

National Health and Nutrition Examination Survey 2003-2004

Documentation, Codebook, and Frequencies

Volatile Organic Compounds in Blood and Water

Laboratory

**Survey Years:
2003 to 2004**

**SAS Export File:
L04VOC_C.XPT**



August 2008

NHANES 2003–2004 Data Documentation

Laboratory Assessment: Lab 04 Volatile Organic Compounds in Blood and Water and Related Questionnaire Items (L04VOC_C)

First Published: August 2008

Last Revised: N/A

Component Description	<p>Both the lab data and questionnaire items will be released in this file.</p> <p>Volatile Organic Compound Questions: The volatile organic compound section of the Mobile Examination Center (MEC) Interview and Phlebotomy Component (PH) provide personal interview data.</p> <p>Volatile Organic Compounds (Human Blood): Exposure to volatile organic compounds (VOCs) is ubiquitous. Chronic exposure to extremely high levels of some VOCs can lead to cancer and neurocognitive dysfunction (1,2).</p> <p>Nearly 200 air toxics have been associated with adverse health effects in occupational studies or laboratory studies, but have not been monitored in general population groups. Information on levels of exposure to these compounds as measured by their levels in blood is essential to determine the need for regulatory mechanisms to reduce the levels of hazardous air pollutants to which the general population is exposed.</p> <p>Volatile Organic Compounds (Home Tap Water): In addition to assessing levels of VOCs in blood, VOC levels were measured in home tap water specimens provided by NHANES participants. Specifically, trihalomethanes (THMs) and the fuel additive methyl tertiary-butyl ether (MTBE) are measured in these samples.</p>
Eligible Sample	<p>Participants aged 20 to 59 years on a one-half sample had questions administered and whole blood and water specimens tested.</p>
Interview Setting and Mode of Administration	<p>The questions were asked during the physical examination, in the mobile examination center (MEC). The questions were administered by the phlebotomist or the MEC interviewers.</p>

Description of Laboratory Methodology

Measurements of Trihalomethanes (THMs) and MTBE in Tap Water:

The prevalence of water disinfection by-products in drinking water supplies has raised concerns about possible health effects from chronic exposure to these compounds. The objective is to support studies exploring the relationship between exposure to THMs and health effects.

This automated analytical method uses headspace solid-phase microextraction (SPME) coupled with capillary gas chromatography and mass spectrometry (3). This method quantitates trace levels of THMs (chloroform, bromodichloromethane, dibromochloromethane, and bromoform) and MTBE in tap water. Detection limits of less than 100 pg/mL for all analytes and linear ranges of three orders of magnitude are adequate for measuring the THMs in tap water samples tested from across the United States. THMs are stable for extended periods in tap water samples after quenching of residual chlorine and buffering to pH 6.5, thus enabling larger epidemiologic field studies with simplified sample collection protocols.

Measurements of THMs and MTBE in Whole Blood

The prevalence of water disinfection by-products (e.g. THMs) in tap water has raised concerns about possible health effects from chronic exposure to these compounds. Exposure to the fuel oxygenate MTBE has also raised concerns. People can be exposed to THMs and MTBE through a variety of sources, including use of household tap water that contains these chemicals. The objective of this study is to support studies exploring the relationship between health effects and exposure to THMs and MTBE. THMs and MTBE were quantified in human blood using capillary gas chromatography (GC) and high-resolution mass spectrometry (MS) with selected ion mass detection and isotope-dilution techniques (4). This method quantified trace levels of THMs (chloroform, bromodichloromethane, dibromochloromethane, and bromoform) and MTBE in human blood. Analyte responses were adequate for measuring background levels after extraction of these volatile organic compounds with headspace SPME. Detection limits ranged from 0.3–2.4 pg/mL, with linear ranges of three orders of magnitude. This method provided adequate sensitivity for measuring the THMs and MTBE in most blood samples tested from diverse U.S. reference population.

Measurements of other VOCs in Whole Blood

Additional VOCs were measured in human blood using SPME in conjunction with gas chromatography and bench top quadrupole mass spectrometer (5). A combination of SPME and multiple single-ion monitoring minimizes the interferences and chemical noise associated with whole-blood samples. Detection limits are below 50 ppt (pg/mL) for a majority of the VOCs tested.

Laboratory Quality Control and Monitoring

Mobile Examination Centers (MECs)

Laboratory team performance is monitored using several techniques. NCHS and contract consultants use a structured quality assurance evaluation during unscheduled visits to evaluate both the quality of the laboratory work and the quality-control procedures. Each laboratory staff person is observed for equipment operation, specimen collection and preparation; testing procedures and constructive feedback are given to each staff. Formal retraining sessions are conducted annually to ensure that required skill levels were maintained.

The NHANES QA/QC protocols meet the 1988 Clinical Laboratory Improvement Act mandates. Detailed QA/QC instructions are discussed in the NHANES LPM.

Analytical Laboratories

NHANES uses several methods to monitor the quality of the analyses performed by the contract laboratories. In the MEC, these methods include performing second examinations on previously examined participants and blind split samples collected on “dry run” sessions.

NCHS developed and distributed a quality control protocol for all the contract laboratories which outlined the Westgard rules used when running NHANES specimens. Progress reports containing any problems encountered during shipping or receipt of specimens, summary statistics for each control pool, QC graphs, instrument calibration, reagents, and any special considerations are submitted to NCHS and Westat quarterly. The reports are reviewed for trends or shifts in the data. The laboratories are required to explain any identified areas of concern.

NCHS/Westat is currently reviewing these reports.

Data Processing and Editing

Automated data collection procedures for the survey were introduced in NHANES 2003–2004. In the MECs and analytical laboratories, data for the laboratory component are recorded directly onto a computerized data collection form. The system is centrally integrated, and it allows for ongoing monitoring of much of the data. Although the complete blood count and pregnancy analyses are performed in the MEC laboratory, most analyses are conducted elsewhere by approximately 21 laboratories across the United States.

Guidelines have been developed that provide standards for naming variables, filling missing values, and handling missing records. NCHS staff, assisted by contract staff, has developed data-editing specifications that check data sets for valid codes, ranges, and skip-pattern consistencies and examine the consistency of values between interrelated variables. Comments have been reviewed and recoded. NCHS staff verifies extremely high and low values whenever possible, and numerous consistency checks are performed. Nonetheless, users should examine the range and frequency of values before analyzing data.

Data Editing

The data editing specifications are as follows:

- Age and gender checks
- Total number of observations complete for each field
- No field overlap, truncated values, or atypical results
- Direct data entry errors
- Abnormal results confirmed by lab
- Test algorithm performed
- Checked comment codes to resolve missing results and missing records
- All missing results and missing MEC-examined records are accounted
- Duplicate records were verified and deleted

Analytic Notes

Measures of volatile organic compounds in blood and water were assessed in a subsample of participants aged 20–59. Use the special weights (WTSVOC2Y) included in this data file when analyzing data. Please refer to the Analytic Guidelines for further details on the use of sample weights and other analytic issues.

The analysis of NHANES 2003-2004 laboratory data must be

conducted with the key survey design and basic demographic variables. The recommended procedure for variance estimation requires use of stratum and PSU variables (SDMVSTRA and SDMVPSU, respectively), which are included in the demographic data file for each data release. The NHANES 2003-2004 Household Questionnaire and Demographic Data Files contain demographic data, health indicators, and other related information collected during household interviews. The phlebotomy file includes auxiliary information such as the conditions precluding venipuncture. The demographic, household questionnaire and phlebotomy files may be linked to the laboratory data file using the unique survey participant identifier SEQN.

Detection limits

The detection limit was variable for many of the analytes in the data set. In addition two variables are provided for each of these analytes. The variable named LBD___LC indicates whether the result was below the limit of detection. There are three values: "0", "1", and "2". "0" means that the result was at or above the limit of detection. "1" indicates that the result was below the limit of detection. "2" means the result was above the limit of detection and exceeds calibrated range of assay.

The other variable named LBX___ provides the analytic result for that analyte. In cases, where the result was below the limit of detection, the value for that variable is the detection limit divided by the square root of two.

References

1. U.S. Occupational Safety and Health Administration (OSHA). Organic Vapors, Method 07 in Analytical Methods Manual. Salt Lake City, Utah; OSHA Analytical Laboratory: 1985.
2. Morandi MT, Stock TH. Personal Exposures to Toxic Air Pollutants, Vol. 2. Houston, TX; The University of Texas – Houston, Health Science Center, School of Public Health: 1998.
3. Cardinali FL, Ashley DL, Morrow JC, Moll DM, Blount BC (2004), Measurement of Trihalomethanes and Methyl Tertiary-Butyl Ether in Tap Water Using Solid-Phase Microextraction GC/MS, Journal of Chromatographic Sciences, 42:200-206.
4. Bonin MA, Silva LK, Smith MM, Ashley DL, Blount BC (2005) Measurement of trihalomethanes and methyl tert-butyl ether in whole blood using gas chromatography with high-resolution mass

spectrometry. J Anal Toxicol. 29(2):81-89.

5. Blount BC, Kobelski RJ, McElprang DO, Ashley DL, Morrow JC, Chambers DM, Cardinali FL (2006) Quantification of 31 Volatile Organic Compounds in Whole Blood Using Solid-Phase Microextraction and Gas Chromatography/Mass Spectrometry. J. Chromatography B. 832(2):292-301.

Locator Fields

Title: Lab 04 Volatile Organic Compounds Questionnaire, Blood and Water

Contact Number: 1-866-441-NCHS

Years of Content: 2003-2004

First Published: August 2008

Revised: N/A

Access Constraints: None

Use Constraints: None

Geographic Coverage: National

Subject: Lab 04 Volatile Organic Compounds Questionnaire, Blood and Water

Record Source: NHANES 2003-2004

Survey Methodology: NHANES 2003-2004 is a stratified multistage probability sample of the civilian non-institutionalized population of the U.S.

Medium: NHANES Web site; SAS transport files

**National Health and Nutrition Examination Survey
Codebook for Data Production (2003-2004)**

**Volatile Organic Compounds in Blood and Water (L04VOC_C)
Person Level Data**

August 2008



SEQN	Target
	B(20 Yrs. to 59 Yrs.)
Hard Edits	SAS Label
	Respondent sequence number
English Text: Respondent sequence number.	
English Instructions:	

WTSVOC2Y	Target
	B(20 Yrs. to 59 Yrs.)
Hard Edits	SAS Label
	VOC subsample 2 yr MEC Weight
English Text: VOC subsample 2 yr MEC Weight	
English Instructions:	

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 291188.07353	Range of Values	1489	1489	
.	Missing	0	1489	

LBXWBF	Target
	B(20 Yrs. to 59 Yrs.)
Hard Edits	SAS Label
	Water Bromoform (ng/mL)
English Text: Water Bromoform Result	
English Instructions:	

Code or Value	Description	Count	Cumulative	Skip to Item
0.0707 to 31	Range of Values	1255	1255	
.	Missing	234	1489	

LBDWBFLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Water Bromoform Comment Code			
English Text: Water Bromoform Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	692	692	
1	below detectable limit	563	1255	
2	detectable result and exceeds the calibrated range of assay	0	1255	
.	Missing	234	1489	

LBXWCF	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Water Chloroform (ng/mL)			
English Text: Water Chloroform Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0849 to 130	Range of Values	1240	1240	
.	Missing	249	1489	

LBDWCFLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Water Chloroform Comment Code			
English Text: Water Chloroform Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	1043	1043	
1	below detectable limit	197	1240	
2	detectable result and exceeds the calibrated range of assay	0	1240	
.	Missing	249	1489	

LBXWBM	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Water Bromodichloromethane (ng/mL)			
English Text: Water Bromodichloromethane Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0354 to 37	Range of Values	1255	1255	
.	Missing	234	1489	

LBDWBMLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Water Bromodichloromethane Comment Code			
English Text: Water Bromodichloromethane Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	1096	1096	
1	below detectable limit	159	1255	
2	detectable result and exceeds the calibrated range of assay	0	1255	
.	Missing	234	1489	

LBXWCM	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Water Dibromochloromethane (ng/mL)			
English Text: Water Dibromochloromethane Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0707 to 34	Range of Values	1255	1255	
.	Missing	234	1489	

LBDWCMLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Water Dibromochloromethane Comment Code			
English Text: Water Dibromochloromethane Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	1056	1056	
1	below detectable limit	199	1255	
2	detectable result and exceeds the calibrated range of assay	0	1255	
.	Missing	234	1489	

LBXWME	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Water MTBE (ng/mL)			
English Text: Water Methyl tert. butyl ether (MTBE) Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0707 to 1.3	Range of Values	1224	1224	
.	Missing	265	1489	

LBDWMELC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Water MTBE Comment Code			
English Text: Water Methyl tert. butyl ether (MTBE) Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	198	198	
1	below detectable limit	1026	1224	
2	detectable result and exceeds the calibrated range of assay	0	1224	
.	Missing	265	1489	

LBXV1A	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood 1,1-Dichloroethane (ng/mL)			
English Text: Blood 1,1-Dichloroethane Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0071 to 0.0134	Range of Values	1371	1371	
.	Missing	118	1489	

LBDV1ALC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood 1,1-Dichloroethane Comment Code			
English Text: Blood 1,1-Dichloroethane Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	0	0	
1	below detectable limit	1371	1371	
2	detectable result and exceeds the calibrated range of assay	0	1371	
.	Missing	118	1489	

LBXV1D	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood 1,2-Dichlorobenzene (ng/mL)			
English Text: Blood 1,2-Dichlorobenzene Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0707 to 0.1344	Range of Values	1331	1331	
.	Missing	158	1489	

LBDV1DLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood 1,2-Dichlorobenzene Comment Code			
English Text: Blood 1,2-Dichlorobenzene Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	0	0	
1	below detectable limit	1331	1331	
2	detectable result and exceeds the calibrated range of assay	0	1331	
.	Missing	158	1489	

LBXV1E	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood 1,1-Dichloroethene (ng/mL)			
English Text: Blood 1,1-Dichloroethene Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0064 to 0.012	Range of Values	1371	1371	
.	Missing	118	1489	

LBDV1ELC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood 1,1-Dichloroethene Comment Code			
English Text: Blood 1,1-Dichloroethene Comment Code				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	0	0	
1	below detectable limit	1371	1371	
2	detectable result and exceeds the calibrated range of assay	0	1371	
.	Missing	118	1489	

LBXV2A	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood 1,2-Dichloroethane (ng/mL)			
English Text: Blood 1,2-Dichloroethane Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0064 to 0.0163	Range of Values	1353	1353	
.	Missing	136	1489	

LBDV2ALC		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Blood 1,2-Dichloroethane Comment Code		
English Text: Blood 1,2-Dichloroethane Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	0	0	
1	below detectable limit	1353	1353	
2	detectable result and exceeds the calibrated range of assay	0	1353	
.	Missing	136	1489	

LBXV2C		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Blood cis-1,2-Dichloroethene (ng/mL)		
English Text: Blood cis-1,2-Dichloroethene Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0071 to 0.0134	Range of Values	1370	1370	
.	Missing	119	1489	

LBDV2CLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood cis-1,2-Dichloroethene Comt Code			
English Text: Blood cis-1,2-Dichloroethene Comment Code				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	0	0	
1	below detectable limit	1370	1370	
2	detectable result and exceeds the calibrated range of assay	0	1370	
.	Missing	119	1489	

LBXV2T	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood trans-1,2-Dichloroethene (ng/mL)			
English Text: Blood trans-1,2-Dichloroethene Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0064 to 0.012	Range of Values	1371	1371	
.	Missing	118	1489	

LBDV2TLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood trans-1,2-Dichloroethene Comt Code			
English Text: Blood trans-1,2-Dichloroethene Comment Code				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	0	0	
1	below detectable limit	1371	1371	
2	detectable result and exceeds the calibrated range of assay	0	1371	
.	Missing	118	1489	

LBXV3B	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood 1,3-Dichlorobenzene (ng/mL)			
English Text: Blood 1,3-Dichlorobenzene Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0354 to 0.0679	Range of Values	1338	1338	
.	Missing	151	1489	

LBDV3BLC		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Blood 1,3-Dichlorobenzene Comment Code		
English Text: Blood 1,3-Dichlorobenzene Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	0	0	
1	below detectable limit	1338	1338	
2	detectable result and exceeds the calibrated range of assay	0	1338	
.	Missing	151	1489	

LBXV4A		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Blood 1,1,2-Trichloroethane (ng/mL)		
English Text: Blood 1,1,2-Trichloroethane Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0071 to 0.0134	Range of Values	1369	1369	
.	Missing	120	1489	

LBDV4ALC		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Blood 1,1,2-Trichloroethane Comment Code		
English Text: Blood 1,1,2-Trichloroethane Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	0	0	
1	below detectable limit	1369	1369	
2	detectable result and exceeds the calibrated range of assay	0	1369	
.	Missing	120	1489	

LBXV4C		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Blood Tetrachloroethene (ng/mL)		
English Text: Blood Tetrachloroethene Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0339 to 14	Range of Values	1366	1366	
.	Missing	123	1489	

LBDV4CLC		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Blood Tetrachloroethene Comment Code		
English Text: Blood Tetrachloroethene Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	218	218	
1	below detectable limit	1148	1366	
2	detectable result and exceeds the calibrated range of assay	0	1366	
.	Missing	123	1489	

LBXV4T		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Blood 1,1,2,2-Tetrachloroethane (ng/mL)		
English Text: Blood 1,1,2,2-Tetrachloroethane Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0071 to 0.0283	Range of Values	1367	1367	
.	Missing	122	1489	

LBDV4TLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood 1,1,2,2-Tetrachloroethane Comt			
English Text: Blood 1,1,2,2-Tetrachloroethane Comment Code				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	2	2	
1	below detectable limit	1365	1367	
2	detectable result and exceeds the calibrated range of assay	0	1367	
.	Missing	122	1489	

LBXVBF	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Bromoform (pg/mL)			
English Text: Blood Bromoform Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.3861 to 310	Range of Values	1310	1310	
.	Missing	179	1489	

LBDVBFLC		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Blood Bromoform Comment Code		
English Text: Blood Bromoform Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	553	553	
1	below detectable limit	756	1309	
2	detectable result and exceeds the calibrated range of assay	1	1310	
.	Missing	179	1489	

LBXVBM		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Blood Bromodichloromethane (pg/mL)		
English Text: Blood Bromodichloromethane Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.1506 to 33	Range of Values	1322	1322	
.	Missing	167	1489	

LBDVBMLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Bromodichloromethane Comment Code			
English Text: Blood Bromodichloromethane Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	999	999	
1	below detectable limit	323	1322	
2	detectable result and exceeds the calibrated range of assay	0	1322	
.	Missing	167	1489	

LBXVBZ	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Benzene (ng/mL)			
English Text: Blood Benzene Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.017 to 1.4	Range of Values	1346	1346	
.	Missing	143	1489	

LBDVBZLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Benzene Comment Code			
English Text: Blood Benzene Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	787	787	
1	below detectable limit	559	1346	
2	detectable result and exceeds the calibrated range of assay	0	1346	
.	Missing	143	1489	

LBXVCB	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Chlorobenzene (ng/mL)			
English Text: Blood Chlorobenzene Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0078 to 0.0148	Range of Values	1370	1370	
.	Missing	119	1489	

LBDVCBLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Chlorobenzene Comment Code			
English Text: Blood Chlorobenzene Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	0	0	
1	below detectable limit	1370	1370	
2	detectable result and exceeds the calibrated range of assay	0	1370	
.	Missing	119	1489	

LBXVCF	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Chloroform (pg/mL)			
English Text: Blood Chloroform Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1.4849 to 3100	Range of Values	1238	1238	
.	Missing	251	1489	

LBDVCFLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Chloroform Comment Code			
English Text: Blood Chloroform Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	1141	1141	
1	below detectable limit	97	1238	
2	detectable result and exceeds the calibrated range of assay	0	1238	
.	Missing	251	1489	

LBXVCM	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Dibromochloromethane (pg/mL)			
English Text: Blood Dibromochloromethane Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.1492 to 34	Range of Values	1333	1333	
.	Missing	156	1489	

LBDVCMLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Dibromochloromethane Comment Code			
English Text: Blood Dibromochloromethane Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	656	656	
1	below detectable limit	677	1333	
2	detectable result and exceeds the calibrated range of assay	0	1333	
.	Missing	156	1489	

LBXVCT	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Carbon Tetrachloride (ng/mL)			
English Text: Blood Carbon Tetrachloride Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0035 to 0.017	Range of Values	1366	1366	
.	Missing	123	1489	

LBDVCTLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Carbon Tetrachloride Comment Code			
English Text: Blood Carbon Tetrachloride Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	7	7	
1	below detectable limit	1359	1366	
2	detectable result and exceeds the calibrated range of assay	0	1366	
.	Missing	123	1489	

LBXVDB	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood 1,4-Dichlorobenzene (ng/mL)			
English Text: Blood 1,4-Dichlorobenzene Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0849 to 190	Range of Values	1323	1323	
.	Missing	166	1489	

LBDVDBLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood 1,4-Dichlorobenzene Comment Code			
English Text: Blood 1,4-Dichlorobenzene Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	714	714	
1	below detectable limit	607	1321	
2	detectable result and exceeds the calibrated range of assay	2	1323	
.	Missing	166	1489	

LBXVDM	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Dibromomethane (ng/mL)			
English Text: Blood Dibromomethane Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0212 to 0.16	Range of Values	1358	1358	
.	Missing	131	1489	

LBDVDMLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Dibromomethane Comment Code			
English Text: Blood Dibromomethane Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	3	3	
1	below detectable limit	1355	1358	
2	detectable result and exceeds the calibrated range of assay	0	1358	
.	Missing	131	1489	

LBXVDP	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood 1,2-Dichloropropane (ng/mL)			
English Text: Blood 1,2-Dichloropropane Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0057 to 0.0106	Range of Values	1368	1368	
.	Missing	121	1489	

LBDVDPLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood 1,2-Dichloropropane Comment Code			
English Text: Blood 1,2-Dichloropropane Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	0	0	
1	below detectable limit	1368	1368	
2	detectable result and exceeds the calibrated range of assay	0	1368	
.	Missing	121	1489	

LBXVEB	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Ethylbenzene (ng/mL)			
English Text: Blood Ethylbenzene Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.017 to 1.6	Range of Values	1323	1323	
.	Missing	166	1489	

LBDVEBLC		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Blood Ethylbenzene Comment Code		
English Text: Blood Ethylbenzene Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	877	877	
1	below detectable limit	446	1323	
2	detectable result and exceeds the calibrated range of assay	0	1323	
.	Missing	166	1489	

LBXVHE		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Blood Hexachloroethane (ng/mL)		
English Text: Blood Hexachloroethane Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0078 to 0.0148	Range of Values	1370	1370	
.	Missing	119	1489	

LBDVHEL	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Hexachloroethane Comment Code			
English Text: Blood Hexachloroethane Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	0	0	
1	below detectable limit	1370	1370	
2	detectable result and exceeds the calibrated range of assay	0	1370	
.	Missing	119	1489	

LBXVMC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Methylene Chloride (ng/mL)			
English Text: Blood Methylene Chloride Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0495 to 2.3	Range of Values	1195	1195	
.	Missing	294	1489	

LBDVMCLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Methylene Chloride Comment Code			
English Text: Blood Methylene Chloride Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	7	7	
1	below detectable limit	1188	1195	
2	detectable result and exceeds the calibrated range of assay	0	1195	
.	Missing	294	1489	

LBXVME	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood MTBE (pg/mL)			
English Text: Blood Methyl t-Butyl Ether (MTBE) Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.1464 to 2300	Range of Values	1307	1307	
.	Missing	182	1489	

LBDVMELC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood MTBE Comment Code			
English Text: Blood MTBE Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	1063	1063	
1	below detectable limit	240	1303	
2	detectable result and exceeds the calibrated range of assay	4	1307	
.	Missing	182	1489	

LBXVOX	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood o-Xylene (ng/mL)			
English Text: Blood o-Xylene Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.017 to 1.5	Range of Values	1367	1367	
.	Missing	122	1489	

LBDVOXLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood o-Xylene Comment Code			
English Text: Blood o-Xylene Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	505	505	
1	below detectable limit	862	1367	
2	detectable result and exceeds the calibrated range of assay	0	1367	
.	Missing	122	1489	

LBXVST	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Styrene (ng/mL)			
English Text: Blood Styrene Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0212 to 0.39	Range of Values	1364	1364	
.	Missing	125	1489	

LBDVSTLC		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Blood Styrene Comment Code		
English Text: Blood Styrene Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	516	516	
1	below detectable limit	848	1364	
2	detectable result and exceeds the calibrated range of assay	0	1364	
.	Missing	125	1489	

LBXVTC		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Blood Trichloroethene (ng/mL)		
English Text: Blood Trichloroethene Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0085 to 1.7	Range of Values	1232	1232	
.	Missing	257	1489	

LBDVTCLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Trichloroethene Comment Code			
English Text: Blood Trichloroethene Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	19	19	
1	below detectable limit	1213	1232	
2	detectable result and exceeds the calibrated range of assay	0	1232	
.	Missing	257	1489	

LBXV3A	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood 1,1,1-Trichloroethane (ng/mL)			
English Text: Blood 1,1,1-Trichloroethane Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0339 to 0.17	Range of Values	1352	1352	
.	Missing	137	1489	

LBDV3ALC		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Blood 1,1,1-Trichloroethane Comment Code		
English Text: Blood 1,1,1-Trichloroethane Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	2	2	
1	below detectable limit	1350	1352	
2	detectable result and exceeds the calibrated range of assay	0	1352	
.	Missing	137	1489	

LBXVTO		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Blood Toluene (ng/mL)		
English Text: Blood Toluene Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0177 to 9	Range of Values	1337	1337	
.	Missing	152	1489	

LBDVTOLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Toluene Comment Code			
English Text: Blood Toluene Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	1269	1269	
1	below detectable limit	68	1337	
2	detectable result and exceeds the calibrated range of assay	0	1337	
.	Missing	152	1489	

LBXVXY	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood m-/p-Xylene (ng/mL)			
English Text: Blood m-/p-Xylene Result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.024 to 5.6	Range of Values	1346	1346	
.	Missing	143	1489	

LBDVXYLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood m-/p-Xylene Comment Code			
English Text: Blood m-/p-Xylene Comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	1324	1324	
1	below detectable limit	22	1346	
2	detectable result and exceeds the calibrated range of assay	0	1346	
.	Missing	143	1489	

LBX2DF	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood 2,5-Dimethylfuran (ng/mL)			
English Text: Blood 2,5 Dimethylfuran result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0078 to 0.44	Range of Values	1224	1224	
.	Missing	265	1489	

LBD2DFLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood 2,5-Dimethylfuran Comment Code			
English Text: Blood 2,5 Dimethylfuran comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	317	317	
1	below detectable limit	907	1224	
2	detectable result and exceeds the calibrated range of assay	0	1224	
.	Missing	265	1489	

LBXV2P	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood 1,2-Dibromo-3-chloropropane(ng/mL)			
English Text: Blood 1,2-Dibromo-3-chloropropane result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0141 to 0.0707	Range of Values	1170	1170	
.	Missing	319	1489	

LBDV2PLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood 1,2-Dibromo-3-chloropropane Comt			
English Text: Blood 1,2-Dibromo-3-chloropropane Comment Code				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	0	0	
1	below detectable limit	1170	1170	
2	detectable result and exceeds the calibrated range of assay	0	1170	
.	Missing	319	1489	

LBXVN	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Nitrobenzene (ng/mL)			
English Text: Blood Nitrobenzene result				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0.0707 to 0.7071	Range of Values	1129	1129	
.	Missing	360	1489	

LBDVNBLC	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Blood Nitrobenzene Comment Code			
English Text: Blood Nitrobenzene comment				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
0	detectable result	0	0	
1	below detectable limit	1129	1129	
2	detectable result and exceeds the calibrated range of assay	0	1129	
.	Missing	360	1489	

VTQ210	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Attached garage?			
English Text: I would like to ask you a few questions about your home. Does your home have an attached garage?				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1	Yes	437	437	
2	No	1025	1462	
7	Refused	2	1464	
9	Don't know	0	1464	
.	Missing	25	1489	

VTQ220		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Private well?		
English Text: Is the source of water for your home from a private well?				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1	Yes	167	167	
2	No	1290	1457	
7	Refused	2	1459	
9	Don't know	5	1464	
.	Missing	25	1489	

VTQ230A		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Toilet bowl deodorizers?		
English Text: Do you use toilet bowl deodorizers inside your home?				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1	Yes	623	623	
2	No	832	1455	
7	Refused	2	1457	
9	Don't know	7	1464	
.	Missing	25	1489	

VTQ230B		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Moth balls or crystals?		
English Text: Do you use moth balls or crystals inside your home?				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1	Yes	135	135	
2	No	1322	1457	
7	Refused	3	1460	
9	Don't know	4	1464	
.	Missing	25	1489	

VTQ240A		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Pump gas into a car or motor vehicle?		
English Text: In the last three days, did you pump gas into your car or other motor vehicle yourself?				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1	Yes	715	715	
2	No	747	1462	
7	Refused	2	1464	
9	Don't know	0	1464	
.	Missing	25	1489	

VTQ240B		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		How long ago did you pump gas?		
English Text: If, yes, how long ago, in hours, did you pump gas into a car?				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1 to 72	Range of Values	715	715	
.	Missing	774	1489	

VTQ250A		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Spend time at swimming pool?		
English Text: In the last three days, did you spend any time at a swimming pool, in a hot tub, or in a steam room?				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1	Yes	44	44	
2	No	1418	1462	
7	Refused	2	1464	
9	Don't know	0	1464	
.	Missing	25	1489	

VTQ250B		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		How long ago at swimming pool?		
English Text: If, yes, how long ago, in hours, has it been since you spent time in a swimming pool, in a hot tub, or in a steam room?				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1 to 70	Range of Values	44	44	
.	Missing	1445	1489	

VTQ260A		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Visit a dry cleaning shop?		
English Text: In the last three days, did you visit a dry cleaning shop or wear clothes that had been dry-cleaned within the last week?				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1	Yes	123	123	
2	No	1339	1462	
7	Refused	2	1464	
9	Don't know	0	1464	
.	Missing	25	1489	

VTQ260B	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Spend 10 minutes near cigarette smoke?			
English Text: In the last three days, did you spend 10 or more minutes near a person who was smoking a cigarette, cigar, or pipe?				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1	Yes	721	721	
2	No	740	1461	
7	Refused	2	1463	
9	Don't know	1	1464	
.	Missing	25	1489	

VTQ270A	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Take a hot shower?			
English Text: In the last three days, did you take a hot shower or bath for five minutes or longer?				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1	Yes	1165	1165	
2	No	297	1462	
7	Refused	2	1464	
9	Don't know	0	1464	
.	Missing	25	1489	

VTQ270B		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		How long since hot shower?		
English Text: If, yes, how long ago, in hours, has it been since your last shower or hot bath?				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1 to 54	Range of Values	1165	1165	
.	Missing	324	1489	

VTQ280A		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Breathe fumes from paints?		
English Text: In the last three days, did you breath fumes from paints?				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1	Yes	132	132	
2	No	1329	1461	
7	Refused	3	1464	
9	Don't know	0	1464	
.	Missing	25	1489	

VTQ280B		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Breathe fumes from degreasing cleaners?		
English Text: In the last three days, did you breath fumes from degreasing cleaners?				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1	Yes	186	186	
2	No	1274	1460	
7	Refused	3	1463	
9	Don't know	1	1464	
.	Missing	25	1489	

VTQ280C		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Breathe fumes from diesel fuel?		
English Text: In the last three days, did you breath fumes from diesel fuel or kerosene?				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1	Yes	133	133	
2	No	1327	1460	
7	Refused	3	1463	
9	Don't know	1	1464	
.	Missing	25	1489	

VTQ280D		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Breathe fumes from paint thinner?		
English Text: In the last three days, did you breath fumes from paint thinner, brush cleaner, or furniture stripper?				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1	Yes	66	66	
2	No	1395	1461	
7	Refused	3	1464	
9	Don't know	0	1464	
.	Missing	25	1489	

VTQ280E		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Breathe fumes from drycleaning fluid?		
English Text: In the last three days, did you breath fumes from drycleaning fluid or spot remover?				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1	Yes	58	58	
2	No	1403	1461	
7	Refused	3	1464	
9	Don't know	0	1464	
.	Missing	25	1489	

VTQ280F	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Breathe fumes from fingernail polish?			
English Text: In the last three days, did you breath fumes from fingernail polish or fingernail polish remover?				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1	Yes	196	196	
2	No	1265	1461	
7	Refused	3	1464	
9	Don't know	0	1464	
.	Missing	25	1489	

VTQ280G	Target			
	B(20 Yrs. to 59 Yrs.)			
Hard Edits	SAS Label			
	Breathe fumes from glue?			
English Text: In the last three days, did you breath fumes from glues or adhesives used for hobbies or crafts?				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1	Yes	90	90	
2	No	1370	1460	
7	Refused	3	1463	
9	Don't know	1	1464	
.	Missing	25	1489	

VTQ280H		Target		
		B(20 Yrs. to 59 Yrs.)		
Hard Edits		SAS Label		
		Breathe fumes from varnish?		
English Text: In the last three days, did you breath fumes from varnish or stain?				
English Instructions:				
Code or Value	Description	Count	Cumulative	Skip to Item
1	Yes	38	38	
2	No	1423	1461	
7	Refused	3	1464	
9	Don't know	0	1464	
.	Missing	25	1489	