

SOME RESULTS FROM THE TELEPHONE HEALTH INTERVIEW SYSTEM

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This paper presents some initial results from the Telephone Health Interview System (THIS) of the National Center for Health Statistics (NCHS). One of the major objectives in the establishment of the Survey Intelligence System at NCHS in 1978 was the development of a telephone interview system. Such a system permits NCHS to: (a) provide technical assistance to health planning agencies conducting telephone surveys, (b) supplement the Center's various survey activities, (c) conduct demonstration telephone surveys, and (d) conduct research on the collection of health data using the telephone as the data collection mode (Massey 1978).

In mid-1978, the THIS planning and development staff was assembled. In September, a core telephone interviewing staff was recruited and trained, and in October 1978, THIS initiated its first telephone interviewing using a national random digit dialing sample.

The first telephone interview was a telephone adaptation of the National Health Interview Survey (HIS) Cigarette Smoking Supplement (Fuchsberg 1978). The HIS Smoking Supplement is a self-respondent interview about cigarette smoking with one-third of the persons 17 years of age or older in the sample household. The first THIS interview was the same smoking interview, with necessary modifications for telephone application, conducted with all 17 year old or older household members as self-respondents.

Although its first data collection was performed to provide procedures and refinements for the System, from start, the THIS has dedicated a portion of its activities to telephone survey methodological interest. Some procedure refinements for greater precision of the System components continued past the three months, but most of the System procedures were established by January of 1979.

Since January, the telephone interviewing staff has been expanded and data collected in four separate national random digit dialing samples. Each sample consisted of approximately 3,000 total telephone numbers. All samples were surveys of the population 17 years of age or older in telephone households in the 48 contiguous states, using the cigarette smoking supplement requiring self response by all eligible respondents in the household.

This paper presents some results of telephone interviewing of multiple respondents within the household from the most recent THIS interviewing.

Disposition of Telephone Numbers

This section describes the results of calling samples of randomly generated telephone numbers, 3,819 primary generation numbers and 4,764 secondary generation numbers. The sampling procedure used is an adaptation of the system for random digit dialing samples by Waksberg (Waksberg 1978).

Briefly, the sampling procedure requires generation of a primary probability sample of 1,000 six-digit area codes and exchanges from the universe of all area codes and exchanges in the United States on a systematic basis starting at a random point. To these six digits, four additional digits, selected in a systematic procedure for generation of random digits, are added to produce the ten-digit primary telephone numbers. Primary Telephone numbers are then dialed. For all primary telephone numbers in-scope (i.e., identified as a residence household), the area code, exchange and bank (i.e., the one-hundred series telephone number suffix) are used to produce secondary telephone numbers by systematically selecting pairs for the last two digits of the four-digit suffixes. Secondary telephone numbers are dialed until a Cluster of eight in-scope numbers are identified from each set of secondary numbers generated from a primary number.

Table 1 presents results by sample type, with definitions of the various final disposition labels below the table. Among the results which are no contacts, as expected, primary telephone numbers show a greater proportion (72%) of no contact numbers than secondary telephone numbers (26%). Secondary telephone numbers are generated only from known household primary numbers. Almost three-quarters of the primary telephone numbers and about one-quarter of the secondary telephone numbers resulted in the no contact categories.

Of the no contact categories, the non-working number group is the largest. This category varies most between the primary and secondary numbers (45% and 14%, respectively).

Seven percent of the primary numbers and less than one percent of the secondary numbers resulted in "busy" signals, most being the "fast busy." Three percent of both the primary and the secondary numbers received ringing responses but were never answered. Some of these are probably non-working numbers. The remaining types of no contact results apply to numbers whose non-working status is more confirmed.

The ring/no answer category illustrates the importance of call rules applied in telephone surveys. THIS experimented with two call-rules for this category. The first sample followed a rule of five calls only, in a one-week day, night, week-end rotation pattern, and the ring/no answer results were 7%. Refining call rules after the first sample to require more than eight calls and a rotation over a two-week period, the ring/no answer category reduced to about half (3%) that of the five rule procedure. The longer, more controlled call rule for ring/no answer results is important to the precision of the THIS sample.

Non-household numbers constitute 7%-8% of the samples; only slight differences between primary numbers and secondary numbers. Most of the non-household numbers are businesses.

The primary and secondary number samples differ greatly in the percentage of households found. Only one-fifth of the primary numbers are in-scope while two-thirds (66%) of the secondary numbers are in-scope. The greater efficiency of the two-stage sampling procedure over strict random digit procedures which produce all numbers in the primary stage only, is clear in this comparison.

The final dispositions achieved in these samples are comparable to results from other research with national random digit dialing samples (Kahn and Groves 1977).

Disposition of Household Telephone Numbers and Analysis of Household Refusal by First Contact

Among the household telephone numbers, two percent did not qualify for interview because there were no 17 year old or older residents or because all eligible respondents were not available during the interviewing period. Thirteen percent of most households fell in non-response categories, being either refusals or break-offs by the first person answering the telephone. (An initial break-off is a termination by the first person during the questions determining the household composition, i.e., after the introduction and explanation of the survey but before the first cigarette smoking question).

A total of 85% of the households resulted in one or more interviews with eligible respondents in the household. All eligible respondents were interviewed in 72% of the households and at least one of the eligible respondents in the household was interviewed in 13%. These results with households include recontact of refusals, a routine procedure of THIS interviewing.

Results from an earlier sample indicate that recycling refusals and break-offs, i.e., recontacting to attempt to "convert" these initial results to interviews, yields an additional 2%-3% of households with interviews. About 30% of initial refusals and initial break-offs yield one or more interviews in the recycled households and a greater portion of individual person refusals and break-offs (partially completed households) yield interviews in these types of recycled households.

It has been suggested that the problem of telephone non-response "may center on the first few moments of interaction, when the interviewer introduces himself/herself and the research organization, reviews the research goals, and attempts to establish rapport with the household member answering the call" (Kahn and Groves 1977). THIS household non-response occurred in the initial period of contact, with the person answering the call, and tends to support this claim. Table 3 presents an analysis of the first household contact refusal and break-offs.

Twenty-two percent of those first persons contacted who indicated that they did not wish to continue with the call did so at the introduction of the call, either at the point the interviewer made the brief statement that he/she was "calling for the Public Health Service in Washington" or at

the first question, immediately after this introduction, which asked for verification of the telephone number dialed.

Twenty-five percent of the first household contacts not continuing with the call broke off at the three-statement explanation of the survey subject and purpose. An additional 22% refused to continue with the contact during the mandatory statements of respondents' voluntary participation and the guarantee of confidentiality.

Only one-third of the initial household contacts who terminated the contact before interview heard the introduction, the explanation of the survey subject and purpose, the statements of respondents' rights and guarantee of confidentiality but broke the contact off during the sequence of questions defining the eligible persons and enumerating the household members.

The tendency for household refusals to occur early in the contact with the household is further supported by information about the person non-response among those households where all eligible respondents were not interviewed.

Of the 50% of eligible respondents in partially completed households who were not interviewed, 21% of those not interviewed were not interviewed because another household member refused to bring them to the telephone after completing his or her own interview. These proxy refusals occur, of course, in the early contacts with the household. Persons refusing to conduct their own interviews or breaking then off after starting were only 12% of the eligible respondents in the partially completed households, as shown in Table 4.

Initial Response Rates

This section addresses the question of response rates in the THIS' initial work. Unlike many telephone surveys which interview one respondent per household, the initial survey efforts of the THIS have been with surveys interviewing multiple respondents within the same household, after establishing who among the household members are eligible.

Since the focus in multiple respondents per household is two-fold, household and person, response rate is not simply summarized in a single reference. Table 5 presents response rates according to several definitions, recognizing the different contexts in multiple respondent household surveys.

These initial response rates for THIS also include other considerations unique to telephone surveys. The occurrence of telephone numbers in a sample which result in only rings with no answering creates a problem of the classification of such numbers as households or non-households in calculating response rate. Although procedures for the sequence number and duration over time of dialings for those numbers which yield ringing and no answers on the initial dialing have been refined in the THIS to yield only about 3% (See Table 1) ring/no answers, the indefinite states of these numbers still requires the assumption that they may be "good" households in a determination of response

from the sample. Consequently, the response rates reported for the THIS initial work include an "adjusted" response rate, adjusted for the "ring/no answer" disposition telephone numbers. This "adjusted" rate gives the "lower bound" of response. (The THIS recycle procedure, i.e., the second series of dialings after a final disposition, indicates that the "busy" category numbers are not households).

The multiple respondent rule in the THIS surveys introduces another aspect of response rate review. In addition to a rate of response, it is of some interest to determine the degree of cooperation received in the interviewing effort. This rate, termed a cooperation rate, focuses on the differences between all units (households or persons) defined in-scope and those in-scope units actually contacted and interviewed. The cooperation rate indicates the degree of success with those households or persons among the eligibles who were actually available. It is a response rate particularly descriptive for multiple respondent samples.

Three categories of responses are presented in Table 5, each showing the base response rate, the adjusted (for ring/no answer) response rate, and the cooperation rate. The three categories are: (1) household, (2) overall, and (3) person response rates.

The household response rate, which is households wherein one or more eligible respondents were interviewed as a function of all in-scope households, is .85. The household response rate adjusted wherein the ring/no answer household is assumed to be equal to an in-scope household, is .78. The household cooperation rate, which is households with one or more eligible respondents interviewed as a function of all households wherein interviews should have been conducted is .86.

The overall response rate, which is households with all eligible respondents interviewed plus the households with only some eligible respondents interviewed multiplied by the proportion of interviewed eligible respondents in those partially completed households, as a function of all in-scope households in the sample, is .78. The adjusted overall response rate, where the base includes ring/no answer dispositions as households, is .73. And the overall cooperation rate is .80.

The person response rate, which is persons interviewed as a function of all known eligible respondents plus estimated eligible respondents in the unenumerated households is .76. The adjusted person response rate, where the base includes ring/no answers by 2.0 (the average number of persons per household among the completed households) is .71. And the person cooperation rate, the persons interviewed as a function of all persons who were enumerated and were available for interview, is .80.

Number of Calls Made to Sample Numbers

It has been pointed out that the overall distribution of the number of calls required to determine the status of each type of telephone number in a telephone survey does not reveal the

large differences in the number of calls required to determine each type of disposition primarily because of the large proportion of non-working numbers in a random digit dialing sample. (Kahn and Groves 1977). For this reason, Table 6 presents the number of calls required to reach the final status for each of the final disposition categories and not for the sample as a whole.

About one-fifth of the telephone numbers resulting in a final "busy" or "ring/no answer" status required a minimum of eight calls. In contrast, most non-working telephone numbers were identified in the first call (83%). Kahn and Groves found over 85% of non-working numbers from a random digit dialing sample identified on the first call (with a second dialing to assure no misdials) (Kahn and Groves 1977). Eighty-nine percent of THIS numbers resulting in other no-contact statuses were identified in three calls.

The THIS rules for placing calls, in addition to specified rotation of calls during days, nights and week-ends over a two-week period for "busy" and "ring/no answer" results, include an immediate verification re-dial on any first "busy," "ring/no answer," or recorded telephone company message result. The effect of extending dialing rules on initial "ring/no answer" outcomes, with consequent reduction of the number of these uncertain final status, has been noted earlier.

Telephone numbers resulting in contact generally require more calls to define status than those not yielding contact. Non-household status, however, requires fewer calls than numbers which are households. The non-household numbers are mostly businesses (See Table 1) which tend to answer calls soon after ringing.

Interviewed households require more calls than those not interviewed. Initial refusals and initial break-offs occurred in an average of 3.3 calls, while households wherein contact was made and persons were interviewed required an average of four to six calls. Seventy-seven percent of households wherein all eligible respondents were interviewed reached this final disposition status in five or less calls. These are multiple respondent households of an average of two eligible respondents. Kahn and Groves reported about three-quarters of working household numbers disposed in five or fewer calls in a one respondent per household survey (Kahn and Groves 1977).

Number of Calls to First Contact

The analysis of the number of calls to reach final disposition provides some measure of the extent of effort required in telephone interview surveys. However, the character of the first contact to households gives fuller insight into multiple respondent interviewing telephone surveys such as the THIS is conducting.

Table 7 shows the number of calls to make a first contact in households wherein eligible respondents were present. Among initial refusals and break-offs, 94% of the first contacts were made in five or less calls with an average of 2.1 calls required for first contact. Households wherein one

or more respondents among the eligibles present were interviewed were first contacted in an average of 2.4 calls, with 92% requiring five or less calls. This slight difference in the number of calls to first contact for these two categories of results is probably simple random variation.

Analysis of the number of calls to first household contact, persons eligible for interview within the households and the number of persons interviewed in the first contact is presented in Table 8. Ninety-four percent of eligible respondents are identified in the first household contact occurring in the first to the fifth call. Sixty-two percent of the eligible respondents identified are interviewed on the first household contact. The percent of eligible respondents interviewed on the first contact varies little with the call on which the first contact occurs, especially in those households where the first contact occurs in four or less calls.

The significance of the relatively few calls to reach most households and the percent of respondents interviewed in the first contact is important in interviewing multiple respondents. Table 8 shows an average of 2.0 calls makes first contact with the household in which 62% of eligible respondents are interviewed. Table 6 shows an average of 3.9 calls to households with interviews are required to reach their final status of one or more eligible respondents interviewed. On an average, about two additional calls, after the first contact, completed the interviewing in these multiple respondent households.

An average of 3.9 calls per household were required to obtain multiple interviews per household in these THIS initial results. The average 3.9 calls were required to complete all eligible interviews in those households wherein all were interviewed and an average of 5.9 calls were required to obtain one or more interviews in those households partially completed. The overall average number of calls to interviewed household is 4.2 Kahn and Groves reported an average of four calls per working household number in the survey with one respondent per household (Kahn and Groves 1977).

Day and Time of Call

Not only is the number of calls to reach final disposition status in a telephone random digit dialing survey useful in understanding telephone survey mechanisms, but the possible differences which may occur by the day of the week and the time of the day the calls are made is also useful.

Data from the initial work of the THIS was analysed for indications of a "best" day and time for placing calls. Possibilities for most efficient call rules may exist from indications of more fruitful days and/or times for reaching households. The researcher must, however, consider possible biases which may result in being too selective in times and days for dialing. Respondent characteristics may vary according to those available at the selected time or day. Non-response may tend to be among select segments of the population because their time or day of availability is excluded.

The THIS will review these questions in future analysis of time and day of call.

Table 9 presents information about the respondent's day and time of the first call. The proportion of all households which are contacted on the first call overall is 54%. Saturday (64%) is a better day for first call contact with households than other days. Weekdays (Monday through Friday) from 5PM to 10PM show a higher proportion of first call household contacts than other weekday hours.

A greater proportion of household first contacts occur after 5PM and a higher proportion of initial refusals and initial break-offs also occur at those times. The highest proportion (10%) of initial refusals and initial break-offs occur at the 5PM-6PM hour (the respondent's dinner hour) and at the later 9PM-10PM hour.

Week-day mornings and hours from 6PM in the week-day evenings show the highest proportions (over 61%) of interview among eligible respondents identified on first call contacts. Although the frequency is low for the time category, Sunday first call contacts show the highest proportion of interviews of eligible respondents (65%) among all days.

Table 10 presents similar information about the first household contact. Sixty-eight percent of all eligible respondents are at home on the first contact and 62% are interviewed on the first contact. Saturdays (71%) and Sundays (72%) are better days for finding eligible respondents at home on the first contact, but the proportion of eligibles interviewed on these days does not differ by more than random chance from the proportion interviewed on week-days.

Morning hours on both week-days and Saturdays show the highest proportion of eligible respondents at home who are interviewed (97%, 98%). Any hours other than week-day afternoon are times the greatest proportion of eligible respondents are at home on the first household contact. The proportion of eligible respondents interviewed on the first household contact are correspondingly highest at these times. Little real difference occurs by day-of-week in the proportion of eligible respondents at home or the proportion interviewed on the first household contact.

From information such as is shown in Tables 9 and 10 analysing the day and time of calls and interviews, an "index of interview likelihood" could be constructed for each dialing day and time category to assist in such questions as interviewer scheduling and times for call-backs. Such use of day and time analysis should, however, be used with caution to assure that other considerations of sample representativeness are not jeopardized by too selective interviewing schedules.

The THIS will make further inquiries of day and time of calls to and contacts with households and persons on data about scheduled and unscheduled call-backs to reach other household members. Experimentation with optimal calling days and times will be conducted in future THIS methodological research.

Summary

The telephone Health Interview System at the National Center for Health Statistics conducted its initial interviewing in several national random digit dialing samples, interviewing multiple self-respondents within households with 17 year old or older members on an interview about cigarette smoking.

Some results of this initial experience were presented, including dispositions of the telephone numbers, response rate and cooperation rate for households and for persons, an analysis of initial refusal and initial break-off dispositions and of households wherein only part of the total eligible persons were interviewed, an analysis of the first calls made to households and the first contact, and an analysis of the day and time of the first dialings on household calls and of first household contact with some information about the day and time persons were interviewed.

The THIS plans to continue extended methodological inquiries focused on multiple self-respondent interviews by telephone and on broader questions of national and local surveys using the telephone as the mode for data collection.

References

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Massey, James T., "New Initiatives Involving the Health Interview Survey". National Center for Health Statistics, paper presented at the 1978 Annual Meeting of the American Statistical Association.

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Table 1. Frequency Distribution of Telephone Number Final Disposition

	Primary Numbers		Secondary Numbers	
	Number	Percent	Number	Percent
Total	3,319	100	4,764	100
No contact	2,734	72	1,223	26
Busy	268	7	13	*
Ring/No answer	109	3	162	3
Non-working	1,710	45	648	14
Wrong connection	155	4	213	4
Other no contact	492	13	187	4
Non-household	284	7	398	8
Business	218	6	286	6
Other	66	1	112	2
Household	810	21	3,143	66

* Less than .5 Percent

Busy - numbers yielding the fast busy (120 interruptions per minute) or regular busy (60 interruptions per minute), at least eight calls.

Ring/No answer - numbers consistently yielding ringing only, at least eight calls.

Non-working - numbers yielding recordings or operator intercepts which told the caller that the number was non-working.

Wrong connection - numbers answered by people who reported "No" to the question, "Is this (telephone number)?"

Other no contact - numbers yielding no results from dialing, the record "Call cannot be completed as dialed" twice, or information that the number is changed.

Non-household - business, institutions, group quarters and other numbers not fulfilling the household residence definition.

Household - residence of five or less persons, either related or unrelated, or more than five related persons.

Table 2. Frequency Distribution of Household Telephone Number Final Disposition

	Number	Percent
Total household telephone numbers	3,944	100
No interview appropriate	92	2
Initial refusal (during introduction)	307	8
Initial break-off (during HH roster)	170	4
Other non-interview	36	1
Partially completed household	507	13
Person refusal or break-off and proxy refusal	288	7
Other 1/	219	6
Completed household	2,832	72

1/ Hearing; speech and other communication problems; eligible person respondent not available.

Table 3. Analysis of First Household Contact Refusals and Break-offs

	Number	Percent
Initial refusal and initial break-off	477	100
Call introduction	36	8
First question	68	14
Explanation of survey	118	25
Explanation of respondent rights	66	14
Statement of confidentiality	40	8
Household composition questions	149	31

Table 4. Analysis of Partially Completed Households

	Number	Percent
Total partially completed households	507	100
Eligible respondents	1,313	100
Interviewed respondents	650	50
Non-interviewed respondents	663	50
Proxy refusal 1/	279	21
Person refusal	107	8
Person break-off	48	4
Other non-interview 2/	229	17

1/ Proxy refusal - an eligible respondent in the household refusing to bring one or more other eligible respondents to the telephone for interview.

2/ Hearing, speech, and other communication problems; eligible respondent(s) not available.

Table 5. Initial Response Rates

Category	Calculation	Rate
Household response =	$\frac{\text{Completed HH} + \text{partially completed HH (i.e. HH with one or more interviews)}}{\text{All in-scope HH}}$	= .85
Household response, adjusted =	$\frac{\text{Completed HH} + \text{partially completed HH}}{\text{All in-scope HH} + \text{ring/no answer}}$	= .78
Household cooperation =	$\frac{\text{Completed HH} + \text{partially completed HH } 1/}{\text{All in-scope HH less non-interviewed HH } 1/}$	= .86
Overall response =	$\frac{\text{Completed HH} + (\text{proportion interviewed in partially completed HH} \times \text{partially completed HH})}{\text{All in-scope HH}}$	= .78
Overall response, adjusted =	$\frac{\text{Completed HH} + (\text{proportion interviewed in partially completed HH} \times \text{partially completed HH})}{\text{All in-scope HH} + \text{ring/no answer}}$	= .73
Overall cooperation =	$\frac{\text{Completed HH} + (\text{proportion interviewed in partially completed HH} \times \text{partially completed HH})}{\text{All in-scope HH less non-interviewed HH } 1/}$	= .80
Person response =	$\frac{\text{Persons interviewed}}{\text{All eligible respondents (including 1st person breakoff known) + 2.0 (initial refusal HH + initial break-off HH + non-interview HH } 1/)}$	= .76
Person response, adjusted =	$\frac{\text{Persons interviewed}}{\text{All eligible respondents (including 1st person break-off} \times 2.0) + 2.0 (\text{initial refusal HH} + \text{initial break-off HH} + \text{non-interview HH } 1/ + \text{ring/no answer})}$	= .71
Person cooperation =	$\frac{\text{Persons interviewed}}{\text{All eligible respondents less non-interviewed persons } 1/ + 2.0 (\text{initial refusal HH} + \text{initial break-off HH})}$	= .80

1/ Households or persons not interviewed because no eligible respondent was available or for hearing, speech or other communication problems.

Table 6. Frequency Distribution of Final Disposition by Number of Calls Placed

	Busy	Ring/ No Answer	Non- Working	Other No Contact	Non- Household	Non- Interview/ Household ^{1/}	Initial Refusal, Initial Break-off ^{1/}	Partially Completed HH ^{1/}	Completed Households
Number	286	271	2,358	1,047	682	92	477	507	2,832
Percent	100	100	100	100	100	100	100	100	100
Number of calls:									
1	-	-	83	67	50	44	33	14	22
2	-	-	10	17	20	18	21	14	21
3	-	-	4	5	12	15	11	11	15
4	-	-	1	3	6	3	10	11	11
5	-	-	1	2	3	3	8	7	8
6	-	-	1	2	3	8	5	8	6
7	-	-	*	1	1	2	4	6	5
8	22	23	*	1	2	-	3	6	4
9 or more	78	77	*	2	3	7	5	23	8
Mean	10.0	10.4	1.4	1.9	2.9	2.9	3.3	5.9	3.9
Range	8-17	8-17	1-14	1-16	1-17	1-17	1-15	1-17	1-17
* Less than .5percent									
^{1/} Includes recycle calls, i.e return calls to those households / persons who had refused once.									

Table 7. Analysis of Number of Calls to First Household Contact

	Total In-scope Households	Initial Refusal, Initial Break-off	Completed and Partially Completed Households
Number	3,559	488	1,428
Percent	100	100	100
Calls to first contact:			
1	55	59	51
2	20	17	21
3	8	8	9
4	6	5	6
5	4	5	5
6	2	2	2
7	2	1	2
8	1	1	2
9 or more	2	2	2
Mean	2.2	2.1	2.4

Table 8. Persons Interviewed on First Household Contact and Number of Calls to First Interview

	Eligible Resp. Number	Percent	Number of Eligible Respondents Interviewed	Percent Eligible Respondents
	5,697	100	3,556	62
Calls to first contact:				
1	3,269	57	1,970	60
2	1,136	20	724	64
3	470	8	309	66
4	310	5	186	58
5	193	4	140	73
6	120	2	79	66
7	83	1	62	75
8	48	1	35	73
9	31	1	22	71
10 or more	37	1	29	81
Mean	2.0		2.1	

Table 9. Analysis of First Household Call by Day and Time of Respondent

Respondent Day/Time of First Call:	First Call Households Number	Proportion of:		
		HH Contacts on First Call	Initial Refusals Break-offs on First Call	Identified Respondents Interviewed on First Call
		Percent	Percent	Percent
	3,807	54	7	60
Monday-Friday				
10AM-Noon	3,583	53	7	60
Noon-2PM	174	46	5	66
2PM-3PM	278	40	3	57
3PM-4PM	374	40	6	59
4PM-5PM	530	40	5	54
5PM-6PM	469	50	7	58
6PM-7PM	367	61	10	58
7PM-8PM	342	67	9	66
8PM-9PM	418	68	8	61
9PM-10PM	320	66	9	64
Time undetermined	52	62	10	54
Saturday	214	49	4	66
10AM-Noon	204	64	7	59
Noon-2PM	43	74	9	60
2PM-3PM	91	63	4	59
3PM-4PM	10	60	-	57
4PM-5PM	60	60	10	60
Time undetermined	65	51	2	65
Sunday	23	39	-	73
Noon-2PM	19	47	-	59
2PM-3PM	9	67	-	50
3PM-4PM	9	56	11	67
4PM-5PM	7	57	-	64
Time undetermined	795	53	6	61
Monday	667	51	7	59
Tuesday	699	54	7	59
Wednesday	726	57	7	60
Thursday	651	50	7	63
Friday				

Table 10. Analysis of First Household Contact by Day and Time of Respondent

Respondent Day/Time of First Contact:	First Contact Households Number	Proportion of:		
		Eligibles at Home on First Contact	At Home Eligibles Interviewed on First Contact	Eligibles Interviewed on First Contact
		Percent	Percent	Percent
	3,220	68	91	62
Monday-Friday				
10AM-Noon	2,806	68	91	62
Noon-2PM	149	72	97	70
2PM-3PM	162	64	93	59
3PM-4PM	178	63	92	58
4PM-5PM	238	61	91	55
5PM-6PM	310	65	90	58
6PM-7PM	346	64	92	58
7PM-8PM	308	73	90	66
8PM-9PM	301	69	91	63
9PM-10PM	354	73	90	66
Time undetermined	59	71	87	61
Saturday	221	71	96	68
10AM-Noon	326	71	91	65
Noon-2PM	109	66	98	64
2PM-3PM	87	69	86	60
3PM-4PM	12	71	92	65
4PM-5PM	118	77	90	69
Time undetermined	88	72	91	65
Sunday	34	78	90	70
Noon-2PM	24	67	100	67
2PM-3PM	16	69	85	59
3PM-4PM	6	77	90	69
4PM-5PM	9	67	86	57
Time undetermined	623	68	92	62
Monday	567	69	91	63
Tuesday	547	66	90	60
Wednesday	593	66	92	61
Thursday	476	70	93	65
Friday				