

8. SURVEY FIELD RESULTS

This chapter presents the field results of the 2001 National Survey of Veterans (NSV 2001) data collection effort. We first examine the final sample yields and response rates of completed interviews against the sample design targets. Next, we detail the call results for each type of instrument and sample. We also present analyses of selected operating statistics such as location and cooperation rates.

8.1 Completed Interviews

The NSV 2001 had sample targets of 13,000 completed extended interviews from the household screening of RDD telephone numbers and 7,000 completed extended interviews from the List Sample, for a total of 20,000 completed extended interviews. Overall, we achieved 100.2 percent of that target. For the RDD sample, we achieved 99.7 percent of the target and for the List Sample, we achieved 101.3 percent of the target.

8.2 Completed Interviews by Sample Stratum

List Sample

The NSV 2001 sample design set interview completion targets by sample stratum for both the List and RDD Samples. The main objective of the List Sample stratification was to augment the sample with veterans in the mandatory health care enrollment priority groups (groups 1 through 6), and with female veterans. The List Sample target for the female veterans was 581 completed extended interviews, and we achieved 99.1 percent of that target (576 completed interviews with female veterans). The List Sample targets for African American and Hispanic veterans were 574 and 280, respectively. We completed 897 extended interviews with African American veterans, and 344 extended interviews with Hispanic veterans. Thus, we almost met the target for female veterans and exceeded the targets for African American and Hispanic veterans. We attribute the higher than expected number of completed extended interviews for these two groups to the fact that the list frame contained a higher proportion of these minority groups than exists in the veteran population, and the latter rate is what we had assumed for sample design purposes.

We also compared the target and achieved List Sample completed extended interviews by priority groups (Table 8-1). PRIOADJ3 represents the priority group as it appeared on the list frame.

Table 8-1. Target versus achieved List Sample completed extended interviews by priority group (PRIOADJ3)

PRIOADJ3	Target	Achieved	Percent of Target
1	1,239	1,410	113.8
2	1,200	1,354	112.8
3	1,636	1,758	107.5
4	931	549	59.0
5	1,231	1,179	95.8
6	763	842	110.4
TOTAL LIST	7,000	7,092	101.3

We exceeded the target for four out of the six mandatory priority groups. The two groups where we fell short were priority group 5, for which we achieved almost 96 percent of the target, and priority group 4, for which we achieved only 59 percent of the target. It turns out that we underestimated the proportion of priority group 4 veterans that would be ineligible for the survey because they were institutionalized or deceased. The proportion ineligible among the priority group 4 veterans was 30.9 percent, whereas less than 5 percent of veterans in priority groups 2, 3 and 6 were ineligible, and just over 7 percent of priority groups 1 and 5 veterans were ineligible (see Table 8-4).

The target List Sample counts by priority group were derived from the list frame variable, PRIOADJ3. Information on the List frame was for a particular point in time. It is possible that by the time we interviewed the veteran this information had changed, thus putting that veteran in a different priority group. Table 8-2 gives the cross-tabulation of the priority group as it appeared on the list frame (PRIOADJ3) and that determined from survey responses (Observed Priority). Based on the survey responses, the number of completed extended interviews for priority group 4 veterans was much smaller than expected based on the number of priority group 4 veterans on the list frame. In fact, many veterans recorded on the list frame as belonging to priority group 4 turned out to be priority group 5 veterans. As a result, only 81 of the List Sample eligible respondents who were priority group 4 veterans on the list frame were actually categorized as belonging to priority group 4 on the basis of their survey responses. At the

same time, a large number of veterans recorded on the List frame as priority group 5 or priority group 6 turned out to belong to other priority groups. From priority group 5, 253 veterans were observed to belong to priority group 7. From priority group 6, 419 veterans gave survey responses that categorized them as belonging to priority groups 3, 5 or 7.

Table 8-2. List priority (PRIOADJ3) by observed priority

PRIOADJ3	Observed Priority							ALL
	1	2	3	4	5	6	7*	
1	1,308	28	14	1	16	16	27	1,410
2	85	1,105	54	4	36	16	54	1,354
3	23	65	1,475	1	61	34	99	1,758
4	13	6	10	94	345	8	73	549
5	7	4	15	4	839	51	259	1,179
6	14	23	72	1	194	395	143	842
TOTAL LIST	1,450	1,231	1,640	105	1,491	520	655	7,092

* 113 cases with unknown "Observed Priority" have been combined with priority 7.

We did not ask questions about catastrophically disabled veterans on the survey. These veterans fall into priority group 4. Pensioners receiving aid and attendance were classified into either priority group 4 or priority group 5. Priority group 6 veterans on the List sampling frame were those enrolled for VA health care who were coming or planning to come to the VA solely for treatment for disorders associated with exposure to a toxic substance, radiation, or for disorders associated with service in the Persian Gulf. Veterans who did not meet the criteria for priority groups 1 through 5 and indicated exposure (regardless of whether they were presently enrolled for this type of care) were classified into priority group 6. Priority group 6 also included compensated veterans with a zero percent rating who did not meet the criteria for priority groups 1 through 5.

RDD Sample

We made assumptions about the distribution of the veteran population across various subgroups, and used those assumptions to arrive at our sample design targets for each subgroup. Because of sampling variability, we expected the observed yields to differ somewhat from those targets, even if our assumptions were correct. However, since the observed yields depended on

the actual (not assumed) distributions of the veteran population across subgroups, the difference could be larger.

We set an RDD Sample target of 662 completed extended interviews with female veterans, and actually completed 699 interviews (105.6 percent of the target). The targets for African American and Hispanic veterans were 1,066 and 520 completed extended interviews, respectively. We completed 983 extended interviews with African American veterans (92.2 percent of the target), and 558 extended interviews with Hispanic veterans (107.3 percent of the target) .

Table 8-3 shows that, while we met the overall target for the RDD Sample, there was considerable variability among the individual priority groups. According to the veteran population distribution used for the NSV 2001 sample design (see Chapter 3), the two smallest priority groups were groups 4 and 6. However, the number of veterans in priority group 4 turned out to be only a fraction (17.4 percent) of what we projected from our assumed distribution. On the other hand, the number of veterans belonging to priority group 6 was 41 times what we expected. This could be partially due to the fact that the absolute numbers for the RDD targets for priority groups 4 and 6 were also very low, which led to large percentage differences. Also, for Priority 6 the definition for the target population was slightly different than what was used to count the achieved number. Data used to estimate the target population was only available for veterans using VA facilities solely for treatment of environmental exposures, whereas the observed population considered anyone stating they had been exposed to environmental hazards regardless of treatment. The RDD Sample completed extended interviews for priority group 5 also fell significantly short, at just over 70 percent of the target.

Table 8-3. Target versus achieved RDD Sample completed extended interviews by priority group

Observed Priority	Target	Achieved	Percent of Target
1	295	371	125.8
2	271	300	110.7
3	661	741	112.1
4	69	12	17.4
5	3,731	2,636	70.7
6	36	1,479	4,108.3
7*	7,937	7,417	93.4

TOTAL RDD

13,000

12,956

99.7

* 61 cases with unknown "Observed Priority" have been combined with priority 7.

8.3 List Sample Extended Interview Results and Response Rates

For the NSV 2001 List Sample, we attempted to complete extended interviews with a total of 13,129 individuals. With 7,092 of these, we were successful in our attempts. Of the remaining cases, we determined that 1,151 were out of scope, principally because they were deceased or institutionalized, and 427 were, for a variety of reasons, eligible nonrespondents. We could not determine the eligibility of 4,459 cases, mainly because the veterans could not be located.

As described in Chapter 6, we divided sample cases into four eligibility and response categories – eligible respondents, ineligible (out of scope), eligible nonrespondents, and eligibility unknown. Table 8-4 shows these response status categories for the six priority groups, as represented by the list frame variable PRIOADJ3. The proportion of eligible respondents was much lower for priority group 4 veterans as compared to the other priority groups. This was due to the large proportion of priority group 4 veterans that were ineligible (out of scope) for the survey. The proportion of eligible nonrespondent veterans was roughly the same across all priority groups except priority group 6, for which that proportion was slightly lower.

Table 8-4. Response status by priority group (List Sample)

PRIOADJ3	Eligible Respondent	Eligible Nonrespondent	Ineligible	Eligibility Unknown
1	60.7	3.8	7.1	28.4
2	60.1	3.4	4.3	32.2
3	57.3	3.0	3.9	35.8
4	31.4	3.0	30.9	34.7
5	51.1	3.4	7.4	38.1
6	58.9	2.7	4.1	34.3
TOTAL LIST	54.0	3.2	8.8	34.0

Table 8-5 shows telephone interviewing results by age group (less than 50, 50 to 64, and over 64). The proportion of ineligible persons increased monotonically with age because the

incidence of institutionalized and deceased persons increases with age. On the other hand, the proportion of eligibility unknown respondents decreased monotonically with age because it is more difficult to locate younger

Table 8-5. Response status by age group (List Sample)

Age Group	Eligible Respondent	Eligible Nonrespondent	Ineligible	Eligibility Unknown
Less than 50	48.0	2.9	1.9	47.2
50-64	59.5	2.6	4.0	33.9
Over 64	53.7	3.9	16.7	25.7
TOTAL LIST	54.0	3.2	8.8	34.0

veterans. The proportion of eligible nonrespondents was slightly higher for elderly veterans (over 64 years) mainly because these persons were more likely to be too incapacitated to respond to the survey. For the same reason that younger veterans (less than 50 years) were more likely to fall into the eligibility unknown category, a lower proportion of them were eligible respondents.

Table 8-6 gives the distribution of response status for male and female veterans. The proportion of ineligible male veterans was almost twice that of female veterans, mainly because males are more likely to be institutionalized or deceased. On the other hand, the proportion of eligibility unknown respondents was higher for female veterans because we had less information with which to locate them. As a result, the proportion of eligible female veteran respondents was slightly lower than that of male veterans.

Table 8-6. Response status by gender (List Sample)

Gender	Eligible Respondent	Eligible Nonrespondent	Ineligible	Eligibility Unknown
Male	54.1	3.3	9.1	33.5
Female	52.8	3.2	4.8	39.2
TOTAL LIST	54.0	3.2	8.8	34.0

Table 8-7 shows the List Sample veteran response status distributed across census regions. The proportion of eligibility unknown respondents in the Midwest region was slightly lower and the proportion of eligible respondents slightly higher than those in the other three

regions. The proportion of ineligible persons was slightly lower in the West, although the proportion of eligible nonrespondents was almost the same in that region as in all others.

Table 8-7. Response status by census region (List Sample)

Census Region	Eligible Respondent	Eligible Nonrespondent	Ineligible	Eligibility Unknown
Northeast	51.6	3.0	10.5	34.9
Midwest	56.8	3.6	9.7	29.9
South	54.1	3.2	8.6	34.1
West	53.0	3.2	6.8	37.0
TOTAL LIST	54.0	3.2	8.8	34.0

8.4 RDD Household Screening Results and Response Rates

As discussed in Chapter 6, the RDD Sample screening criteria was somewhat loose. Since we asked one household member to report military service for all other household members, we knew that some screener respondents would not have enough knowledge to provide definitive information for determining veteran status. Therefore, we asked detailed military service questions of all potential veterans (or their knowledgeable proxies) identified and selected for an extended interview through the screening process. The results of this approach are shown in Tables 8-8 and 8-9. A total of 305,500 telephone numbers were sampled for the RDD Sample. Of these, 300,000 were sampled from the 50 states and District of Columbia using a list-assisted random digit dialing method (national RDD Sample) and 5,500 were sampled from Puerto Rico using a naïve RDD sampling method (Puerto Rico RDD Sample).

Of the 300,000 telephone numbers sampled for the national sample, 205,949 were dialed. We did not call the remaining 94,051 numbers because we had identified them as nonworking or business numbers before data collection began. Table 8-8 shows the household level screening interview response status for the 205,949 list-assisted RDD Sample telephone numbers and the 5,500 Puerto Rico RDD Sample telephone numbers for which calls were attempted. As discussed in Chapter 6, there were no households with a response status of eligible nonrespondent because, by definition, a completed screening interview can be categorized as eligible or ineligible. Hence, we were able to assign an eligible or ineligible status to all completed screening interviews. If the household did not complete a screening

Table 8-8. Household screener interview results by sample type

Sample Type	Eligible Respondents	Ineligible	Eligibility Unknown
RDD National	18,810	116,212	70,927
RDD Puerto Rico	96	4,137	1,267
TOTAL RDD	18,906	120,349	72,194

interview, then we assigned the response status eligibility unknown. The RDD screener response rate was 67.6 percent.¹

We identified 18,906 RDD Sample households (national and Puerto Rico) as containing potential veterans and 120,349 as ineligible. We could not determine eligibility for the remaining 72,194 numbers. Of the 120,349 ineligible telephone numbers, 54,304 were residential telephone numbers (i.e., telephones for households with no veterans in them), and the rest were either business or nonworking telephone numbers. Thus, a total of 73,210 telephone households were identified during RDD screening and 18,906 had at least one potential veteran.

Table 89 shows the comparative results of the household screening process, in terms of the yield of households with potential veterans. Of all households screened, 25.8 percent (18,906) had at least one potential veteran. Because of the deliberately relaxed criteria for identifying potential veterans at this stage of the screening, the proportion of households with a potential veteran found during our screening process was higher than the proportion determined by the extended interview (22.1 percent). The assumption we made for the purpose of the sample design was that one out of every four households would be a veteran household (see Chapter 3).

Table 8-9. Distribution of telephone households by number of potential veterans in the household

	Households with number of Veterans in the Household equal to				All Households
	0	1	2	3 or more	
Count	54,304	17,936	909	61	73,210
Percent	74.2	24.5	1.2	0.1	100.0

¹ RDD screener response rate = (eligible respondents + ineligible respondents)/total dialed telephone numbers.

Table 8-9 also shows that 17,936 of the 18,906 veteran households (94.9 percent) had one potential veteran, while 4.8 percent of the veteran households contained two potential veterans. Only 61 households (0.3 percent of the veteran households) had more than two potential veterans.

8.5 RDD Sample Extended Interview Results and Response Rates

From the 18,906 RDD Sample screened household with potential veterans, we identified 19,950 potential veterans. Nearly two-thirds of these (12,956 out of 19,950 or 64.9 percent) completed the extended interview. Only 3.1 percent were eligible nonrespondents and 11.5 percent were out of scope (ineligible) for the survey because they were not actually veterans. The proportion with eligibility unknown was 20.5 percent.

The RDD Sample extended interview response rate, at 76.4 percent, was better than that for the List Sample (62.8 percent).² In part this is because a relatively higher proportion of List Sample veterans could not be located, which also meant they could not be contacted. The overall RDD Sample (screener and extended interview) response rate was 51.6 percent.³ Of the RDD Sample respondents, 64.9 percent were eligible veterans who completed the interview and 11.5 percent responded to the extended interview eligibility questions but were determined not to be veterans. Of the List Sample respondents, 54.0 percent were eligible veterans who completed the interview and 8.8 percent were determined not to be eligible. We could not determine eligibility for 20.5 percent of the screened RDD Sample cases or for 34.0 percent of the List Sample cases. The main reason for the higher proportion of List Sample cases with unknown eligibility was, again, our inability to locate them. This was not an issue for RDD Sample cases because contact was made during the household screening interview. There were no notable differences in the proportion of eligible nonrespondents between the RDD and List Samples (3.1 percent for the RDD Sample versus 3.2 percent for the List Sample). In the following sections, we compare the distributions of response status categories across age groups (Table 8-10), gender (Table 8-11) and census regions (Table 8-12).

² Extended interview response rate = eligible respondents + ineligible respondents/total [List or RDD] Sample.

³ Overall RDD Sample response rate= screener response rate * extended interview response rate.

Table 8-10. Distribution of response status by age groups (RDD Sample)

Age Group	Eligible Respondent	Eligible Nonrespondent	Ineligible	Eligibility Unknown
Less than 50	59.1	2.9	17.0	21.0
50-64	63.6	2.6	12.3	21.5
Over 64	70.9	3.7	6.5	18.9
TOTAL RDD	64.9	3.1	11.5	20.5

Table 8-11. Distribution of response status by gender (RDD Sample)

Gender	Eligible Respondent	Eligible Nonrespondent	Ineligible	Eligibility Unknown
Male	65.4	3.1	11.0	20.5
Female	58.1	2.8	19.6	19.5
TOTAL RDD	64.9	3.1	11.5	20.5

Table 8-12. Distribution of response status by census region (RDD Sample)

Census Region	Eligible Respondent	Eligible Nonrespondent	Ineligible	Eligibility Unknown
Northeast	64.7	3.5	11.8	20.0
Midwest	65.6	2.9	11.5	20.0
South	63.7	3.1	11.9	21.3
West	66.7	2.7	10.8	19.8
TOTAL RDD	64.9	3.1	11.5	20.5

Table 8-10 shows that the ineligibility rate decreased monotonically with age. That is, the proportion of potential veterans identified during the screening interview that were not actually veterans decreased with age. The proportion of elderly veterans (over 64) that did not respond to the extended interview was also higher than in the other two age groups.

The ineligibility rate was also higher for potential female veterans (Table 8-11). Household members tended to be more uncertain about identifying potential female veterans during the screening interview than they were about identifying potential male veterans. There was no significant difference in the distribution of response status across census regions (Table 8-12).

8.6 List Sample Location Rates

We located 73.6 percent of List Sample veterans. By definition, location rates for the response categories eligible respondent, ineligible and eligible nonrespondents were 100 percent. The location rate for veterans of unknown eligibility was 22.2 percent. Although we located these veterans, we assigned them to the eligibility unknown category because they did not provide the information necessary to determine their eligibility. Table 8-13 gives the location rate by three age groups (less than 50, 50 to 64, over 64). We found it more difficult to locate younger veterans than older ones, perhaps because younger people in general tend to be more mobile or less likely to have a telephone or address listing in their name.

Table 8-13. List Sample location rates by age group

Age Group	Location Rate (Percent)
Less than 50	58.6
50-64	72.5
Over 64	83.9
TOTAL LIST	73.6

The location rate was also higher for male veterans than for female veterans (74.3 percent for male veterans versus 66.1 percent for female veterans). We may have had difficulty locating female veterans because they are less likely to have a telephone or address listing in their own or maiden names.

Table 8-14 gives the List Sample location rates by census region. Our location rate was highest in the Midwest region and somewhat lower in the West.

Table 8-14. List Sample location rates by census region

Census Region	Location Rate (Percent)
Northeast	74.1
Midwest	77.4
South	73.6
West	69.7
TOTAL LIST	73.6

8.7 Cooperation Rates

Survey cooperation rates are one indicator of interviewers' ability to complete an interview after contact has been established with sampled individuals. They also demonstrate the effectiveness of interviewer training. The calculation for cooperation rates uses completed interviews and refusals only. Included with the completed interview cases are all ineligible (out-of-scope) cases (as determined by completion of the required screening questions). We calculated cooperation at two stages: at the initial attempt to complete an interview and after making all attempts to persuade those who initially refused to participate in the survey (refusal conversion). Table 8-15 shows the number of initial refusal cases, number of refusal conversion cases, and the refusal conversion rates by sample type. One-third of initial refusals at the RDD Sample screening interview were converted to completed interviews while more than 80 percent of initial refusals at the RDD and List Sample extended interview level were converted.

Table 8-15. Refusal conversion rates by sample type

Sample Type	Initial Refusals	Refusal Conversions	Refusal Conversion Rate
RDD Screener	54,781	18,072	33.0
RDD Extended	1,935	1,566	80.9
List Extended	983	807	82.1

Table 8-16 presents the initial cooperation rates, the conversion rates for those who initially refused, and the net cooperation rates after both stages for the RDD Sample screening interview, and RDD and List Sample extended interview. The percentages are based only on those cases for which a telephone interview was attempted.

Table 8-16. Cooperation rate by sample type

Sample Type	Initial Cooperation Rate	Refusal Conversion Rate	Final Cooperation Rate
RDD Screener	50.1	33.0	66.5
RDD Extended	86.5	80.9	96.4
List Extended	85.8	82.1	95.1

The RDD screening interview had an initial cooperation rate of 50.1 percent, a conversion rate of 33.0 percent and a net cooperation rate of 66.5 percent. Among individuals selected for the RDD extended interview, the initial cooperation rate was 86.5 percent, the conversion rate was 80.9 percent, and the net cooperation rate was 96.4 percent.

The List Sample veterans' initial cooperation rate, at 85.8 percent, was slightly lower than that of the RDD Sample. On the other hand, the List Sample extended interview refusal conversion rate of 82.1 percent was slightly higher than the RDD Sample rate. The List Sample net cooperation rate (95.1 percent) for the extended interview was slightly lower than the RDD Sample extended interview net cooperation rate (96.4 percent).

8.8 Questionnaire Administration Timing

Table 8-17 presents selected statistics about the amount of time it took veterans to complete the screening and extended interviews. The average and median administration times for the RDD screening interview were 4.1 and 3.8 minutes, respectively. The average administration time is higher than the median time because the distribution is skewed to the right. List Sample veterans took an average of 38.7 minutes to complete the extended interview, while the RDD Sample took 33.3 minutes. It is not surprising that List Sample veterans took longer, since they generally have more medical conditions and medical treatment experiences to report, and those sections of the interview were the most time-consuming to complete. Table 8-17 also shows that the median time for the List Sample extended interviews was 36.1 minutes as compared with 31.3 minutes for the RDD Sample extended interviews.

Table 8-17. Questionnaire administration time in minutes by sample type

Sample Type	Number Completed	Mean	Lower Quartile	Median	Upper Quartile	Maximum
RDD Screener	18,906	4.1	3.3	3.8	4.5	27.2
RDD Extended	12,956	33.3	26.6	31.3	37.6	136.5
List Extended	7,092	38.7	30.7	36.1	43.8	137.6

The upper and lower quartile values of interview administration time and the maximum value are also shown in Table 8-17 for the RDD screener, RDD and List Sample

extended interviews. Seventy five percent of the RDD screener interviews were completed in less than four-and-half minutes. While 75 percent of the RDD extended interviews were completed in less than 38 minutes, the comparable figure for the List Sample extended interviews was almost three-quarters of an hour. Although a few extended interviews took over two hours, 95 percent of the extended interviews took under 52 minutes for the RDD Sample and just over an hour for the List Sample. Overall (both RDD and List Sample cases), 654 extended interviews took more than an hour. The NSV 2001 cooperation rates in themselves are testimony to the sampled veterans' support of the survey effort. The fact that 654 veterans were willing to devote over an hour of their time to the interview further substantiates that support.

8.9 Telephone Call Statistics

Table 8-18 presents dialing statistics for completed interviews. It shows, for each sample type, how many calls had to be made to complete an interview. Overall, just over 30 percent of the RDD screener cases were completed in one call and almost half of these cases were completed in two calls. More than 95 percent of the RDD screener cases were completed within 12 calls. The average number of calls per screened household was 3.9 calls.

Over 48 percent of the RDD extended interviews were completed in one call and just over 23 percent of the List Sample extended interviews were completed in one call. Almost 62 percent of extended interviews were completed within 2 calls for the RDD Sample, and just over 40 percent of List Sample extended interviews were completed within 2 calls. When the count rises to 3 calls, there was still a significant difference in the proportion of completed extended interviews by sample type, at 70 percent for the RDD Sample and 53 percent for the List Sample. After five calls, the completion rates for the RDD and List Sample cases were 80 percent and 71 percent, respectively. The average number of calls per completed extended interview was 3.6 for the RDD Sample and 4.9 for the List Sample. It took fewer calls to recontact the RDD Sample cases, for which contact had already been established at the screening interview stage, than the List Sample cases, where the extended interview was our first contact. For the combined RDD and List Samples, 91 percent of the extended interviews were completed within 10 calls, 94 percent within 12 calls, and 96 percent within 14 calls.

Table 8-18. Number of completed cases by number of calls for each sample type

Number of Call	Sample Type					
	RDD Screener		RDD Extended		List Extended	
	Number	Percent	Number	Percent	Number	Percent
1	5,771	30.5	6,243	48.2	1,654	23.3
2	3,609	19.1	1,734	13.4	1,201	16.9
3	2,594	13.7	1,041	8.0	884	12.5
4	1,727	9.1	751	5.8	731	10.3
5	1,264	6.7	592	4.6	529	7.5
6	870	4.6	471	3.6	353	5.0
7	641	3.4	359	2.8	301	4.2
8	523	2.8	291	2.2	250	3.5
9	379	2.0	255	2.0	214	3.0
10	303	1.6	176	1.4	141	2.0
11	244	1.3	171	1.3	149	2.1
12	190	1.0	140	1.1	127	1.8
13	154	0.8	131	1.0	109	1.5
14	116	0.6	124	1.0	79	1.1
15 or more	521	2.8	477	3.7	370	5.2
Total Completed	18,906	100.0	12,956	100.0	7,092	100.0