

How many hours at day-care:
Week-day, from _____ to _____
Weekend, from _____ to _____

Pre-school or school (check one): _____ Pre-school _____ School;
What grade: _____
Name and address of pre-school or school _____
Located ____ East of 45th Street; ____ West of 45th Street.

If day-care or pre-school or school is located WEST of 45th Street go to question #13.

DAY-CARE:

9. How many hours per week does your child spend at the DAY-CARE, both indoors and outdoors?

	Hours/week (Summer: June-Aug)		**Hours/week (Fall: Sep – Nov)**		**Hours/week (Winter: Dec –Feb)**		**Hours/week (Spring: Mar-May)**	
	Week day	Week End	Week day	Week end	Week day	Week End	Week day	Week End
Indoors:								
Outdoor:								

If the child does not play outdoors at the day-care, skip to question #11.

10. Please describe the nature of your child's (0-6 years only) outdoor activity at the day-care. How many hours PER WEEK would you estimate that s/he is involved in the following activities?

Outdoor DAY-CARE	**Hours/week (Summer: June-Aug)**		**Hours/week (Fall: Sep – Nov)**		**Hours/week (Winter: Dec –Feb)**		**Hours/week (Spring: Mar-May)**	
	Week Day	Week End	Week Day	Week End	Week Day	Week End	Week Day	Week End
Play in the sand-box								
Play in grass-covered areas on the property (participating in activities such as soccer, catch, etc.) Identify primary types of activities **close** (1-2 feet) to the property: _____								

	Hours/week (Summer: June-Aug)		**Hours/week (Fall: Sep – Nov)**		**Hours/week (Winter: Dec –Feb)**		**Hours/week (Spring: Mar-May)**	
	Week Day	Week End	Week Day	Week End	Week Day	Week End	Week Day	Week End
Play in exposed soil or dirt area (non grass-covered area) such as digging in the dirt with trucks, etc. Identify primary types of activities in this area _____								
Play on swing set or similar structure								

If this child does not attend pre-school or school, go to question #13.

_____ PRE-SCHOOL OR _____ SCHOOL (check one)

11. How many hours per week does your child spend at PRE-SCHOOL OR SCHOOL, both indoors and outdoors?

	Hours/week (Summer: June-Aug)	**Hours/week (Fall: Sep – Nov)**	**Hours/week (Winter: Dec –Feb)**	**Hours/week (Spring: Mar-May)**
Indoors:				
Outdoor:				

If the child does not play outdoors at pre-school, skip to question #14.

12. Please describe the nature of your child's (0-6 years only) outdoor activity at the pre-school or school. How many hours would you estimate that they are involved in the following activities? (Interviewer, if the adult is unable to provide this information, skip to #13. This information will be obtained directly from the pre-school or school).

Outdoor PRE-SCHOOL or SCHOOL	**Hours/week (Summer: June-Aug)**	**Hours/week (Fall: Sep – Nov)**	**Hours/week (Winter: Dec –Feb)**	**Hours/week (Spring: Mar-May)**
Play in the sand-box				
Play in grass-covered areas on the property (participating in activities such as soccer, catch, etc.). Identify primary types of activities **close** (1-2 feet) to the property: _____				
Play in exposed soil or dirt area (non grass-covered area, such as digging in the dirt with trucks, etc.). Identify primary types of activities in this area: _____				
Play on swing set or similar structure (Interviewer should determine percent of dirt cover in this area)				

13. Now, I have some questions on **FOOD** consumption for your child. Does your child consume the following foods:

FOODS	YES	NO
Fruits grown in your garden		
Vegetables grown in your garden		
Take any Mexican home remedies such as *Greta*		
Mexican home remedies such as *Arzcon*		
Any other home remedies or herbal treatments? Specify: _____		
Any other home remedies or herbal treatments? Specify: _____		
Eat foods from any pottery or ceramic-ware made in Mexico		
Eat canned foods or drinks made in Mexico or any other country Specify: _____		
Eat candy made in Mexico or any other country		

14. Has your child been tested for lead before:

When	Where	Results (ug/dL)	Child's type of insurance	Any other health problems such as asthma, anemia, sickle cell? (Specify)

15. Does you child chew or suck on any of the following non-food items. (Interviewer check appropriate box):

Fingers/Thumbs	Newspapers/ Magazines	Pewter/Brass	Woodwork/Rails
Pacifier	Cosmetics	Mini-blinds	Doors
Toys	Matches	Knick Knack	Paint Chips
Blanket/Plush Toys	Jewelry/Key	Furniture	Pick at Paint
Crayons/Art Supplies	Dirt/Rocks/Sticks	Window sills	Play w/ baby powder
Other: Specify: _____	Other: Specify: _____	Other: Specify: _____	Other Specify: _____

If more children in the household, below age 7, go to new "CHILD" questionnaire.

16. If no more children in the household below age 7, then END the interview.

END: Thank you so much for your time. The information you have provided will help us in determining the level of exposure of people to lead in the community.

IN SPANISH

DEMOGRAPHIC AND LAND USE SURVEY
Omaha Superfund Site
Omaha, Nebraska

By

Shireen S. Rajaram, Ph.D.
Associate Professor; Sociology
University of Nebraska – Omaha
August 2003

For
The Nebraska Health and Human Services
System – Risk Assessment Program

Under a Cooperative Agreement with the
U. S. Environmental Protection Agency, Region VII
and
Black & Veatch

(IEUBK – Omaha Super Fund Site)

(PLEASE DROP OFF COMPLETED SURVEYS IN DR. RAJARAM'S MAIL-BOX IN ROOM, ASH 383, DEPARTMENT OF SOCIOLOGY, UNIVERSITY OF NEBRASKA- OMAHA, WITHIN A WEEK OF COMPLETION OF THE SURVEY)

All information obtained during the course of this survey and the project needs to be kept strictly confidential at all times.

Entrevista Número: _____

Fecha: _____ Hora: _____

Nombre del Entrevistador (Letra Imprenta): _____

Dirección de la Casa: _____
_____

Estamos haciendo una encuesta a la gente del vecindario al Este de la calle 45, para entender mejor las actividades diarias y la situación de la comunidad. Esta información nos ayudara a determiner el riesgo que tiene la gente a la exposicion a plomo.

Tenemos unas pocas preguntas que hacerle. Voy a leerle la pregunta y hare unas anotaciones de sus respuestas en este formulario. La información que usted provea va a permanecer confidencial.

Primero,

1. Cuantas personas viven en esta casa: _____
2. Cuantos :

   Adultos (mayor de 18) : _____
   Niños menores de 7: _____
   Niños entre 7 y 18: _____

1. Por favor cuenteme mas acerca de la edad, sexo y herencia etnica/racial de la gente que vive in la casa.

Persona	**Edad (años)**	**Sexo (M/F)**	**** Raza/Etnicidad (y pais de origen) (Entrevistador mire las categorias abajo)**
Encuestado/a			
Esposo/Compañero/a			
Hijo/a 1			
Hijo/a 2			
Hijo/a 3			
Hijo/a 4			
Otros (especifique parentesco con el entrevistado)			

** raza/Etnicidad (Entrevistador, por favor pregunte pais de origin, si aplica para # 1, 2,3,4. Por ejemplo: Guatemala, Sudan, Vietnam, etc.):

1. Africo Americano
2. Asiatico Americano
3. Latino(a)/Hispano(a)
4. Nativo Americano/Alaska
5. Blanco/Caucásico (no Hispano)

ADULTOS

Primero, permitame hacerle algunas preguntas respecto a usted y otros adultos que puedan vivir en la casa (preguntas restringuidas para solo 2 adultos) antes de que continuemos con otras preguntas sobre la actividad de juego de sus hijos. Primero,

1. Tiene usted un jardin de vegetales en su casa (marque uno)? ___Si ___No
2. Cuales son sus principales cultivos en orden de cantidad ?
    a) Tomates (grado #)___
    b) Chiles (grado #)___
    c) Arverjas (grado #)___
    d) Quingombo(grado #)___
    e) Otros (especifique)_____

3. Animales en la cas. Usted tiene:
Gatos?: ___Si___No Sí es si cuantos?____
Marque uno: ___Adentro; ___ Afuera; ___Ambos adentro y afuera

Perros?: ___Si___No Sí es si cuantos?____
Marque uno: ___Adentro; ___ Afuera; ___Ambos adentro y afuera

Otros animals (Especifique): _____

4. En casa usted consume agua principalmente de directamente de la llave o la filtra o usa agua enbotellada (marque uno)?

Para beber: ___Agua de la llave; ___Agua filtrada de la llave; ___Agua enbotellada
Para cocinar: ___Agua de la llave; ___Agua filtrada de la llave; ___Agua enbotellada

5. Usted o algun adulto en la casa participa de las siguientes ACTIVIDADES y/o PASATIEMPOS en la casa?

Pasatiempos/Actividades	SI	NO
Vidrieria hacer o reparar		
Fregaderos de plomo,balas, hacer o reparar		
Baterias, manufactura, restauración		
Ceramica; hacer o decoración		

Pasatiempos/Actividades	SI	NO
Pintura, artistica o industrial		
Tiro al blanco; adentro/afuera		
Trabajo en metal; restauración, lijar, cortar, soldar		
Latón, Bronce,Peltre; recolectar, pulir, lijar.		
Autoservicio; baterias, radiadores		
Trabajo Electrico, soldadura.		
Carpinteria; construccion, renovacion, demolicion		
Limpieza con poder; arena, agua.		
Quimico/Electrico		
Fabricacion de vidrio		
Refineria de petroleo		
Otros; Especifique: _____		

6. Cual es su ocupacion principal: _____.

Por favor describa: _____

7. Tiene usted exposicion a plomo en su ocupacion: __ Si; __No; __No sé
8. Trabaja usted tiempo completo o medio tiempo (marque uno); ___Tiempo completo ___medio tiempo
9. Aproximadamente, cuantas horas semanales trabaja usted? _____
10. Aproximadamente, cuantos dias de vacaciones o dias de trabajo usted esta fuera de Omaha(Casa)?_____
11. Usted es voluntario fuera de casa (marque uno)? ___Si ___No
12. Sí si, cuantas horas al año usted es voluntario fuera de casa?_____

Ahora tenemos algunas preguntas respecto a donde vive usted.

13. En que año fue construida la casa?_____
14. Usted es propietario o toma en renta la casa (marque uno)? ___Propietario ___Renta
15. Ha habido alguna resiente renovacion o remodelacion? ___Si ___No

Sí si, describa: _____

16. Algunas estrucutras de la casa de al lado han sido renovadas, pintadas o demolidas limpieza con chorro de arena o agua? ___Si; ___No
17. Hace cuanto usted vive en esta casa (numero de años): _____
18. Sí es menos de un año, vivia usted previamente al Este de la calle 45 o al Oeste:? ____Oeste de la calle 45. Vaya al SIGUIENTE ADULTO. Si no hay otro adulto viviendo en la casa, pero hay niños menores de 7 años viviendo en la casa, vaya a # 28. O vaya al FINAL.
19. ____Este de la calle 45. Cuantos años ____. Vaya al SIGUIENTE ADULTO. Si no hay otro adulto viviendo en la casa, pero hay niños menores de 7 años viviendo en la casa, vaya a # 28. O vaya al FINAL.

SIGUIENTE ADULTO

Edad: _____; Sexo: _____; Relacion con el entrevistado: _____
19. Cual es la ocupacion de este adulto:_____.
Por favor describa: _____

20. Esta persona tiene exposicion a plomo en su ocupacion: ___ Si;___No
21. Esta persona trabaja tiempo completo o medio tiempo (marque uno); ___Tiempo completo ___medio tiempo
22. Aproximadamente, cuantas horas semanales trabaja esta persona? _____
23. Aproximadamente, cuantos dias de vacaciones o dias de trabajo esta persona esta fuera de Omaha(Casa)?_____
24. Esta persona es voluntario/a fuera de casa (marque uno)? ___Si___No
25. Sí si, cuantas horas al año es voluntario/a fuera de casa?_____.
26. Hace cuanto esta persona vive en esta casa (numero de años): _____
27. Sí es menos de un año, esta persona vivia previamente al Este de la calle 45 o al Oeste:?

____Oeste de la calle 45. Si no hay niños menores de 7 años en la casa, VAYA AL FINAL. Si hay niños menores de 7 años de edad, VAYA AL # 28.

____Este de la calle 45. Cuantos años ____. Si no hay niños menores de 7 años en la casa, VAYA AL FINAL. Si hay niños menores de 7 años de edad,VAYA AL # 28.

FINAL. Muchas gracias por su tiempo. La informacion que usted a dado nos ayudara a determinar el nivel de exposicion a plomo que la gente tiene en la comunidad.

28. Como usted sabe, los niños son los que tienen mayor riesgo de envenenamiento por plomo. Entonces ahora nos gustaria hacerle algunas preguntas acerca de las actividades diarias de los niños en la casa durante los diferentes periodos del año, por ejemplo en primavera, verano, etc.

(Entrevistador, ahora VAYA A "NIÑO/A" questionarios).

++

Entrevistador, por favor haga una inspección visual del jardin y de un porcentaje estimado de la propiedad en:

___ Jardin delantero; ___Jardin Trasero
(note que el total debe sumar 100)

Porcentaje de jardin delantero comprometido (note que el total debe sumar 100):

_____Area cubierta de pasto _____ Caja de arena
_____Area cubiertad e tierra _____ Area asfaltada o pavimentada
_____Otra, Especifique

Porcentaje de jardin trasero comprometido (note que el total debe sumar 100):

_____Area cubierta de pasto _____ Caja de arena
_____Area cubiertad e tierra _____ Area asfaltada o pavimentada
_____Otra, Especifique

NIÑO/A (solo sin son niños menores de 7 años de edad)

Entrevista Número: _____

Fecha: _____ Hora: _____

Nombre del Entrevistador (Letra Imprenta): _____

Dirección de la Casa: _____
_____

Niño/a # _____ Edad: _____ Relación con le entrevistado: _____

4. Cuantas horas POR SEMANA su niño/a esta en CASA, ambos adentro y afuera? ("adentro" se refiere a horas despierto, y "afuera" se refiere a tiempo gastado afuera en el jardin).

Lugar de la casa	**Horas/Semanales (Verano: Junio-Agosto)**		**Horas/Semanales (Otoño: Septi-Noviembre)**		**Horas/Semanales (Invierno: Dicie-Febrero)**		**Horas/Semanales (Primavera: Marzo- Mayo)**	
	Entre Semana	Fines de Semana	Entre Semana	Fines de Semana	Entre Semana	Fines de Semana	Entre Semana	Fines de Semana
Adentro								
Afuera								

5. Si su niño no juega afuera de casa vaya a la pregunta # 8.
6. Si su hijo juega el mayor tiempo afuera de la casa(marque uno):

_____Jardin del frente; _____Jardin trasero; _____No aplica(explique)_____

7. Por favor describa el tipo de actividad que el niño realize afuera de la casa (0-6 años unicamente). Cuantas horas usted estima que su niño esta involucrado en las siguientes actividades?

Actividad fuera de CASA	**Horas/Semanales (Verano: Junio-Agosto)**	**Horas/Semanales (Otoño: Septi-Noviembre)**	**Horas/Semanales (Invierno: Dicie-Febrero)**	**Horas/Semanales (Primavera: Marzo-Mayo)**
Jugar en la caja de arena				
Jugar en las area cubiertas de pasto de la propiedad (participar en actividades como futbol, atrapar, etc.). Identifique el				

principal tipo de actividades **cerca** (1-2 pies) de la casa: _____				
	Horas/Semanales (Verano: Junio-Agosto)	**Horas/Semanales (Otoño: Septi-Noviembre)**	**Horas/Semanales (Invierno: Dicie-Febrero)**	**Horas/Semanales (Primavera: Marzo-Mayo)**
Jugar en areas expuestas a la tierra, al suelo (no areas cubiertas con pasto) (como cavar en la tierra con escavadoras, etc.). Identificar el tipo de actividades principales en esta area:_____				
Ayudar con las plantas o jardineria				
Juegos o columpios o estructuras similares. (Entrevistador tiene que determinar el procentaje de esta area)				

8. Ahora, nos gustaria conocer la actividad de este niño fuera de casa.

El niño asiste a guarderia, pre escolar o Escuela?

_____Guarderia. Nombre y Dirección _____
Localizada (marque uno): ____ Este de la calle 45; _____Oeste de la calle 45

Cuantas horas en la guarderia:
Dias entre semana , de _____ a _____
Fines de semana , de _____ a _____

Pre-escuela o Escuela (marque una): _____ Pre-Escuela _____Escuela.
Que grado:_____
Nombre y Dirección _____
Localizada: ____ Este de la calle 45; _____Oeste de la calle 45

Si la guarderia o pre-escuela o escuela esta localizada al OESTE de la calle 45 vaya a la pregunta # 13.

GUARDERIA

9. Cuantas horas por semana su niño esta en la GUARDERIA, ambos adentro y afuera?

	Horas/Semanales (Verano: Junio-Agosto)		Horas/Semanales (Otoño: Septi-Noviembre)		Horas/Semanales (Invierno: Dicie-Febrero)		Horas/Semanales (Primavera: Marzo- Mayo)	
	Entre Semana	Fines de Semana	Entre Semana	Fines de Semana	Entre Semana	Fines de Semana	Entre Semana	Fines de Semana
Adentro								
Afuera								

Si su niño no juega afuera de la guarderia vaya a la pregunta # 11.

10. Por favor describa el tipo de actividad que su niño realize afuera de la guarderia (0-6 años unicamente). Cuantas horas POR SEMANA usted estima que su niño/a esta involucrado en las siguientes actividades?

Actividad fuera de GUARDERIA	Horas/Semanales (Verano: Junio-Agosto)		Horas/Semanales (Otoño: Septi-Noviembre)		Horas/Semanales (Invierno: Dicie-Febrero)		Horas/Semanales (Primavera: Marzo- Mayo)	
	Entre Semana	Fines de Semana	Entre Semana	Fines de Semana	Entre Semana	Fines de Semana	Entre Semana	Fines de Semana
Jugar en la caja de arena								
Jugar en las area cubiertas de pasto de la propiedad (participar en actividades como futbol, atrapar, etc.). Identifique el principal tipo de actividades **cerca** (1-2 pies) de la casa: _____								
Jugar en areas expuestas a la tierra, al suelo (no areas cubiertas con pasto) (como cavar en la tierra con escavadoras, etc.). Identificar el tipo de actividades principales en esta area:_____								

Juegos o columpios o estructuras similares. (Entrevistador tiene que determinar el procentaje de esta area)								

Si este niño no asiste a pre-escuela o Escuela, vaya a la pregunta # 13.

_____PRE-ESCUELA O _____ESCUELA (marque una)

11. Cuantas horas por semana su niño esta en la PRE-ESCUELA O ESCUELA, ambos adentro y afuera?

	Horas/Semanales (Verano: Junio-Agosto)	**Horas/Semanales (Otoño: Septi-Noviembre)**	**Horas/Semanales (Invierno: Dicie-Febrero)**	**Horas/Semanales (Primavera: Marzo-Mayo)**
Adentro				
Afuera				

Si el niño/a no juega afuera de la pre-escuela o escuela, evite las preguntas hasta la la # 14.

12. Por favor describa el tipo de actividad que su niño realize afuera de la pre-escuela o Escuela (0-6 años unicamente). Cuantas horas usted estima que su niño/a esta involucrado en las siguientes actividades? (Entrevistador, si el adulto no puede dar esta informacion, evitela y vaya a # 13. Esta informacion se va a obtener directamente de la Pre-escuela o Escuela).

Actividad fuera de PRE-ESCUELA O ESCUELA	**Horas/Semanales (Verano: Junio-Agosto)**	**Horas/Semanales (Otoño: Septi-Noviembre)**	**Horas/Semanales (Invierno: Dicie-Febrero)**	**Horas/Semanales (Primavera: Marzo-Mayo)**
Jugar en la caja de arena				
Jugar en las area cubiertas de pasto de la propiedad (participar en actividades como futbol, atrapar, etc.). Identifique el principal tipo de actividades **cerca** (1-2 pies) de la casa: _____				

Actividad fuera de PRE-ESCUELA O ESCUELA	**Horas/Semanales (Verano: Junio-Agosto)**	**Horas/Semanales (Otoño: Septi-Noviembre)**	**Horas/Semanales (Invierno: Dicie-Febrero)**	**Horas/Semanales (Primavera: Marzo-Mayo)**
Jugar en areas expuestas a la tierra, al suelo (no areas cubiertas con pasto) (como cavar en la tierra con escavadoras, etc.). Identificar el tipo de actividades principales en esta area:_____				
Juegos o columpios o estructuras similares. (Entrevistador tiene que determinar el procentaje de esta area)				

13. Ahora , tengo unas preguntas acerca de el consumo de **ALIMENTOS** de su niño. Su niño consume los siguientes alimentos:

ALIMENTOS	**SI**	**NO**
Frutas cultivadas en su jardin		
Vegetales cultivados en su jardin		
Toma remedios caseros mejicanos como *Greta*		
Remedios caseros mejicanos como *Arzcon*		
Algun otro remedio casero o tratamiento herbal? Especifique: _____		
Algun otro remedio casero o tratamiento herbal? Especifique: _____		
Come algun alimento de vasijas de barro o ceramica hecha en Mejico?		
Come alimentos o bebidas enlatadas hechas en Mejico u otro Pais. Especifique: _____		
Come dulces hechos en mejico u otro pais		

14. Ha sido su niño examinado para plomo anteriormente:

Cuando	Donde	Resultados (ug/dL)	Tipo de aseguranza del niño	Algun otro porblema de salud como Asma, anemia, anemia falciforme? (Especifique)

15. Su niño mastica o chupa alguo de los siguientes no-alimentos. (Entrevistador marque la casilla apropiada):

Dedos	Periodicos/Magazines	Peltreria/Latas	Objetos de Madera/Rieles
Chupo/Entretenedor	Cosmeticos	Mini-percianas	Puertas
Juguetes	Fosforos	Chucherias	Fichas pintadas
Cobijas/felpas	Joyeria/llaves	Muebles	Pedazo de pintura
Crayones/materials de arte	Tierra/ piedras/palos	Marcos de ventanas	Jugar con talco para bebes
Otros: Especifique: _____	Otros: Especifique: _____	Otros: Especifique: _____	Otros: Especifique: _____

Si hay mas niños en la casa menores de 7 años de edad, vaya a un nuevo "NIÑO/A" cuestionario.

16. Si no hay mas niños en la casa menores de 7 años de edad, entonces FINALICE la entrevista. Muchas gracias por su tiempo. La informacion que usted a dado nos ayudara a determinar el nivel de exposicion a plomo que la gente tiene en la comunidad.

APPENDIX - 2

BVID_____

U.S. Environmental Protection Agency Region VII

Omaha Lead Site
Omaha, NE

Interior Dust Samples
Remedial Investigation/
Feasibility Study

PROPERTY ACCESS
(to be completed by property owner)

Black & Veatch Special Projects Corp. (BVSPC) is under contract with the U.S. Environmental Protection Agency (EPA) to assist in the determination of of lead and other metals in interior dust within the Omaha, Nebraska area. Your cooperation is requested in giving BVSPC/EPA permission to access yo property for the purpose of interior dust sampling analysis in support of this study. For further information contact Don Bahnke, EPA Project Manager, (8 551-7703 or the Office of External Affairs (800) 223-0425.

Property Access Granted By: _____
(Please Print Name)

_____ _____
(Property Owner Signature) *(Date)*

NOTE: Granting permission DOES NOT necessarily imply your property will be sampled at this time.

SAMPLE INFORMATION
(to be completed by sampler - Please Print)

Residence address: _____ _____ _____ _____
(City) (State) (Zip)

Children live at the residence: ☐ Yes ☐ No List ages: _____

Sampler: _____ Date: _____

Wipe Sample

Room: Kitchen/Breakfast ☐ Bedroom ☐ Living Room ☐ Dining Room ☐ Den/Great Room/Family Room ☐
Play Room ☐ Office ☐ Other ☐ _____

Area of sample collection: _____ (inches^2)

Time of collection: _____

Lead loading: _____ ($\mu g/ft^2$) Lab result: _____

Vacuum Sample No. 1

Room: Kitchen/Breakfast ☐ Bedroom ☐ Living Room ☐ Dining Room ☐ Den/Great Room/Family Room ☐
Play Room ☐ Office ☐ Other ☐ _____

Area of sample collection: _____

Time of collection: _____ Total Sample Time: _____

Type of Floor Sampled:

(Check one) Carpet ☐ Rug ☐
(Check one) Plush ☐ Level Loop ☐ Multi-level ☐ Shag ☐ Other ☐ _____

-OR-

(Check one) Hard Surface: Wood ☐ Tile ☐ Vinyl/Laminate ☐ Concrete ☐ Brick ☐ Other ☐ _____

Access Attempts:

First: _____ Second: _____ Third: _____

Black & Veatch Special Projects Corp.

Last vacuumed: _____

Temperature: _____ Humidity: _____ Flow rate: _____ Pressure drop: _____

Tare weight (container before sample): _g Final weight (container and sample): _____g Weight of total sample: _____g

Pan tare weight (pan w/o sieved sample): _____g Final weight (pan and sieved sample): _____g

Weight of sieved dust sample: _____g (Fine Dust)

Lead loading: _____ ($\mu g/ft^2$) Lead concentration: _____ ($\mu g/g$) Lab result: _____

Vacuum Sample No. 2

Room: Kitchen/Breakfast ☐ Bedroom ☐ Living Room ☐ Dining Room ☐ Den/Great Room/Family Room ☐
Play Room ☐ Office ☐ Other ☐ _____

Area of sample collection: _____ ($inches^2$)

Time of collection: _____ Total Sample Time: _____

(Check one) Carpet ☐ Rug ☐
(Check one) Plush ☐ Level Loop ☐ Multi-level ☐ Shag ☐ Other ☐ _____
-OR-
(Check one) Hard Surface: Wood ☐ Tile ☐ Vinyl/Laminate ☐ Concrete ☐ Brick ☐ Other ☐ _____

Last vacuumed: _____

Temperature: _____ Humidity: _____ Flow rate: _____ Pressure drop: _____

Tare weight (container before sample): _g Final weight (container and sample): _____g Weight of total sample: _____g

Pan tare weight (pan w/o sieved sample): _____g Final weight (pan and sieved sample): _____g

Weight of sieved dust sample: _____g (Fine Dust)

Lead loading: _____ ($\mu g/ft^2$) Lead concentration: _____ ($\mu g/g$) Lab result: _____

Vacuum Sample No. 3

Room: Kitchen/Breakfast ☐ Bedroom ☐ Living Room ☐ Dining Room ☐ Den/Great Room/Family Room ☐
Play Room ☐ Office ☐ Other ☐ _____

Area of sample collection: _____ ($inches^2$)

Time of collection: _____ Total Sample Time: _____

(Check one) Carpet ☐ Rug ☐
(Check one) Plush ☐ Level Loop ☐ Multi-level ☐ Shag ☐ Other ☐ _____
-OR-
(Check one) Hard Surface: Wood ☐ Tile ☐ Vinyl/Laminate ☐ Concrete ☐ Brick ☐ Other ☐ _____

Last vacuumed: _____

Temperature: _____ Humidity: _____ Flow rate: _____ Pressure drop: _____

Tare weight (container before sample): _g Final weight (container and sample): _____g Weight of total sample: _____g

Pan tare weight (pan w/o sieved sample): _____g Final weight (pan and sieved sample): _____g

Weight of sieved dust sample: _____g (Fine Dust)

Lead loading: _____ ($\mu g/ft^2$) Lead concentration: _____ ($\mu g/g$) Lab result: _____

AUTHORITY FOR ENVIRONMENTAL RESPONSE ACTIONS
The activities to be implemented by EPA under this agreement are pursuant to Section 104 of CERCLA, 42 U.S.C. 9604. EPA's right of access to the property for in Section 104(e) of CERCLA, 42 U.S.C. 9604(e), which provides entry for, "determining the need for response, or choosing or taking any response action under this title, or otherwise enforcing the provisions of this title."