

---

**APPENDIX D**

---

**PUBLIC HEALTH SURVEY INSTRUMENT**



KOMEX • H2O SCIENCE • INC  
11040 SANTA MONICA BLVD., SUITE 300  
LOS ANGELES, CA 90025, USA  
TEL 310.914.5901 FAX 310.914.5959  
EMAIL: info@losangeles.komex.com  
WEB SITE: www.komex.com

ENVIRONMENT AND WATER RESOURCES

**FINAL PUBLIC HEALTH SURVEY INSTRUMENT  
FOR COMMUNITIES ADJACENT TO  
OMNITRANS FUELING STATIONS LOCATED AT  
1700 WEST 5<sup>TH</sup> STREET, SAN BERNARDINO  
234 SOUTH I STREET, SAN BERNARDINO  
4748 ARROW HIGHWAY, MONTCLAIR**

PREPARED BY:

**KOMEX**

11040 Santa Monica Blvd., Suite 300

Los Angeles, CA 90025

USA

Date: September 10, 2003

Project Number: 296-001

## **TABLE OF CONTENTS**

---

<b>1</b>	<b>INTRODUCTION.....</b>	<b>3</b>
<b>2</b>	<b>SECTION I - FAMILY RELATIONSHIPS AND VERIFICATION OF DEMOGRAPHIC INFORMATION.....</b>	<b>4</b>
<b>3</b>	<b>SECTION II-- HEALTH STATUS AND LIMITATION OF ACTIVITIES .....</b>	<b>7</b>
<b>4</b>	<b>SECTION III - HEALTH CARE ACCESS AND UTILIZATION .....</b>	<b>1</b>
<b>5</b>	<b>CLOSURE/LIMITATIONS.....</b>	<b>3</b>

# 1 INTRODUCTION

---

As part of an effort to comply with Senate Bill 1927, Omnitrans has authorized Komex to perform a public health survey of residents living within a ½ mile radius of its bus refueling stations. The three stations are located at 1700 West 5th Street, San Bernardino; 234 South I Street, San Bernardino; and 4748 Arrow Highway, Montclair, California. The stations located on West 5th Street (San Bernardino) and Arrow Highway (Montclair) dispense liquid natural gas (LCNG) and diesel fuel to buses using the facility. Unleaded gasoline is also dispensed to staff cars, vans and trucks. The station located on South I Street dispenses unleaded gasoline to buses using the facility.

The following sections outline the proposed draft public health survey instrument for the communities. The draft survey has three sections. The first section of the survey attempts to capture the demographic data for each study area. The second section of the study attempts to capture an estimate of the health of the individuals being surveyed. The final section of the study attempts to capture a measure of the medical care or advice that the community may have sought to identify the cause of any adverse health effects.

Many of the questions are abstracted from the National Institute of Health Sciences (NIHS) study on public health.

## 2 SECTION I - FAMILY RELATIONSHIPS AND VERIFICATION OF DEMOGRAPHIC INFORMATION

---

1. ENTER THE STREET NAME OF THE FAMILY YOU WISH TO INTERVIEW.

FID.010 Street Name: \_\_\_\_\_ (N) No one is available to interview now. |

2. ENTER THE BLOCK NUMBER OF THE FAMILY YOU WISH TO INTERVIEW.

FID.020 Block ID: \_\_\_\_\_ (N) No one is available to interview now.

3. ENTER THE FAMILY CODE OF THE MEMBER OF THE FAMILY YOU WISH TO INTERVIEW.

FID.030 Family member code: \_\_\_\_\_ (N) No one is available to interview now.

4. **FR: READ IF NECESSARY:**

**I would like to speak with {you/name}. {Are/Is} {you/he/she} available?**

**FR: READ IF NECESSARY:**

**I would like to speak with someone in this family , preferably an adult who is knowledgeable about the family's health, to complete the interview for their family.**

FID.040

**FR: SPECIFY WHY THIS FAMILY'S INTERVIEW CANNOT BE COMPLETED BEFORE CLOSEOUT.**

5. **CERTAIN SECTIONS OF THIS INTERVIEW DEPEND ON KNOWING IF A PERSON IS 18 YEARS OLD OR OLDER. COULD YOU PLEASE TELL ME IF {YOU/NAME} {ARE/IS} AT LEAST 18 YEARS OLD?**

>RELRESP\_B< You have selected a person less than 18 years old. Is this correct?  
(1) Yes, accept this person (FID.050)  
(2) No, select another person

FID.050 **FR: {RELRESP@A} HAS BEEN SELECTED AS THE FAMILY REFERENCE PERSON FOR THIS FAMILY. IS THIS FAMILY MEMBER AN APPROPRIATE CHOICE? PREFERABLY A CIVILIAN ADULT?**

>FAMREF\_A< (1) Yes (FID.060)  
(2) No, select another person (FID.050--FAMREF\_B)

>FAMREF\_B< [Enter Person #] [ ]

**READ TO PARTICIPANT: FROM THE FOLLOWING LIST, WHICH BEST DESCRIBES YOUR POSITION THE FAMILY?**

>FRPREL<

- |   |                            |
|---|----------------------------|
| (2) Spouse (husband/wife)                                       | (10) Aunt/uncle            |
| (3) Unmarried partner   | (11) Niece/nephew          |
| (4) Child (biological/adoptive /<br>in-law/step/foster)         | (12) Other relative        |
| (5) Child of partner  | (13) House-mate / Roommate |
| (6) Grandchild  | (14) Roomer/Boarder        |
| (7) Parent (biological/adoptive /<br>in-law/step/foster)        | (15) Other nonrelative     |
| (8) Brother/sister (biological/adoptive/<br>in-law/step/Foster) | (16) Legal guardian        |
| (9) Grandparent (grandmother/father)                            | (17) Ward                  |
|   | (97) Refused               |
|   | (99) Don't know            |

**Check item:** If the person number at FID.050--FAMREF\_B is 14 to 17 years goto FID.050--FAMREF\_C; Else goto FID.060.

>FAMREF\_C< You have selected a person less than 18 years old. Is this correct?  
(1) Yes, accept this person (FID.060)

>FAMREF\_D< How many family members live at this address?

---



---



---



---

>FAMREF\_E< What are the family members ages?

---



---



---



---

FAMREF\_F< What are there gender?

---



---



---



---

6. HOW LONG HAVE YOU LIVED AT THIS ADDRESS?

**FID.060**

>FMLNG< List Years for each Family Member: \_\_\_\_\_

---

---

---

---

7. DOES A MEMBER OF YOUR HOUSEHOLD CURRENTLY ATTEND OR HAS ATTENDED IN THE PAST A SCHOOL IN AN AREA NEAR AN OMNITRANS FUELING STATION? (SHOW FLASHCARD WITH LOCATION OF FUELING STATIONS)

>FMSCHL\_1< (1) Yes, go to FID.080  
(2) No, go to FID 0.100

8. HOW MANY MEMBERS OF YOUR HOUSEHOLD HAVE ATTENDED SCHOOL IN AN AREA NEAR AN OMNITRANS FUELING STATION? (SHOW FLASHCARD WITH LOCATION OF FUELING STATIONS)

---

---

>FMSCHL\_2< FID.080 List Family Member Number(s): \_\_\_\_\_

9. HOW MANY YEARS HAS EACH HOUSEHOLD MEMBER ATTEND THE SCHOOL NEAR THE OMNITRANS FUELING STATIONS?

---

---

>FMSCHL\_3< FID.090 List Years for each Family Member: \_\_\_\_\_

---

---

10. HOW MANY HOURS PER DAY DO YOU SPEND OUTSIDE AT HOME OR IN THE IMMEDIATE NEIGHBORHOOD OF THE OMNITRANS FUELING STATIONS?

>DLYEXP< FID.100 List Hours Per Day for each Family Member: \_\_\_\_\_

---

---

---

---

### 3 SECTION II-- HEALTH STATUS AND LIMITATION OF ACTIVITIES

---

1. IS THERE A SMOKER IN THE HOUSEHOLD?

FHS.010

>FMSMKR\_1< (1) Yes  
(2) No

2. WHAT TYPE OF SMOKING IS THE HOUSEHOLD MEMBER?

FHS.020

>FMSMKR\_2< (1) Cigarette (4) Other  
(2) Cigar (7) Refused  
(3) Pipe (9) Don't know

3. HOW MANY PACKS A DAY DOES THE HOUSEHOLD MEMBER SMOKE?

FHS0.030

>FMSMKR\_3< (1) List Number: \_\_\_\_\_  
(7) Refused  
(9) Don't know

4. IS THE SMOKER ALLOWED TO SMOKE INSIDE OF THE HOUSEHOLD?

FHS0.040

>FMSMKR\_4< (1) Yes  
(2) No  
(7) Refused  
(9) Don't know

5. DOES YOUR PROFESSION REQUIRE THAT YOU WORK WITH CHEMICALS (HOUSEHOLD OR INDUSTRIAL)? IF SO, HOW LONG HAVE YOU HAD THIS PROFESSION?

FHS.050

>CHMXPO\_1< (1) Yes  
(2) No  
(7) Refused  
(9) Don't know

>CHMXPO\_A< If Yes List Chemicals and Hours Exposed: \_\_\_\_\_  
(7) Refused  
(9) Don't know

>CHMXPO\_B< If Yes How Long?

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(97) REFUSED	(3) MONTH(S)
(99) DON'T KNOW	(4) YEAR(S)

6. DOES YOUR PROFESSION REQUIRE THAT YOU WORK IN AN ENVIRONMENT THAT IS DUSTY? IF SO, HOW LONG HAVE YOU HAD THIS PROFESSION?



FHS.060

- >DSTXPO\_1< (1) Yes  
(2) No  
(7) Refused  
(9) Don't know

>DSTXPO\_A< **If Yes List Sources and Hours Exposed:** \_\_\_\_\_  
(7) Refused  
(9) Don't know

>DSTXPO\_B< **If Yes How Long?**

- |                 |              |
|-----------------|--------------|
| (01-94) 01-94   | (1) DAYS(S)  |
| (95) 95+        | (2) WEEK(S)  |
| (97) REFUSED    | (3) MONTH(S) |
| (99) DON'T KNOW | (4) YEAR(S)  |

7. DOES YOUR PROFESSION REQUIRE THAT YOU WORK OUTDOORS? IF SO, HOW LONG HAVE YOU HAD THIS PROFESSION?

FHS.070

- >OUTXPO\_1< (1) Yes  
(2) No  
(7) Refused  
(9) Don't know

>OUTXPO\_A< **If Yes List Hours Outdoor Per Day:** \_\_\_\_\_  
(7) Refused  
(9) Don't know

>OUTXPO\_C< **If Yes How Long?**

- |                 |              |
|-----------------|--------------|
| (01-94) 01-94   | (1) DAYS(S)  |
| (95) 95+        | (2) WEEK(S)  |
| (97) REFUSED    | (3) MONTH(S) |
| (99) DON'T KNOW | (4) YEAR(S)  |

8. DOES YOUR PROFESSION REQUIRE THAT YOU WORK IN A NOISY ENVIRONMENT? IF SO, HOW LONG HAVE YOU HAD THIS PROFESSION?

FHS.080

- >NSXPO\_1< (1) Yes  
(2) No  
(7) Refused  
(9) Don't know

>NSXPO\_A< **If Yes List Hours of Operation Per Day:** \_\_\_\_\_  
(7) Refused  
(9) Don't know

>NSXPO\_B< **If Yes How Long?**

- |                 |              |
|-----------------|--------------|
| (01-94) 01-94   | (1) DAYS(S)  |
| (95) 95+        | (2) WEEK(S)  |
| (97) REFUSED    | (3) MONTH(S) |
| (99) DON'T KNOW | (4) YEAR(S)  |

9. DOES YOUR PROFESSION REQUIRE THAT YOU WORK AROUND ANIMALS? IF SO, HOW LONG HAVE YOU HAD THIS PROFESSION?

FHS.090

>NMLXPO\_1< (1) Yes  
(2) No  
(7) Refused  
(9) Don't know

>NMLXPO\_A< **If Yes Types of Animals and Hours Exposed Per Day:** \_\_\_\_\_  
(7) Refused  
(9) Don't know

>NMLXPO\_B< **If Yes How Long?**

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(97) REFUSED	(3) MONTH(S)
(99) DON'T KNOW	(4) YEAR(S)

10. DOES YOUR PROFESSION REQUIRE THAT YOU WORK AROUND EXHAUST FUMES? IF SO, HOW LONG HAVE YOU HAD THIS PROFESSION?

FHS.100

>FMSXPO\_1< (1) Yes  
(2) No  
(7) Refused  
(9) Don't know

>FMSXPO\_A< **If Yes Types of Fumes and Hours Exposed:** \_\_\_\_\_  
(7) Refused  
(9) Don't know

>FMSXPO\_B< **If Yes How Long?**

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(97) REFUSED	(3) MONTH(S)
(99) DON'T KNOW	(4) YEAR(S)

11. DO YOU KEEP AN ANIMAL IN THE HOUSE?\

FHS.110

>NMLXPO\_2< (1) Yes  
(2) No  
(7) Refused  
(9) Don't know

>NMLXPO\_B< **If Yes Types of Animals and Hours Exposed:** \_\_\_\_\_  
(7) Refused  
(9) Don't know

12. FR: ASK IF NECESSARY: With whom am I speaking?  
ENTER THE LINE NUMBER OF THE PERSON YOU CONSIDER TO BE THE MAIN RESPONDENT FOR THIS FAMILY'S HEALTH QUESTIONS.

FHS.120

>FRPREL<

- |   |                            |
|---|----------------------------|
| (2) Spouse (husband/wife)                                       | (10) Aunt/uncle            |
| (3) Unmarried partner   | (11) Niece/nephew          |
| (4) Child (biological/adoptive /<br>in-law/step/foster)         | (12) Other relative        |
| (5) Child of partner  | (13) House-mate / Roommate |
| (6) Grandchild  | (14) Roomer/Boarder        |
| (7) Parent (biological/adoptive /<br>in-law/step/foster)        | (15) Other nonrelative     |
| (8) Brother/sister (biological/adoptive/<br>in-law/step/Foster) | (16) Legal guardian        |
| (9) Grandparent (grandmother/father)                            | (17) Ward                  |
|   | (97) Refused               |
|   | (99) Don't know            |

13. FR: READ THE FOLLOWING INTRODUCTION:

I AM NOW GOING TO ASK ABOUT {YOUR/THE} GENERAL HEALTH { /OF FAMILY MEMBERS}.

14. IN THE PAST 5 YEARS WOULD YOU SAY THAT YOUR OVERALL HEALTH HAS:

**FHS.140**

>HLTHSTS\_1<

- |                            |                       |
|----------------------------|-----------------------|
| (1) IMPROVED SIGNIFICANTLY | (2) IMPROVED SOMEWHAT |
| (3) STAYED ABOUT THE SAME  | (4) DECLINED SOMEWHAT |
| (5) DECLINED SIGNIFICANTLY | (6) DON'T KNOW        |
| (7) REFUSED                |                       |

15. IF "DECLINED" ABOVE, WHAT DO YOU THINK IS THE MAJOR CAUSE FOR THIS DECLINE IN YOUR HEALTH:

**FHS.150**

>HLTHSTS\_2<

- |                      |   |
|----------------------|---|
| (1) ADVANCING AGE    | (2) HEALTH CONDITION/INJURY PREVIOUSLY DOCUMENTED |
| (3) AIR QUALITY/SMOG | (4) WORK RELATED                                  |
| (5) STRESS           | (6) OTHER   |
| (7) REFUSED          |   |

16. IN THE PAST 3 YEARS WOULD YOU SAY THAT YOUR OVERALL HEALTH HAS:

**FHS.160**

>HLTHSTS\_3<

- |                            |                       |
|----------------------------|-----------------------|
| (1) IMPROVED SIGNIFICANTLY | (2) IMPROVED SOMEWHAT |
| (3) STAYED ABOUT THE SAME  | (4) DECLINED SOMEWHAT |
| (5) DECLINED SIGNIFICANTLY | (6) DON'T KNOW        |
| (7) REFUSED ( FID.160)     |                       |

17. IF "DECLINED" ABOVE, WHAT DO YOU THINK IS THE MAJOR CAUSE FOR THIS DECLINE IN YOUR HEALTH:

**FHS.170**

>HLTHSTS\_4<

- |                        |   |
|------------------------|---|
| (1) ADVANCING AGE      | (2) HEALTH CONDITION/INJURY PREVIOUSLY DOCUMENTED |
| (3) AIR QUALITY/SMOG   | (4) WORK RELATED                                  |
| (5) STRESS             | (6) OTHER   |
| (7) REFUSED ( FID.160) |   |

18. IN THE PAST YEAR WOULD YOU SAY THAT YOUR OVERALL HEALTH HAS:

**FHS.180**

>HLTHSTS\_5<

- |                            |                       |
|----------------------------|-----------------------|
| (1) IMPROVED SIGNIFICANTLY | (2) IMPROVED SOMEWHAT |
| (3) STAYED ABOUT THE SAME  | (4) DECLINED SOMEWHAT |
| (5) DECLINED SIGNIFICANTLY | (6) DON'T KNOW        |
| (7) REFUSED ( FID.160)     |                       |

19. IF "DECLINED" ABOVE, WHAT DO YOU THINK IS THE MAJOR CAUSE FOR THIS DECLINE IN YOUR HEALTH:

**FHS.190**

>HLTHSTS\_6<

- |                        |   |
|------------------------|---|
| (1) ADVANCING AGE      | (2) HEALTH CONDITION/INJURY PREVIOUSLY DOCUMENTED |
| (3) AIR QUALITY/SMOG   | (4) WORK RELATED                                  |
| (5) STRESS             | (6) OTHER   |
| (7) REFUSED ( FID.160) |   |

20. ARE/IS (**READ NAME BELOW**) LIMITED IN THE KIND OR AMOUNT OF NONWORK ACTIVITIES HE/SHE/THEY CAN DO BECAUSE OF A PHYSICAL, MENTAL, OR EMOTIONAL PROBLEM?

**FHS.200**

>PLYSTS\_1<

- (1) YES
- (2) NO
- (7) REFUSED
- (9) DON'T KNOW

21. WHO IS THIS? (ANYONE ELSE?)

>PLAPLYLI1< >PLAPLYLI4<  
>PLAPLYLI2< >PLAPLYLI5<  
>PLAPLYLI3< >PLAPLYLI6<

22. IS {SUBJECT NAME LISTED IN PLAYPLYLM} ABLE TO TAKE PART AT ALL IN THE USUAL KINDS OF PLAY ACTIVITIES DONE BY MOST CHILDREN {SUBJECT NAME}'S AGE?

**FHS.220**

>PLYSTS\_2<

(1) YES  
(2) NO  
(7) REFUSED  
(9) DON'T KNOW

23. DO ANY OF THE FOLLOWING FAMILY MEMBERS, (READ NAME BELOW) RECEIVE SPECIAL EDUCATIONAL OR EARLY INTERVENTION SERVICES?

**FHS.230**

>PSPEDE\_1<

(1) YES  
(2) NO  
(7) REFUSED  
(9) DON'T KNOW

24. WHO IS THAT? (ANYONE ELSE?)

>PSPEDEI1< >PSPEDEI4<  
>PSPEDEI2< >PSPEDEI5<  
>PSPEDEI3< >PSPEDEI6<

25. BECAUSE OF A HEALTH PROBLEM, {DO/DOES} {YOU/ANYONE IN THE FAMILY} HAVE DIFFICULTY WALKING WITHOUT USING ANY SPECIAL EQUIPMENT?

**FHS.240**

>WLK\_1<

(1) YES  
(2) NO  
(7) REFUSED  
(9) DON'T KNOW

26. WHO IS THAT? (ANYONE ELSE?)

>PLAWALK1< >PLAWALK4<  
>PLAWALK2< >PLAWALK5<  
>PLAWALK3< >PLAWALK6<

27. {ARE/IS} {YOU/ANYONE IN THE FAMILY} LIMITED IN ANY WAY BECAUSE OF DIFFICULTY REMEMBERING OR BECAUSE {YOU/THEY} EXPERIENCE PERIODS OF CONFUSION?

- (1) YES (FHS.240) (7) REFUSED (CHECK ITEM FHSCCI2)  
(2) NO ( CHECK ITEM FHSCCI2)(9) DON=T KNOW (CHECK ITEM FHSCCI2)

28. WHO IS THIS? (ANYONE ELSE?)

>PLAREME1< >PLAREME4<  
>PLAREME2< >PLAREME5<  
>PLAREME3< >PLAREME6<

29. ARE {YOU/ANY FAMILY MEMBERS (LIST NAMES OF PERSONS WITHOUT LIMITATION IF NEEDED)} LIMITED IN ANY WAY IN ANY ACTIVITIES BECAUSE OF PHYSICAL PROBLEMS?

**FHS.290**

>PLIMANY\_1<

- (1) YES  
(2) NO  
(7) REFUSED  
(9) DON'T KNOW

30. WHO IS THAT? (ANYONE ELSE?)

>PLIMANY1< >PLIMANY4<  
>PLIMANY2< >PLIMANY5<  
>PLIMANY3< >PLIMANY6<

31. WHAT CONDITIONS OR HEALTH PROBLEMS CAUSE {SUBJECT NAME'S} LIMITATIONS?  
CODE ALL THAT APPLY, BUT DO NOT PROBE. ENTER (N) FOR NO MORE.

**FHS.310**

>HLTHCND\_1<

- \_1(1) VISION/ PROBLEM SEEING  
\_2(2) HEARING PROBLEM  
\_3(3) SPEECH PROBLEM  
\_4(4) ASTHMA  
\_5(5) BIRTH DEFECT  
\_6(6) INJURY  
\_7(7) MENTAL RETARDATION  
\_8(8) OTHER DEVELOPMENTAL PROBLEM (E.G. CEREBRAL PALSY)  
\_9(9) OTHER MENTAL, EMOTIONAL, OR BEHAVIORAL PROBLEM  
\_10(10) BONE, JOINT, OR MUSCLE PROBLEM  
\_11(11) EPILEPSY OR SEIZURES  
\_12(12) LEARNING DISABILITY  
\_13(13) ATTENTION DEFICIT/HYPERACTIVE DISORDER (ADD/ADHD)  
\_14 (14)OTHER IMPAIRMENT/PROBLEM (SPECIFY ONE)  
\_15 (15)OTHER IMPAIRMENT/PROBLEM (SPECIFY ONE)  
\_16 (16) BREATHING PROBLEM  
\_17 (17) NOSEBLEEDS  
\_18 (18) NAUSEA  
\_19 (19) NUMBNESS  
(97) REFUSED  
(99) DON'T KNOW/NOT SURE

32. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD ASTHMA OR A BREATHING PROBLEM?

**FHS.320**

>ASMALNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

33. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD THE INJURY THAT CAUSED {HIS/HER} LIMITATION?

**FHS.330**

>HLTHCND\_2<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

34. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD BONE, JOINT, OR MUSCLE PROBLEM?

**FHS.340**

>MSKLNG\_1<

(01-94) 01-94	(1) DAYS(S)	
(95) 95+	(2) WEEK(S)	
(96) SINCE BIRTH	(3) MONTH(S)	
(97) REFUSED	(4) YEAR(S)	
(99) DON'T KNOW		(00) NOT APPLICABLE

35. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD EPILEPSY OR SEIZURES?

**FHS.350**

>EPILNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

36. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD LEARNING DISABILITIES?

**FHS.360**

>LDALNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

37. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD ATTENTION DEFICIT DISORDER?

**FHS.370**

>ADDLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

38. WHAT CONDITIONS OR HEALTH PROBLEMS CAUSE {YOUR/SUBJECT NAME'S} LIMITATIONS?

**FHS.380**

>HLTHCND\_3<

- \_1(1) VISION/PROBLEM SEEING
- \_2(2) HEARING PROBLEM
- \_3(3) ARTHRITIS/RHEUMATISM
- \_4(4) BACK OR NECK PROBLEM
- \_5(5) FRACTURE, BONE/JOINT INJURY
- \_6(6) OTHER INJURY
- \_7(7) HEART PROBLEM
- \_8(8) STROKE PROBLEM
- \_9(9) HYPERTENSION/HIGH BLOOD PRESSURE
- \_10(10) DIABETES
- \_11(11) LUNG PROBLEM(E.G., ASTHMA AND EMPHYSEMA)
- \_12(12) CANCER
- \_13(13) BIRTH DEFECT
- \_14(14) MENTAL RETARDATION
- \_15(15) OTHER DEVELOPMENTAL PROBLEM (E.G. CEREBRAL PALSY)
- \_16(16) SENILITY
- \_17(17) DEPRESSION/ANXIETY/EMOTIONAL PROBLEM
- \_18(18) WEIGHT PROBLEM
- \_19 (19) BREATHING PROBLEM
- \_20 (20) NOSEBLEEDS
- \_21 (21) NAUSEA
- \_22 (22) NUMBNESS

<M> FOR OTHER, INCLUDING MORE CONDITIONS



39. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD VISION PROBLEMS OR PROBLEM SEEING?

**FHS.390**

>VSNLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

40. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD HEARING PROBLEMS?

**FHS.400**

>HRGLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

41. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD ARTHRITIS OR RHEUMATISM?

**FHS.410**

>RALNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

42. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD BACK OR NECK PROBLEM?

**FHS.420**

>NKLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

43. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD FRACTURES, BONE/JOINT INJURY?

**FHS.430**

>BNLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

44. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD OTHER INJURIES?

**FHS.440**

>OTHLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

45. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD A HEART PROBLEM?

**FHS.450**

>HRTLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

46. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD A STROKE PROBLEM?

**FHS.460**

>STRKLNQ\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

47. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD HYPERTENSION OR HIGH BLOOD PRESSURE?

**FHS.470**

>HBPLNQ\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

48. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD DIABETES?

**FHS.480**

>DBTSLNQ\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

49. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD LUNG PROBLEM OR BREATHING PROBLEM?

**FHS.490**

>LNGPRBLNQ\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

50. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD CANCER?

**FHS.500**

>CNCRLNQ\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

51. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD WEIGHT PROBLEM?

**FHS.510**

>WGHTLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

52. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD KIDNEY/BLADDER/RENAL PROBLEM?

**FHS.520**

>KDNYLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

53. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD CIRCULATION PROBLEMS?

**FHS.530**

>CIRCLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

54. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD BENIGN TUMORS/CYST?

**FHS.540**

>TMRLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

55. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD FIBROMYALGIA/LUPUS?

**FHS.550**

>LPSLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

56. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD OSTEOPOROSIS/ TENDONITIS?

**FHS.560**

>TNDNLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

57. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD EPILEPSY/SEIZURES?

**FHS.570**

>SZRLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

58. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD MULTIPLE SCLEROSIS  
(MS)/MUSCULAR DYSTROPHY (MD)?

**FHS.580**

>MSMDLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

59. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD POLIO (MYELITIS),PARALYSIS,PARA-  
QUADRAPLEGIA/PARALYSIS?

**FHS.590**

>POLIOLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

60. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD PARKINSON'S/TREMORS?

**FHS.600**

>PRKNSNLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

61. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD OTHER NERVE DAMAGE/CARPAL TUNNEL SYNDROME?

**FHS.610**

>CRPLLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

62. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD A HERNIA?

**FHS.620**

>HRNIALNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

63. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD AN ULCER?

**FHS.630**

>ULCRLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

64. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD THYROID PROBLEM/GRAVE'S DISEASE/GOUT?

**FHS.640**

>GRVSLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

65. HOW LONG {HAVE/HAS} {YOU/SUBJECT NAME} HAD MIGRAINE HEADACHES?

**FHS.650**

>MRGNLNG\_1<

(01-94) 01-94	(1) DAYS(S)
(95) 95+	(2) WEEK(S)
(96) SINCE BIRTH	(3) MONTH(S)
(97) REFUSED	(4) YEAR(S)
(99) DON'T KNOW	(00) NOT APPLICABLE

66. WOULD YOU SAY {SUBJECT NAME'S} HEALTH IN GENERAL IS EXCELLENT, VERY GOOD, GOOD, FAIR, OR POOR?

**FHS.660**

**>HLTHSTS\_7<**

- (1) EXCELLENT
- (2) VERY GOOD
- (3) GOOD
- (4) FAIR
- (5) POOR
- (7) REFUSED
- (9) DON'T KNOW

## 4 SECTION III - HEALTH CARE ACCESS AND UTILIZATION

---

1. DURING THE PAST 12 MONTHS {WERE/WAS} {YOU/ANYONE IN THE FAMILY} A PATIENT IN A HOSPITAL OVERNIGHT? (DO NOT INCLUDE AN OVERNIGHT STAY IN THE EMERGENCY ROOM.)

HCA.010

>HSPTL\_1< (1) Yes  
(2) No  
(7) Refused  
(9) Don't know

2. WHO WAS IN A HOSPITAL OVERNIGHT? (ANYONE ELSE?)

HCA.020

>PHOSPYR1< >PHOSPYR6<  
>PHOSPYR2< >PHOSPYR7<  
>PHOSPYR3< >PHOSPYR8<  
>PHOSPYR4< >PHOSPYR9<  
>PHOSPYR5< >PHOSPYR10<

3. HOW MANY DIFFERENT TIMES DID {YOU/SUBJECT NAME} STAY IN ANY HOSPITAL OVERNIGHT OR LONGER DURING THE PAST 12 MONTHS?

HCA.030

>HSPTL\_2< (1-365) 1-365 TIMES  
(997) REFUSED  
(999) DON'T KNOW

4. ALTOGETHER HOW MANY NIGHTS WAS {SUBJECT NAME} IN THE HOSPITAL DURING THE PAST 12 MONTHS?

>HSPTL\_3< (1-365) 1-365 TIMES  
(997) REFUSED  
(999) DON'T KNOW

5. ALTOGETHER HOW MANY NIGHTS HAS {SUBJECT NAME} BEEN UNDER THE CARE OF A DOCTOR OR PHYSICIANS ASSISTANT DURING THE PAST 12 MONTHS?

>PDR\_1< (1-365) 1-365 TIMES  
(997) REFUSED  
(999) DON'T KNOW



6. WHO HAS BEEN UNDER THE CARE OF A DOCTOR OR PHYSICIANS ASSISTANT? (ANYONE ELSE?)

>PDR\_2<

>PDRYR1<	>PDRYR6<
>PDRYR2<	>PDRYR7<
>PDRYR3<	>PDRYR8<
>PDRYR4<	>PDRYR9<
>PDRYR5<	>PDRYR10<

7. DO YOU HAVE A HEALTH CONDITON OR PROBLEM THAT LIMITS YOUR QUALITY OF LIFE?

FHS.670

>HLTHCND\_4<

\_19(19) MISSING LIMBS (FINGERS, TOES OR DIGITS), AMPUTEE  
\_20(20) KIDNEY, BLADDER OR RENAL PROBLEMS  
\_21(21) CIRCULATION PROBLEMS (INCLUDING BLOOD CLOTS)  
\_22(22) BENIGN TUMORS, CYSTS  
\_23(23) FIBROMYALGIA, LUPUS  
\_24(24) OSTEOPOROSIS, TENDINITIS  
\_25(25) EPILEPSY, SEIZURES  
\_26(26) MULTIPLE SCLEROSIS (MS), MUSCULAR DYSTROPHY (MD)  
\_27(27) POLIO(MYELITIS), PARALYSIS, PARA/QUADRIPLEGIA  
\_28(28) PARKINSON'S DISEASE, OTHER TREMORS  
\_29(29) OTHER NERVE DAMAGE, INCLUDING CARPAL TUNNEL SYNDROME  
\_30(30) HERNIA  
\_31(31) ULCER  
\_32(32) VARICOSE VEINS, HEMORRHOIDS  
\_33(33) THYROID PROBLEMS, GRAVE'S DISEASE, GOUT  
\_34(34) KNEE PROBLEMS (NOT ARTHRITIS (03), NOT JOINT INJURY(05))  
\_35(35) MIGRAINE HEADACHES (NOT JUST HEADACHES)  
\_36(36) OTHER IMPAIRMENT/PROBLEM (SPECIFY ONE) \_\_\_\_\_  
\_37(37) OTHER IMPAIRMENT/PROBLEM (SPECIFY ONE) \_\_\_\_\_  
(97) REFUSED  
(99) DON'T KNOW/NOT SURE

## 5 CLOSURE/LIMITATIONS

---

Our services have been performed using that degree of care and skill ordinarily exercised under similar circumstances by reputable, qualified environmental consultants practicing in this or similar locations. No other warranty, either expressed or implied, is made as to the professional advice included in this report. These services were performed consistent with our agreement with our client.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We do not warrant the accuracy of information supplied by others or the use of segregated portions of this report.

Respectfully submitted,

Tony Jones, Ph. D.

James Clark, Ph.D.

*Project Manager*

**KOMEX**

---

**APPENDIX B**

---

**SUMMARY OF PUBLIC MEETINGS**

---

## APPENDIX C

---

# LOCAL AREA SURVEY RESULTS

---

**APPENDIX D**

---

**PUBLIC HEALTH SURVEY INSTRUMENT**