

Item ID Number 01830

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Corporate Author NORC

Report/Article Title Report of a Pretest of the Survey Instrument for the Vietnam Era Twin Study Survey of Health.

Journal/Book Title

Year 1984

Month/Day August

Color

Number of Images 116

Description Notes Alvin L. Young filed this item under "Vietnam Veterans Twin Study."

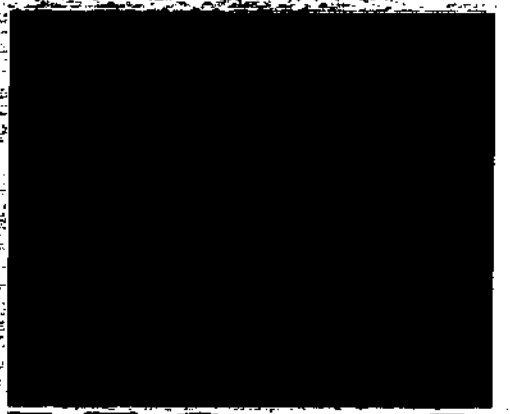
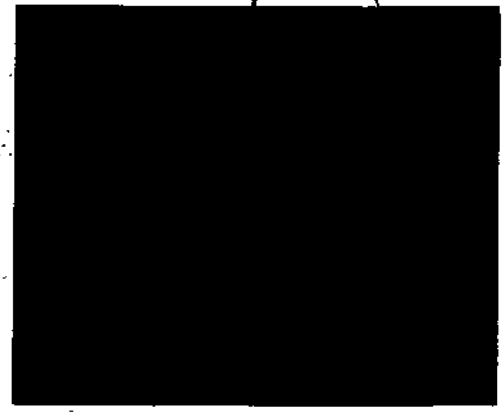
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**Report of a Pretest of the Survey Instrument for
the Vietnam Era Twin Study Survey of Health**

**Mary Utne O'Brien, Ph.D.
NORC
August 1984**

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Report of a Pretest of the Survey Instrument for the Vietnam Era Twin Study Survey of Health

Overview of the Report

This is the report of a pretest of the survey instrument and accompanying respondent materials proposed for use in the Vietnam Era Twin Study (YETS) Survey of Health. The pretest was conducted by NORC, a social science research center at the University of Chicago, under contract to the National Academy of Sciences. The purpose of the pretest was to obtain information about the performance of the items comprising the survey instrument--their clarity and face validity, the suitability of their particular organization within the instrument, and the appropriateness of their interconnecting instructions. Also under study was whether the cover letter accompanying and introducing the study to respondents was as informative and persuasive a document as possible.

A convenience sample of veteran twin pairs from the Chicago area was mailed the cover letter and survey instrument in late May, 1984. Returns from this sample were manually reviewed for respondent problems with instructions and apparent misunderstandings of the intent of items. All such item problems were recorded by case number and are described in this report. Responses to the open-ended items in the survey were recorded verbatim, and questionnaires were then edited for machine entry of responses for computer analysis. Responses to items are also summarized in this report.

A subgroup of the respondents to the mail survey, selected to represent diversity with respect to several of the key variables in the questionnaire, was invited to NORC for discussion of the survey instrument and cover letter. Two focus groups, involving fraternal and identical twin pairs (i.e., both brothers present), were conducted.

The examination of response problems, the statistical analyses of items, the discussions with the twin veterans themselves, and experience with many other mail survey instruments, lead NORC to conclude that the YETS Survey of Health is an exceptionally clear and effective document. Responses were remarkably error-free, item non-response was extremely low, and veterans reported enjoying the experience of completing the survey. NORC recommends a number of changes in the survey instrument and in the cover letter, however, and these are described, and the reasons for them documented, in this report. A complete draft of the recommended form of the survey instrument and the cover letter is attached to this report.

The remainder of this report consists of four sections. Section I briefly reviews the purposes of the twin registry and the survey of health. Section II describes the design of the pretest. Section III presents the study's findings. In the fourth and final section, NORC describes its recommendations for changes in the survey instrument and the cover letter, for use in the main survey.

I. The Vietnam Era Twin Study and the Vietnam Era Twin Registry Survey of Health

A. Components of the VETS The Vietnam Era Twin Study Survey of Health is one component of the overall research program known as the Vietnam Era Twin Study (VETS). The VETS is composed of three distinct activities: 1) identification of a set of approximately 12,000 Vietnam era veteran twin pairs; 2) the mailed Survey of Health, sent to all 12,000 twin pairs; and 3) a comprehensive medical, psychiatric, psychological and psycho-social examination of 600 pairs of identical twins randomly selected from the Vietnam Era Twin Registry.

The identification of 12,000 veteran twin pairs is being carried out by the National Academy of Sciences Medical Follow-Up Agency (NAS-MFUA) under contract with the Veterans Administration. Veteran twin pairs will be identified using the military records maintained at the National Personnel Records Center in St. Louis. The NAS-MFUA is abstracting a large number of socio-demographic and military service variables from the military records. All of the items collected are being entered into a computer file which will form the Vietnam Era Twin Registry.

The second component of the VETS, the Survey of Health, is designed to serve two purposes. First, it will gather information about a wide range of health parameters that can be used as "screener" information by future researchers. For example, all those who report having diabetes might form one group for future study; those with chronic skin conditions, such as severe acne, another group; those who report severe emotional problems, another; and so on.

A second purpose of the Survey of Health will be to provide information for analyses that require no further data collection. That is, it will yield a data set with sufficient information to support original analyses about specific health conditions. By combining the information abstracted from the military records with the Survey of Health it will be possible to examine the relationship between military service and a wide variety of medical and psychological conditions.

The third component of the VETS is the comprehensive medical, psychiatric, psychological, and psycho-social assessment of health. The comprehensive health assessment (which is presently in the planning phase) will involve selecting a random sample of 600 twin pairs from the Vietnam Era

Twin Registry. These 600 twin pairs would then be invited to St. Louis for examination and testing. The purpose of the comprehensive health assessment is to provide a precise understanding of the association between service in Southeast Asia and long-term health status.

B. Major Sections of the Survey of Health The YETS Survey of Health asks questions in seven major topical areas: zygosity, demographic, alcohol and cigarette consumption, physical health, combat experience, emotional health, marriage and reproductive history, and locating information. Each of these major areas is briefly discussed below:

1. Zygosity. The purpose of the zygosity questions is to discriminate between monozygotic and dizygotic twins. The ability to distinguish between mono and dizygotic twins is important for all future studies that examine the impact of genetics and environment on health and disease.

2. Demographics. Basic demographic questions are included so that the Vietnam Era Twin Registry can be compared and contrasted to the population of all Vietnam Era veterans. In addition, many demographic characteristics are strongly associated with health and disease.

3. Alcohol and Cigarette Consumption. These items are known to be associated with many diseases. In studying the health effects of military service it essential to adjust for the potential confounding effects of alcohol and smoking.

4. Physical Health. The twin pairs are asked about a broad spectrum of specific illnesses and diseases (such as cancer, stroke, liver disease, etc.). Each veteran is asked whether he currently has a specific disease, whether he has visited a physician for the condition, and whether he has been hospitalized for this condition.

5. Combat Experience. A list of 18 different combat roles or experiences that men could have had while in Southeast Asia is included. These items are potentially important contributors to the long-term physical and emotional health of the veterans.

6. Emotional Health. A considerable number of questions are asked regarding the respondent's emotional health. A special effort has been made to ascertain whether any veterans display symptoms of Post-Traumatic Stress Disorder.

7. Marriage and Fertility History. A complete marital and fertility history is obtained from each veteran. Included in this history are dates of all marriages, divorces and childbirths.

8. Locating Information. The respondent's most recent address and telephone number are requested; also the most recent address and telephone number of his twin are obtained. This information will be very important for future studies involving the Vietnam Era Twin Registry.

II. Design of the Pretest

The pretest consisted of a mail survey of 119 individuals, all Vietnam-era veteran twins, and focus group discussions of the survey instrument and study procedures with selected mail survey respondents. The entire pretest was conducted over a five-week period from late-May through June, 1984.

A. The Sample The pretest used two convenience samples of veteran twins. The first sample, which yielded the majority of the cases, was from Defense Manpower Data Center (DMDC) data tapes. The second sample consisted of a group of self-selected veteran twins.

1. The DMDC sample. The DMDC data tapes contain information reported at the time of separation from service for all individuals who were discharged from the U.S. military after 1968. Following an initial sort on year of separation from service (to encompass veterans from the period of service of interest to the study (1968-1975)), and Chicago-area zip code, veteran twin pairs were selected using the following criteria:

1. Same last name
2. Same date of birth
3. Different first name
4. Social security number the same to the first five digits.

Selection on these criteria yielded 91 veteran twin pairs. Inspection of the DMDC information available for each case revealed that due to coding and data entry errors, there were actually only 81 likely twin pairs. In addition to the non-twins that were eliminated, two more pairs were excluded because inspection of first names suggested they were female, as later confirmed by parents, bringing the total number of pairs in the DMDC sample to 79.

DMDC data on these individuals include "home address" at the time of separation from service. For most of these young men, this was their parents' home address. The age of this information ranged from 9 to 16 years old--a fairly cold trail for locating. Fortunately, the parents of fully 46% of the veteran twins could still be reached at the address reported at the time of leaving the service. Using the non-extraordinary locating techniques of directory assistance, telephone directories and criss-cross directories (which, given an address, supply any associated telephone number), 47 twin pairs, or 59 per cent of the DMDC sample of 79 pairs, were located and mailed the questionnaire. [Note: In the course of the locating effort it was learned from one of the veteran twins that his veteran twin brother had died since leaving the military. The deceased brother was not, of

course, sent a questionnaire. Therefore, although 47 pairs were located, only 93 individuals from the DMDC sample group were sent the pretest survey, and the sample number reported is an uneven number.]

2. The self-selected sample. The DMDC sample was augmented by 13 pairs of veteran twins who had contacted NORC, the National Academy, or the Veterans Administration to ask to be included in the study. All had read newspaper accounts of the registry, and wanted to be sure that they were not missed by those seeking to study all Vietnam-era veteran twins. In some cases it was not the twin, but a non-twin sibling or a spouse who contacted one of the three organizations to "volunteer" a veteran twin.

Thus, a total of 119 veteran twins--93 from DMDC sources and 26 self-selected-- were sent the pretest questionnaire. Characteristics of respondents from each of the two sources are reported separately, but for the most part responses to the major analytic variables in the questionnaires are combined in this report, because they are assumed to be unrelated to differences in the samples.

B. Procedures of the Pretest Data on the performance of the survey instrument and the individual items were gathered by two methods: a mail survey; and small-group discussions (also called focus group discussions) with the veteran twin mail survey respondents.

1. The mail survey pretest.

Locating. The mail survey began with efforts to locate the individuals whose names and 9 to 16 year-old addresses were produced by the DMDC selection procedure, confirm the twin veteran status of these individuals, and obtain a current mailing address for each one. (No locating was needed for the self-selected sample, because these individuals reported their current addresses when they approached the study.)

Using directory assistance, telephone directories, and criss-cross or reverse directories (which supply phone numbers, given addresses), people at the home addresses listed by the veterans at the time of separation from service were contacted in pursuit of information about current addresses. These approaches yielded information on 58 per cent of the DMDC sample. In not all of these cases was direct access to the veteran obtained. Often a parent would agree to forward any materials sent to their sons at their (the parents') address, rather than give out their sons' addresses to NORC. In some instances one brother, directly contacted, would agree to the same (i.e., he would forward the

material to his brother, rather than give out an address). Other families were very forthcoming, not only with twins' addresses but with their telephone numbers as well.

The remaining 42 per cent of the DMDC sample was not pursued with any more extraordinary locating effort. The pretest was designed to use a convenience sample. It was not intended to function as a test of the adequacy of and difficulties associated with use of the DMDC tapes as a sample source (although indications of such were, of course, obtained).

The self-selected sample was added to the pretest sample at this point in order to insure enough responses to support the planned item analyses--approximately 75-100 cases.

Mailout and follow-up. Each veteran twin in the pretest sample was sent: a cover letter explaining the study and asking the veteran's cooperation in completing the survey; a questionnaire; and a postage-paid envelope addressed to NQRC in which to return the questionnaire. These materials were mailed out on May 20, 1984. The first returns were received three days later, on May 23. Follow-up telephone calls to the nonrespondents and/or their families began ten days after that, in early June. Several respondents reported that they had not received the original mailing, so a second packet of materials was immediately sent to them. Three and one-half weeks after the initial mailing a second mailing, along with an additional cover letter strongly urging participation, and \$5.00 cash payment "as a token of appreciation for [their] assistance" was sent to 29 respondents who at some point had indicated a willingness to participate, but whose questionnaires had not yet been received.

Materials contained in the mailouts are reproduced in Appendix 1.

Editing and processing survey returns. Surveys were logged in upon receipt at NQRC, and batched for data entry. Prior to editing for machine entry, all cases comprising a batch were reviewed, one-by-one, and problems in responses noted (by respondent ID number) and described on a blank questionnaire labelled "Summary of Item Problems." Summarized across all batches (i.e., summarized for all cases), these problems are presented in the Findings section below.

After item problems were recorded, responses to the two open-ended questions in the questionnaire were recorded verbatim on a separate tally sheet. These responses are also reported in the Findings section below, along with the responses to all other items.

2. Focus group discussions. The purpose of the focus groups was to learn as much as possible from respondents about the cover letter, the items, and the questionnaire as a whole. The focus groups solicited feedback on all aspects of language choice, as well as the adequacy (completeness, mutual exclusivity) of the response categories provided, given the varieties of experiences of the respondents. They sought information on any errors of omission, as well. Thus, participants were asked if there were any important health conditions that they felt had been overlooked by the survey, and whether there were any personal experiences-- military or otherwise--that they felt were related to their current health that the questionnaire had failed to ask about.

The first 50 or so individuals to return their questionnaires to NORC formed the group for consideration for participation in the focus group discussions (because of the short time available for the pretest, the focus groups were to be conducted simultaneously with the field period for the mail surveys). In examining the responses of these individuals, NORC sought to represent: twin pairs in the same group (i.e., both brothers present); identical and fraternal twins; Vietnam and non-Vietnam-experienced veterans; a range of combat experiences; those who reported some post-service distress; the more loquacious (or at least those who wrote a great deal in response to open-ended questions and in the margins of the questionnaire); those who responded selectively (to explore reasons why some items elicit more non-response than others); and those who seemed especially slow (it is essential that the questionnaire be clearly understood by the least educated and least bright, yet not be tedious for others, so it was necessary that ranges of ability be represented).

Two focus group discussions were scheduled for two successive weekday evenings, the time NORC has found to be most convenient for participants in such groups. NORC sought to schedule 7-8 individuals for each group. There were to be other individuals present--NORC project staff and three different "outsiders" each evening (YA representatives and the Principal Investigators)--bringing the group totals to approximately 13-14 people (see Appendix 2 for list of participants). NORC's experience is that in focus groups larger than this, the conversational dynamic usually changes such that people become less open, conversation less free-wheeling, and the discussions less productive.

Respondents were asked to select one of the two evenings convenient for them, were sent instructions for how to find NORC, and were given \$10.00 to offset their expenses.

The agenda for the focus groups is included in Appendix 2.

C. The Analyses

1. Qualitative analyses. As noted above, all questionnaires were carefully reviewed, item-by-item, and any apparent difficulties in following instructions for responding and in understanding the intended meaning of items were separately recorded. For example, Question 4 lists people who may have been a part of the respondent's life as a child-- parents, siblings, grandparents, classmates, teachers, and strangers--and asks the respondent whether and to what extent each "...had difficulty in telling you and your twin brother apart." Identical twins typically respond that while parents and siblings had difficulty at least "some of the time", the others had difficulty telling them apart "all of the time." Fraternal twins, on the other hand, usually report that the people listed "never" had trouble telling them apart.

A close reading of individual questionnaires, however, revealed that two respondents misunderstood the item, responding as if it were asking how often the people listed could tell "you and your twin brother apart" ("all of the time...some of the time... never"). These two respondents, who had already reported being an identical twin, and as like their brother "as two peas in a pod," also said their parents had difficulty telling them apart "all of the time" while strangers "never" had difficulty. Every instance of this type of misunderstanding was recorded, and is described in the reports on individual items in the next section. The qualitative analyses, then, informed recommendations for changes in item wording and layout or visual presentation (e.g., to be sure words essential to the meaning of an item were prominent).

Finally, issues raised in the focus group discussions, while reported in full in the Findings section, were subject to a "qualitative analysis" that informed NORC's final recommendations. That is, not all veterans' recommendations became NORC recommendations. The participants' views were reviewed in light of NORC's experience with usual advice from those who infrequently encounter surveys, and in light of the specific needs, purposes, and limitations (space, time, self-administered format, etc.) of this survey.

2. Quantitative analyses. After responses were data-entered for machine analysis, a number of simple indicators of data quality were calculated: the percentage of correct and incorrect responses to each item; the percentage of non-responses to each item for which there should have been responses (i.e., not including valid skips); and the percentage of questionnaires with no errors at all.

Finally, the substance of responses was tabulated; that is, frequencies for each category of response for each item, and descriptive statistics, such as means, where these are meaningful, were calculated and reported.

The information from all the analyses is presented in the following section.

III. Findings

A. Overview The pretest revealed the YETS Survey of Health to be a survey instrument that was clear and easy to understand. Respondents committed relatively few errors in completing the questionnaire, and the vast majority of these errors was easily corrected using conventional coding rules. For example, a respondent may have circled an entire response category, rather than the code number representing the category. Others circled both category and code. Or, some respondents failed to zero-fill blank columns when reporting numbers, although they otherwise correctly reported the numbers, beginning each sequence from the right.

Despite the inclusion of items that dealt with sensitive and potentially threatening topics--mental distress, infant death and abnormality, and income, for example--the instrument enjoyed an exceptionally low level of item non-response. In fact, only 66 out of a possible over-15,600 responses (78 net respondents, approximately 200 variables), or .4%, were left blank. No respondent refused to report income, traditionally among the most sensitive of questionnaire items. In fact, the few cases of item non-response seemed to be due more to misunderstandings of skip patterns and instructions than to a refusal to disclose information deemed "too personal" to report in a survey.

Finally, the respondents to the Survey of Health were highly motivated to respond fully and accurately to a degree that is unusual in NORC experience. For example, it is notable, although impossible to document, that the veteran twins' responses were among the most painstakingly neat that the experienced NORC coders and data processing staff working on this project have ever encountered. When a NORC staff member remarked upon this to focus-group participants, many reported that they had read through the entire questionnaire before responding, so that they could answer as accurately and with as full an understanding of the questionnaire as possible. This kind of care is not typical of general-public samples for mail surveys. In addition, as described in Section 4, not a single veteran failed to provide his current telephone number for the survey, requested explicitly for the purpose of facilitating future contacts for other studies. Although 28 per cent of the responding pretest sample was self-selected, and thus should be expected to be highly motivated to respond, the other 72 per cent, approached "cold," was equally responsive to this item. We believe that the high quality of the survey instrument, as well as the special nature of the study population (twins, Vietnam-era veterans), accounts for the accuracy and completeness of responses.

B. Who Responded: Rates of Response and Characteristics of Respondents

1. **Response rates by sample subgroup.** The sample for the pretest comprises two subsamples; those whose names were obtained from DMDC records, and a self-selected group of veteran twins. In the course of attempting to locate the DMDC sample twins direct contact was made with some veterans and /or their spouses, while in other cases no direct contact was made (e.g., DMDC address information was simply confirmed by Directory Assistance, and no further contacts were made with the household prior to mailing the survey materials). We further divide the DMDC subsample, then, into those personally contacted, and those with no personal contact prior to receipt of survey materials. The initial composition of the resulting three sample subgroups is described in Table 1.

Table 1 shows the importance of the initial personal contact with veteran twins who otherwise have no knowledge of the study. While almost 85 per cent of the self-selected veteran twins responded, and 80 per cent of the DMDC veteran twins who were personally informed of the survey by NORC locating-callers, the response rate for the DMDC group that received no prior contact was about 56 per cent. Overall response rate for the survey was 68.1 per cent.

Table 2 describes the net sample of respondents. Of the 81 questionnaires that were returned, two were from triplets, and one was from an individual who never actually served in the military. None of these individuals are in the theoretical population of interest, so are subtracted from the gross sample to yield a net sample of 78 responses out of an initial net sample of 116.

Table 1: Survey of Health Response Rates, by Sample Subgroup

<u>Subgroup</u>	<u>Number Sent</u>	<u>Number Received</u>	<u>Response Rate</u>
1. DMDC: Personal contact during locating effort	30	24	80.0%
2. DMDC: No personal contact during locating effort	63	35	55.6%
3. Self-Selected	26	22	84.6%
TOTAL	119	81	68.1%

Table 2: Composition of Final Sample

Original sample.....	119
Out-of-sample (triplet, not in military).....	3
Net sample.....	116
Returned questionnaires.....	81
Out-of-sample returns.....	3
Net responses.....	78
Gross response rate (Returned questionnaires/Original sample).....	68.1%
Net response rate (Net responses/ Net sample).....	67.2%

2. Characteristics of respondents. The self-selected sample (N = 21) differed from the DMDC sample (N = 57) in a number of respects. The self-selected veteran twins were on average about five years older, had slightly less education, were more likely to have served in Southeast Asia, and thus to have had combat experience, and were much more likely to report that they were identical twins. Information on the two samples is presented in Table 3. Information on the combined total sample is presented, item-by-item, in the following section.

Table 3: Characteristics of DMDC and Self-Selected Samples

<u>Characteristic</u>	<u>DMDC Sample</u>	<u>Self-Selected Sample</u>
1. Age	Mean = 34.5	Mean = 39.4
2. Level of education (High school degree = 12, College degree = 16, etc.)	Mean = 15.3	Mean = 14.2
3. Ever married	Yes = 82.5%	Yes = 90.5%
4. Any children	Yes = 63.2%	Yes = 81.0%
5. Zygosity	Identical = 47.4% Fraternal = 50.9% Don't know = 1.8%	Identical = 76.2% Fraternal = 23.8%
6. Southeast Asia duty	Yes = 38.6%	Yes = 57.1%
7. Combat experience	Yes = 24.6%	Yes = 57.1%

C. Findings: Focus Group Reactions to the Introductory Letter

NORC solicited the opinions of focus group participants about the clarity and persuasive effectiveness of the letter accompanying and introducing the survey materials. Participants provided very useful feedback about the letter, resulting in the changes presented in the proposed modified cover letter in Appendix 3.

For the most part the focus group participants found the letter to be very effective. The letterhead stationary of the National Academy of Sciences was seen as impressive and authoritative, yet removed enough from any association with official government (e.g., military) bodies to not be off-putting.

They were of the strong opinion that the letter's description of the study as conducted "...with the cooperation of ...the Department of Defense" would result in a refusal to participate by veterans with very hard feelings toward the military, of whom they felt there would be enough to possibly cause a problem with bias in the sample. The recommended new form of the letter omits the reference to the Department of Defense.

The major change in the letter is the dropping of the fourth paragraph, which sights the Federal Code of Regulations under which authority the study is being conducted. This paragraph was viewed as jarringly technical and out of place by respondents. NORC recommends that the paragraph be moved to the cover of the questionnaire itself, rather than embedded in the cover letter.

No other changes in the introductory letter are recommended.

D. Findings: Responses to the Items in the Survey of Health

In this, the longest single section of the report, the responses to each item in the questionnaire are reported. In addition to the substance of the responses (i.e., the frequency of responses in each response category), this section reports all anomalous or non-standard responses to items. If a non-standard response can be rendered accurately interpretable by standard coding and editing procedures, it is described below as an "Item Event." If the response cannot be so corrected, e.g., it would require a call-back to the respondent to clarify the response, it is described as an "Item Error." Item events were edited prior to tabulation of frequencies, and so are not reflected in the Numbers and Percentages reported next to each response category.

The findings are reported in the order in which they appear in the questionnaire, and are grouped into the seven major topical areas they represent.

1. Zygosity Questions (Qs. 1-7)

Q. 1. Do you have a twin brother? (CIRCLE ONE)

	<u>Number</u>	<u>Percent</u>
Yes, living (GO TO Q.2).....1	77	98.7
Yes, deceased (GO TO Q.2).....2	1	1.3
No.....3	0	0.0
Triplet or higher.....4	<u>0</u>	<u>0.0</u>
	78	100%

IF 'NO' OR 'TRIPLET', PLEASE STOP HERE AND RETURN FORM IN THE ENVELOPE PROVIDED.

Non-standard responses

Item Events: Circles "Yes" rather than "1" # of instances: 2
Circles both "Yes" and "1" # of instances: 2

% accurate (with conventional coding/editing procedures): 100%

Item non-response: 0%

Discussion and recommendation

Neither the focus group nor the item analysis uncovered any difficulties with this question. It is recommended that it be retained as is.

Q.2. As children, were you and your twin "as alike as two peas in a pod," or of only ordinary family resemblance? (CIRCLE ONE)

	<u>Number</u>	<u>Percent</u>
As alike as two peas in a pod.....1	49	62.8
Of only ordinary family resemblance..... 2	27	34.6
DON'T KNOW.....8	<u>2</u>	<u>2.6</u>
	78	100%

Non-standard responses

Item Error: Circles "1" and "2".....* of instances: 1

% accurate (with conventional coding/editing procedures): 99%

Item non-response: 0%

Discussion and recommendations

Focus group discussion indicated that this item was clearly understood and meaningful. Item response analysis confirms this. It is recommended that the item be retained as is.

Q.3. Do you yourself believe that you and your twin are identical (monozygotic) twins, or do you believe that you are fraternal (dizygotic) twins? (CIRCLE ONE)

	<u>Number</u>	<u>Percent</u>
Identical (monozygotic).....1	43	55.1
Fraternal (dizygotic).....2	34	43.6
DON'T KNOW.....8	<u>1</u>	<u>1.3</u>
	78	100%

Non-standard responses

Item Events: Self-corrected error.....* of instances: 1

Answer to Q.3. contradict

answer to Q.2.* of instances: 1

Circles "1" and writes

in "FACT"* of instances: 1

% Accurate (with conventional coding/editing procedures): 100%

Item non-response: 0%

Discussion and recommendations

Two veterans said that the terms "monozygotic" and "dizygotic" should be dropped, because these terms are redundant with "identical" and "fraternal." The latter terms cover the topic adequately. Despite the focus group comments, we recommend that the item be retained in its current form. No one reported any problems with the terms, and to insure clarity of meaning, the apparent redundancy should be kept.

Q. 4. When you were children, how often did the following persons have difficulty in telling you and your twin brother apart? (CIRCLE ONE FOR EACH LINE)

	All of the time	Some of the time	Never	DON'T KNOW	DOES NOT APPLY	Number
a. Parents.....	1.. (0.0%)	2..(32.5)	3..(62.3)	8..(5.2)	6.	77
b. Other Brothers and Sisters.....	1....(1.3)	2..(20.8)	3..(62.3)	8..(10.4)	6	77
c. Grandparents.....	1..(14.5)	2..(38.2)	3..(34.2)	8..(2.6)	6..(10.5)	76
d. Classmates.....	1....(27.3)	2..(40.2)	3..(27.3)	8..(5.2)	6	77
e. Teachers.....	1....(26.9)	2..(38.5)	3..(30.8)	8..(3.8)	6	78
f. Stranger.....	1....(55.1)	2..(15.4)	3..(23.1)	8..(6.4)	6	78

Non-standard responses

- Item Events: Self-corrected mistake on e..... * of instances: 1
- Self-corrected mistake on c, d..... * of instances: 1
- Reverses answers..... * of instances: 2
- For "c" writes "Never met them"
instead of "6"..... * of instances: 1
- Item Errors: Does not answer a-d..... * of instances: 1
- Does not answer c..... * of instances: 1

% accurate (with conventional coding/editing procedures): 99%

Item non-response: <1%

Discussion and recommendations

The editing process revealed that the question may elicit reversed responses, that is, the respondent may read the question as saying "How often could (LIST)...tell you and your twin apart?" It is recommended that the question be reformatted so that the question and its instruction form a clear and unbroken block of type (see layout in Appendix 3).

Q. 5. The following list describes characteristics that you and your twin brother may or may not have shared when you were children. For each characteristic listed, please consider your childhood years (before you were teenagers) and describe whether you and your twin brother were very similar, somewhat similar or very different. (CIRCLE ONE FOR EACH LINE)

<u>When we were children our:</u>	Very Similar	Somewhat Similar	Very Different	DON'T KNOW	NUMBER
a. Eye color was.....	1 (84.4%)	2 (2.6)	3 (10.4)	8 (2.6)	77
b. Hair color was.....	1 (78.2)	2 (14.1)	3 (6.4)	8 (1.3)	78
c. Hair type was.....	1 (77.9)	2 (14.3)	3 (5.2)	8 (2.6)	77
d. Heights were.....	1 (63.6)	2 (28.6)	3 (5.2)	8 (2.6)	77
e. Weights were.....	1 (56.2)	2 (34.6)	3 (6.4)	8 (2.6)	78
f. Teeth were.....	1 (59.0)	2 (33.3)	3 (3.8)	8 (3.8)	78
g. Voices were.....	1 (55.1)	2 (33.3)	3 (9.0)	8 (2.6)	78
h. Muscular strength was.....	1 (59.0)	2 (32.1)	3 (7.7)	8 (1.3)	78
i. Temperaments were.....	1 (41.0)	2 (33.3)	3 (24.4)	8 (1.3)	78
j. Musical abilities were.....	1 (51.3)	2 (21.8)	3 (7.7)	8 (19.2)	78
k. Language abilities were.....	1 (64.9)	2 (28.6)	3 (0.0)	8 (6.5)	77
l. Manual skills (dexterity) were.....	1 (74.4)	2 (21.8)	3 (2.6)	8 (1.3)	78

Non-standard responses

Item Event: self-corrects error at f.* of instances: 1

Item Error: illegitimate skip of a, c, d, k.....* of instances: 1

% accurate (with conventional coding/editing procedures): 100% for b, e - j, l;
99% for a, c, d, k

Item non-response: <1%

Discussion and recommendations

The item appears to have worked well and it is recommended that it be retained as is.

Q. 6. About how tall are you without shoes? (WRITE IN NUMBER OF FEET AND INCHES.
IF ZERO INCHES, WRITE IN "00")

FEET INCHES (Response Range: 5' 3" - 6' 3";
Mean: 5'10" N = 78)

Non-standard responses

Item events: Self-corrected error.....# of instances: 1
Failure to left justify.....# of instances: 1
Use of fractions of an inch.....# of instances: 2
Failure to zero fill.....# of instances: 1

% accurate (with conventional coding/editing procedures): 100%

Item non-response: 0%

Discussion and recommendations

The main observation which can be drawn from item edit and the focus groups is that some respondents like to put in fractions. Recommendation: retain as is. (Fractional and decimal heights can be dealt with in the process of questionnaire coding and editing.)

7. About how much do you weigh without clothes or shoes? (WRITE IN NUMBER OF POUNDS)

POUNDS
(Response Range: 130-243;
Mean: 171.98 pounds N = 78)

Non-standard Responses

There were no non-standard responses.

% accurate (with conventional coding/editing procedures): 100%

Item non-response: 0%

Discussion and recommendation

Neither focus group discussions nor item edit revealed any difficulties with this question. It is recommended that the item be retained as is.

2. Demography Questions, (Qs. 8. and 9.)

Q.8.A. Are you presently employed part-time or full-time? (CIRCLE ONE)

	Number	Percent
Yes, full-time (GO TO B).....	1 70	89.7
Yes, part-time (GO TO B).....	2 2	2.6
Not employed (GO TO Q.9).....	3 6	7.7
	78	100%

IF PRESENTLY EMPLOYED:

B. What kind of business or industry is this? (Example: TV and radio manufacture, retail shoe store, State Labor Department, farm, etc.)_____

C. What kind of work are you doing? (Example: Electrical engineer, stock clerk, typist, farmer, etc.)_____

D. What are your most important activities or duties? (Example: Typing, filing, selling new cars, finishing concrete, etc.)_____

(A wide range of occupations was reported, from self-employed truck driver to computer analyst, floor layer to clinical psychologist.)

Non-standard responses

Item Events: Misses skip at 8.A., gives unneeded answers.....* of instances: 2
 Circles "Yes" not "1"* of instances: 1
 Item Errors: Employer ambiguity, B. (self-employed?).....* of instances: 1
 Occupation ambiguity* of instances: 1

% Accurate (with conventional coding/editing procedures): 97.4%

Item non-response: 0%

Discussion and recommendations

One somewhat embarrassed veteran told the focus group that he was gainfully occupied ("I'm not on welfare or anything"), but had no outlet to describe his full-time student status. It is recommended that the item be retained but that a new item, asking about student status, be added.

Q.9. What is the highest grade or year of school you have completed and gotten credit for? (CIRCLE THE ONE HIGHEST GRADE OR YEAR)

- a. None.....00
- b. Elementary.....01 02 03 04 05 06 07 08
- c. High School.....09 10 11 12
- d. College.....13 14 15 16
- e. Some Graduate School..... 17 (Range: 11-18; Mean: 13.8 N = 78)
- f. Graduate or Professional Degree.....18

Q.9. continued

Non-standard responses

Item Events: Self-corrected errors.....* of instances: 4
 Circles letter instead of number.....* of instances: 2
Item Errors: Circles both 08 and 12.....* of instances: 2
 Circles 08, 12 and 13.....* of instances: 1
 Circles 12 and writes in "GED".....* of instances: 1

% accurate (with conventional coding/editing practices): 100%

Item non-response: 0%

Discussion and recommendations:

The item needs an option covering post-secondary tertiary institutions other than colleges--for example, vocational schools.

3. Alcohol and Cigarette Consumption Questions (Qs. 10-16)

In order to get an accurate picture of each veteran's general health, everyone is asked the next few questions about alcoholic beverages and smoking.

Q.10. Have you had more than 20 alcoholic drinks in your entire life? (CIRCLE ONE)

	<u>Number</u>	<u>Percent</u>
Yes (GO TO Q.11).....1	75	96.2
No (GO TO Q.16).....2	3	3.8
	<u>78</u>	<u>100%</u>

Non-standard responses

Item Events: Circles "Yes" instead of "1".....* of instances: 2
Circles "Yes" and "1".....* of instances: 1

% accurate (with conventional coding/editing procedures): 100%

Item non-response: 0%

Discussion and recommendations

This item emerged from the response analysis and the focus groups as straightforward and clear. It is recommended that it be retained in present form.

Q. 11. How old were you when you first started drinking alcoholic beverages regularly? (WRITE IN AGE)

 YEARS OLD

(Response range: 15-30 years;
Mean: 19.7 years N = 78)

Never drink alcoholic beverages regularly.....00 (N = 8, 10.3%)

Non-standard responses

There were no non-standard responses.

% accurate (with conventional coding/editing procedures): 100%

Item non-response: 0%

Discussion and recommendations

Focus group participants reported some confusion with the word "first" in the question. They suggested that "first" clouds the question's meaning by suggesting "when did you take your first drink." We recommend retaining the question but deleting the word "first."

Q.12.A. During the entire time that you have been drinking alcoholic beverages, how many days per week or month do you drink alcoholic beverages, on the average?
(WRITE IN EITHER DAYS PER WEEK OR DAYS PER MONTH)

DAYS PER WEEK (Response range: 1-7;
Mean: 3.6 N = 46)

or

DAYS PER MONTH (Response range: 1-25;
Mean: 6.7 N = 34)

Q.12.B. If a DRINK is considered one can or bottle of beer or one glass of wine, or one mixed drink or shot of hard liquor, how many DRINKS would you have on the average, on those days when you drink? (WRITE IN NUMBER OF DRINKS. PUT A "0" IN ANY EXTRA BOX ON THE LEFT)

DRINKS (Response range: 1-20; Mean: 4.2)

Non-standard responses

12. A.

Item Events: Fills both halves of disjunct.....* of instances: 13
Fails to zero fill (left justify).....* of instances: 6
Self-corrected errors.....* of instances: 2
Item Error: Writes "unknown" and leaves blank.....* of instances: 1

12. B

Item Events: Fails to zero fill.....* of instances: 8
Writes in answer, leaves 12 B blank.....* of instances: 2
12 .B. filled in by respondent who should
have skipped (from "2" at 10.).....* of instances: 2

% accurate (with conventional coding/editing procedures: 12A: 99%; 12B: 100%

Item non-response: <1%

Discussion and recommendations:

Some respondents utilized both the days-per-week and the days-per-month format. While there was no conflicting information reported--that is, the duplicate days per month figures were always 4 times the reported days per week--it is likely that with over 12,000 pairs in the main survey some contradictory information will be reported. To prevent the need for arbitrary coding decisions in such instances, we recommend dropping the days per month response option in all the drinking questions. This will result in less sensitivity to those who report infrequent drinking (less than once a week), but infrequent drinkers are of less analytic interest, as well.

Focus group participants reported that the question is confusing if you have quit drinking. The particular difficulty with this item is that it would not appear to give the clearest path to the critical data. It is recommended that Q.12 be dropped. The preferable sequence would be from Q.11 to Q.14 followed by Q.13 (see Appendix 3 for all recommended changes.)

Q.13. A. Was there a period in your life (of at least 6 months) when your consumption was more than this?

	Number	Percent
Yes (GO TO B).....1	53	72
No (GO TO Q. 14)..... 2	21	28
	74	100%

IF YES:

B. When was this (WRITE IN YEARS)

| 1 | 9 | | | to | 1 | 9 | | |

Highest concentration of responses: 1969- 72 (start of period of heavier drinking)
1974- 76 (end of period of heavier drinking)

C. On about how many days per week or month would you drink more alcoholic beverages, on the average? (WRITE IN EITHER DAYS PER WEEK OR DAYS PER MONTH)

| | DAYS PER WEEK (Response range: 1-7;
Mean: 4.3 N= 43)

or

| | | DAYS PER MONTH (Response range: 1-31;
Mean: 16.3 N=17)

D. How many drinks would you have, on average, on those days when you were drinking more?
(WRITE IN NUMBER OF DRINKS. PUT A "0" IN ANY EXTRA BOX ON THE LEFT)

| | | DRINKS (Response range: 2-30; Mean: 8.7)

Non-standard responses

13. A.

Item Events: Circles "Yes" instead of "1".....* of instances: 3
Circles "No" instead of "2".....* of instances: 1
Circles both "Yes" and "1".....* of instances: 1
Writes "Yes" but circles neither.....* of instances: 1
Circles "2" but misses skip.....* of instances: 1

13. B.

Item Events or Error: None.

13. C.

Item Events: Fills in both days/week and days/month...* of instances: 9
Qualifies days/week with "in part".....* of instances: 2
Left-justifies answer.....* of instances: 2

13. D.

Item Error: Illegitimate skip* of instances: 1
Item Event: Zero fill problem (fails to left justify).....* of instances: 3

% accurate (with conventional coding/editing procedures): A,B,C= 100%, D=99%

Item non-response: <1%

Discussion and recommendations

Item edit and focus group discussion confirmed that the question is accurately understood. However, the order of questions 13 and 14 should be reversed (see discussion at Q.12).

Q.14. A. Do you still drink alcoholic beverages?

	Number	Percent
Yes (GO TO B).....1	67	89.3
No (GO TO Q.15).....2	<u>8</u>	<u>10.7</u>
	75	100%

IF YES:

B. On about how many days per week or month do you currently drink alcoholic beverages, on the average? (WRITE IN EITHER DAYS PER WEEK OR DAYS PER MONTH)

DAYS PER WEEK (Response range: 1-7;
Mean: 1.8)

or

DAYS PER MONTH (Response range: 1-20;
Mean: 2.6)

C. How many drinks do you have, on the average, on those days when you drink? (WRITE IN NUMBER OF DRINKS: PUT A "0" IN ANY EXTRA BOX ON THE LEFT)

DRINKS (Response range: 1-10;
Mean: 3.3 N = 67)

GO TO Q. 16!

Non-standard responses

14 A

Item Event: Circles "Yes" instead of "1".....* of instances: 3

14 B

Item Events: Fills in both (week + month).....* of instances: 7

Self-corrects error.....* of instances: 1

Fails to zero-fill.....* of instances: 1

14 C

Item Events: Leaves boxes blank but writes in answer.....* of instances: 1

Fails to zero-fill.....* of instances: 9

Misses skip (14A = "No").....* of instances: 1

% accurate (with conventional coding/editing procedures): 100%

Item non-response: 0%

Discussion and recommendations

Non-standard responses to this item were of the readily editable kind. Just as with Q.12, Q.14 sometimes elicited both the days per week and days per month response from the same respondent. As with Q.12, it is recommended that the item drop the days-per-month response option, and that its sequence in the questionnaire should be altered (see Appendix 3).

Q.15. How old were you when you stopped drinking? (WRITE IN AGE)

 11 YEARS OLD (Range: 24-38; Mean age: 29.8 years)

Non-standard responses

Item Event: Fails to skip when should have
(writes in "00").....# of instances: 18

% accurate (with conventional coding/editing procedures): 100%

Item non-response: 0%

Discussion and recommendations

The question should be retained. However, given the skip, or failure-to skip, problem, it is recommended that an introductory direction repeat that the item is to be answered only by those who did drink regularly but no longer drink at all.

Q.16.A. Have you smoked at least 100 cigarettes in your life?

(CIRCLE ONE)

	<u>Number</u>	<u>Percent</u>
Yes (GO TO B).....1	54	69.2
No (GO TO Q. 17).....2	<u>24</u>	<u>30.8</u>
	78	100%

IF YES

B. Do you smoke cigarettes now? (CIRCLE ONE)

	<u>Number</u>	<u>Percent</u>
Yes.....1	30	55
No.....2	<u>24</u>	<u>45</u>
	54	100%

C. On the average, about how many cigarettes a day (do/did) you smoke?

(WRITE IN NUMBER SMOKED PUT A "0" IN ANY EXTRA BOXES ON THE LEFT)

 26 CIGARETTES (Response range: 1-60;
Mean: 26.8)

D. About how long has it been since you last smoked
cigarettes fairly regularly? (CIRCLE ONE)

	<u>Number</u>	<u>Percent</u>
Currently smoke.....1	29	54
Days.....2	0	0
Weeks.....3	0	0
Months.....4	2	4
Years.....5	21	38
Never smoked regularly.....6	<u>2</u>	<u>4</u>
	54	100%

Q.16 continued

Non-standard responses

16 A

Item Event: Circles "yes" instead of "1".....* of instances: 4

16 B

Item Events: Circles "yes" instead of "1".....* of instances: 2

Circles "no" instead of "2".....* of instances: 2

16 C

Item Events: Fails to zero-fill.....* of instances: 9

Item Error: Fails to answer.....* of instances: 1

16 D

No errors or item events

% accurate (with conventional coding/editing procedures): 99%

Item non-response: <1%

Discussion and recommendations

The Principal Investigators have informed NORC that two substitute questions are needed here to provide more specific information on the number of years the respondent has smoked (i.e., the number of "pack years"), even if the respondent is no longer smoking. Part D. was intended to provide an indication of pack years, but it is too indirect.

For all respondents who have smoked at least 100 cigarettes, the sequence will now ask how old they were when they first started smoking regularly. For those who have stopped smoking, the sequence will ask how long it has been since they smoked regularly. (See Qs. 17.-19., Appendix 3.)

4. Physical Health Conditions (Qs. 17-21)

Q.17. Do you currently have any of the following health problems?
(CIRCLE YES OR NO FOR EACH LINE, 1-16)

	<u>Yes</u>	<u>No</u>	<u>%</u>
1. Accidental injury	1	2	12.8
2. High blood pressure/hypertension.....	1	2.	9.0
3. Respiratory conditions, such as lung trouble, persistent coughing, etc.....	1	2	5.1
4. Cancer	1	2	0.0
5. Heart trouble.....	1	2	1.3
6. Stroke.....	1	2	0.0
7. Kidney, bladder, or urinary problems, such as stones, infections, etc.....	1	2	0.0
8. Skin problems, such as acne or skin rash.....	1	2	16.7
9. Mental or emotional problems.....	1	2	1.3
10. Diabetes.....	1	2	0.0
11. Stomach or digestive disorders, such as ulcers, inflammations, etc.....	1	2	7.7
12. Liver problems, such as hepatitis, cirrhosis, etc.	1	2	1.3
13. Blood disorders, such as anemia, blood clots, etc.....	1	2	1.3
14. Nerve disorders, such as epilepsy, migraines, etc.....	1	2	1.3
15. Visual problems	1	2	21.9
16. Hearing problems.....	1	2	14.1

N = 78 to all subparts

Non-standard responses

% Accurate (edited)

17. 1. Self-corrected error (1 instance)	100%
2. Circles "2" with note "under control" (1)	100%
3. --	100%
4. --	100%
5. --	100%
6. --	100%
7. --	100%
8. Self-corrected error (1)	100%
9. --	100%
10. --	100%
11. --	100%
12. --	100%
13. --	100%
14. Circles "migraines" (1)	100%
15. Self-corrected error (1); writes in "glasses" (1)	100%
16. --	100%

Item non-response: 0%

Q.17 continued

Discussion and recommendations

Focus group participants pointed to several significant omissions in the list of health conditions. Skeletal and joint disorders, for example, should be included.

Some of the categories of health problems were thought vague: especially "accidental injury," "skin problems, such as acne or skin rash," "mental or emotional problems," and "visual problems."

The category "mental or emotional problems" seemed to many of the focus group participants as out of place, buried as it is in a list of physical disorders.

Finally, a category for describing "Other" health problems was recommended by the veterans in the focus groups.

Our recommendations follow closely upon the observations raised in the focus groups:

- * Omit "accidental injuries." The category is overly broad, and while intended as an indirect measure of risk-taking behavior, there was no evidence from the focus groups that the item is a valid operationalization of this concept.
- * Omit "mental or emotional problems." This category is best dealt with separately from the list of physical conditions.
- * Omit "visual problems," which introduces the problem of interpretation as between corrected and uncorrected visual defects.
- * Sharpen the focus of "Skin problems, such as acne or skin rash" by specifying "persistent" skin problems.
- * Add a category for joint and skeletal problems.
- * Add a category for "Other," and ask respondent to specify the condition.

18. Please indicate which statement below best describes your military duty status: (CIRCLE ONE)

	<u>Number</u>	<u>Percent</u>
Released from active military duty during the years 1965-75.....1	69	91
Released from duty after 1975.....2	7	9
Still on active military duty.....3	<u>0</u>	<u>0</u>
	76	100%

Non-standard responses

Item Error: no response given * of instances: 2
Item Event: supplemental information written in..... * of instances: 1

% accurate (with conventional coding/editing procedures): 97.5%

Item non-response: 2.5%

Discussion and recommendations

Other than the fact that two individuals failed to respond to this item, it appears to have worked well and should be retained in its present form. It is noteworthy, however, that in response to Q.23.A. two respondents reported that they were still in the military. These are apparently the two non-respondents to this item, because no one responded in the equivalent category here.

The Principal Investigators recommended that a question be added, later in the sequence, to ascertain whether the respondent requested a military duty assignment in Vietnam, to assess the extent of volunteering. (See Q.25, Appendix 3.)

19. The questions below concern your health over the entire period since your active duty during the Vietnam Era, 1965-1975.

If you were released from active military duty during the years 1965-1975, please describe your health since your date of release.

If you are still on active duty, or released after 1975, describe your health since 1975.

In responding, please include any current health problems you described in Q.17. (ALWAYS ANSWER A AND THEN ANSWER B AND C AS APPROPRIATE FOR EACH LINE, 1-16)

A. Since active military duty 1965-75, have you had this problem?

B. Have you consulted a physician about this problem?

C. Have you ever been hospitalized overnight for this problem?

IF YES TO THIS, ANSWER B >>>>

IF YES TO THIS, ANSWER C >>>>

	A.	B.	C.
1. Accidental Injury	Yes...29 (38%) No...48 (62%)	Yes... 29 No....	Yes... 9 No....
2. High Blood Pressure/Hypertension	Yes... 7 (9%) No...70 (91%)	Yes... 5 No....	Yes... 2 No....
3. Respiratory Conditions such as Lung Trouble, Persistent Coughing, etc.	Yes... 8 (10%) No...69 (90%)	Yes... 6 No....	Yes... 2 No....
4. Cancer	Yes... 0 (0%) No...77 (100%)	Yes... No....	Yes... No....
5. Heart Trouble	Yes... 3 (4%) No...74 (96%)	Yes... 3 No....	Yes... 2 No....
6. Stroke	Yes... 0 (0%) No...77 (100%)	Yes... No....	Yes... No....
7. Kidney, Bladder, or Urinary Problems such as Stones, Infections, etc.	Yes... 4 (5%) No...73 (95%)	Yes... 4 No....	Yes... 3 No....

Total Number of Respondents: 77

19. (continued)

A. Since active military duty 1965-75, have you had this problem?

B. Have you consulted a physician about this problem?

C. Have you ever been hospitalized overnight for this problem?

IF YES TO THIS, ANSWER B ==>>

IF YES TO THIS, ANSWER C ==>>

	A.	B.	C.
8. Skin Problems such as Acne or Skin Rash	Yes... 19 (25%) No... 58 (75%)	Yes... 8 No....	Yes... 1 No....
9. Mental or Emotional Problem	Yes... 4 (05%) No... 73 (95%)	Yes... 3 No....	Yes... 1 No....
10. Diabetes	Yes... 0 (0%) No... 77 (100%)	Yes... No....	Yes... No....
11. Stomach or Digestive Disorders, such as Ulcers, Inflammations, etc	Yes... 8 (10%) No... 69 (90%)	Yes... 8 No....	Yes... 5 No....
12. Liver Problems, such as Hepatitis, Cirrhosis, etc.	Yes... 1 (1%) No... 76 (99%)	Yes... 1 No....	Yes... 1 No....
13. Blood Disorders, such as Anemia, Blood Clots, etc.	Yes... 2 (3%) No... 75 (97%)	Yes... 2 No....	Yes... 2 No....
14. Nerve Disorders, such as Epilepsy, Migraines, etc.	Yes... 4 (05%) No... 73 (95%)	Yes... 4 No....	Yes... 1 No....
15. Visual Problems	Yes... 16 (21%) No... 61 (79%)	Yes... 15 No....	Yes... 1 No....
16. Hearing Problems	Yes... 9 (12%) No... 68 (88%)	Yes... 9 No....	Yes... 0 No....

Total Number of Respondents: 77

Q.19 continued

Non-standard responses

General: Answers B and C even though A is "no"* of instances: 11
Answers C even though B is "no"* of instances: 1
Fails to include health problems
described in Q. 17.....* of instances: 4

	<u>% Accurate (edited)</u>
19. 1. Self-corrects error (2)	100%
2. No problems	100%
3. Yes for B but skips C (1)	99%
4. --	100%
5. --	100%
6. --	100%
7. --	100%
8. Answers C even though B is "no" (1)	100%
Answers B and C though A is "no" (1)	100%
9. Answers C even though B is "no" (1)	100%
10. No problems	100%
11. No problems	100%
12. No problems	100%
13. Self-corrects error (1)	100%
14. Self-corrects error (1)	100%
15. "Yes" to A but illegitimate skip of B and C (1)	
Negative answer to 19.15. contradicts response to Q. 17 (1)	97%
16. Self corrects error (1)	100%

Item non-response: <1%

Discussion and recommendations

For a visually very complex item, the error rate is extremely low for Q.19. Errors are for the most part in the direction of providing **more** information than is actually required.

Categories must be amended as per recommendations for Q.17: omit "Accidental injury;" qualify "Skin problems" with "persistent;" omit "Mental or emotional problem;" add "Joint or skeletal disorders...;" omit "Visual problems;" and add a category for "Other."

The Principal Investigators recommend that a fourth category or question, D., be added to the sequence of 19.A, B, and C. It will ask all those who reported hospitalization for a health problem to also report the date of the first hospitalization. This will allow easy identification of health problems that existed prior to service. (See Q.22., Appendix 3.)

Q.20. Would you say that your health in general is excellent, very good, good, fair, or poor?
 (CIRCLE ONE)

		<u>Number</u>	<u>Percent</u>
Excellent.....	5	35	44.9
Very good.....	4	30	38.5
Good.....	3	11	14.1
Fair.....	2	2	2.6
Poor.....	1	<u>0</u>	<u>0.0</u>
		78	100%

Non-standard responses

Item Error: Circles both "5" and "4" with line connecting. * of instances: 1

% accurate (with conventional coding/editing procedyres): 99%

Item non-response: 0%

Discussion and recommendations

Both focus group discussion and item edit confirmed that the item was straightforward and easily understood. It is recommended that it be retained as is.

Q. 21.A. Compared to your twin brother's health, how would you rate your health?
 Would you say your health is...(CIRCLE ONE)

	Number	Percent
Better than your brother's (GO TO B).....1	16	20.5
About the same as your brother's (GO TO Q.22).....2	52	66.7
Worse than your brother's (GO TO B).....3	9	11.5
Doesn't apply, because brother is not living.....6	<u>1</u>	<u>1.3</u>
	78	100%

IF HEALTH IS BETTER OR WORSE:

B. In what way is your health different from your brother's health?

Verbatim Responses to Question 21B.

1. (R's health worse than brother's)
 Had surgery (twice) in the last ten years: once for colon re-section, other for polyp on duodenum.
2. (R's health better than brother's)
 My brother had liver damage from too much alcoholic intake. He has had two operations (about 10 years apart) for polyps in the large intestine.
3. (R's health better than brother's)
 My brother has back problems and trouble with his hips.
4. (R's health better than brother's)
 I don't have an ulcer.
5. (R's health better than brother's)
 He must take medication for migraines, plus he was wounded in Vietnam, which resulted in a leg injury, keeping him from obtaining total mobility.
6. (R's health better than brother's)
 My brother suffers from ulcers, migraine (cluster) headaches, and takes blood thinners and other prescribed medication. I take no prescribed medicine nor do I suffer the above problems. However, I suspect that my chloracne condition is possibly the result of exposure to Agent Orange. Two of my partners aborted pregnancy because of this fear.
7. (R's health worse than brother's)
 Never had malaria or hepatitis or in any severe accident or exposed to Agent Orange.
8. (R's health better than brother's)
 My brother gets more colds and has had some stomach and nerve problems.
9. (R's health worse than brother's)
 Worse because although I am very fit and exercise hard regularly, I have arthritis in my left hand which makes it difficult to perform many simple tasks.
10. (R's health better than brother's)
 My brother is overweight and has had some stomach problems.

11. (R's health better than brother's)
My brother seems to get more colds or flu whereas I rarely get sick at all (once or twice in ten years).
 12. (R's health better than brother's)
I do not have high blood pressure which requires treatment/or medication.
 13. (R's health worse than brother's)
I have stomach problems, he does not.
 14. (R's health worse than brother's)
I catch colds more often and seem to be sick longer.
 15. (R's health worse than brother's)
 - My brother weighs less in relation to his height (6' 2")
 - He eats better foods (i.e., maintains a better diet)
 - He drinks less alcohol less often (does not smoke either)
 - He exercises strenuously daily, while I do so only 3 times a week.
 16. (R's health worse than brother's)
He doesn't smoke cigarettes and I do.
 17. (R's health worse than brother's)
He is slim and very active whereas I get tired easily (I'm on medication for high blood pressure) and I get in the dumps lately.
 18. (R's health better than brother's)
I can tell and I know without a doubt my health is better.
 19. (R's health better than brother's)
Brother's accidental injuries, and problems he had when discharged--which was supposedly malaria he picked up in Nam.
 20. (R's health better than brother's)
I am more physically active, therefore in better shape.
 21. (R's health better than brother's)
I'm more physically active and I don't drink as much as my brother and I don't smoke at all.
 22. (R's health worse than brother's)
He does not smoke. He is in better fitness than I'm in.
 23. (R's health better than brother's)
Not as many colds.
 24. (R's health better than brother's)
He smokes and drinks more than I.
 25. (R's health better than brother's)
He is 100% disabled due to injuries incurred in combat in RYN, I am not, I stay in good physical health by regular exercise.
-

Q.21. continued

Non-standard responses

No non-standard responses. All who should have gone on to explain differences, did so.

% accurate (with conventional coding/editing procedures): 100%

Item non-response: 0%

Discussion and recommendations

The kinds and quality of data elicited by the question seem impressive. It is recommended the the question be retained. Because it is so productive of rich data, it is also recommended that the better/worse "compared to your brother" format be utilized in an additional context, so that a new item could ask each respondent to compare his adjustment to civilian life to that of his twin (pretest Q.23., Appendix 3 Qs. 29, 30).

5. SEA and combat experience: Q.22.

22.A. When you were in the military, were you stationed in Vietnam, Laos, or Cambodia; in the waters in or around these countries; or fly in missions over these areas? (CIRCLE ONE)

	<u>Number</u>	<u>Percent</u>
Yes (GO TO B).....1	34	43.6
No (GO TO Q.23A).....2	44	56.4
	78	100%

B. Below is a list of 18 different combat roles and experiences that men had during the Vietnam war. For each statement, please indicate whether you had that combat experience. (CIRCLE YES OR NO FOR EACH LINE, 1-18)

	<u>Yes</u>	<u>No</u>	<u>% YES</u>
1. In an artillery unit which fired on the enemy...1 .. 2			14.7
2. Flew in an aircraft (reconnaissance, or fixed wing F-14, B-52, etc.).....1 .. 2			23.5
3. Flew helicopter attack gunships or medvacs.....1 .. 2			11.8
4. Stationed at a forward observation post.....1 .. 2			26.5
5. Tunnel rat checking enemy base camps.....1 .. 2			2.9
6. Served on river patrol or gunboat.....1 .. 2			5.9
7. Demolitions expert in the field.....1 .. 2			11.8
8. Assigned to Graves and Registration to retrieve dead bodies from the field.....1 .. 2			0.0
9. Served as a medic in combat.....1 .. 2			2.9
10. Received incoming fire.....1 .. 2			61.8
11. Encountered mines and booby traps.....1 .. 2			38.2
12. Received sniper or sapper fire.....1 .. 2			61.8
13. Unit patrol ambushed.....1 .. 2			26.5
14. Flew in aircraft (fixed wing or helicopters) and was shot down.....1 .. 2			2.9
15. Engaged VC and/or NVA in firefight.....1 .. 2			38.2
16. Saw Americans killed, and/or saw Vietnamese killed.....1 .. 2			55.9
17. Wounded.....1 .. 2			14.7
18. Captured by the enemy.....1 .. 2			0.0

Q. 22. continued

Non-standard responses

22A

Item Event: Circles neither "1" nor "2" but writes "Classified in Special Forces for a tour"* of instances: 1

Item Event: Circles "yes" or "no" instead of "1" or "2".....* of instances: 5

22B

Item Event: Misses skip at 22B (that is, answers "no," then gives negative answers for all elements of 22B).....* of instances: 6

22A: % accurate (with conventional coding/editing procedures): 100%

22B: % accurate (with conventional coding/editing procedures): 100%

Item non-response: 0%

Discussion and recommendations

Several focus group participants wondered if the geographic range described in 22.A. was sufficiently inclusive. What if one had been stationed in Thailand? What about the Korean DMZ?

In connection with 22.B., one veteran, a non-combat zone medic, reported that he had felt very stressed in the role although the question gave him no outlet for describing this form of combat-related stress.

Another instanced the role of supplying (for example, with chemicals) front-line forces as a task attended by tensions in many ways akin to those of combat. However, given that the intent of the question is geographically restrictive, and that focus is on combat or combat related roles rather than on an exhaustive list of stressful situations, it is recommended that the question be retained as is.

6. Psychological health conditions, including PTSD (Qs.23-24)

23.A. Overall, how would you describe your readjustment to civilian life after your release from active duty? Would you say that returning to civilian life caused you...(CIRCLE ONE)

	<u>Number</u>	<u>Percent</u>
Considerable difficulty (GO TO B)..... 1	5	6.4
Some difficulty (GO TO Q. 24).....2	20	25.6
Very little difficulty (GO TO Q. 24).....3	11	14.1
None, or practically no difficulty (GO TO Q. 24)..... 4	40	51.3
Does not apply; I am still in the military (GO TO Q. 24)..... 5	<u>2</u>	<u>2.6</u>
	78	100%

IF CONSIDERABLE DIFFICULTY

B. Please describe the difficulties you had_____

Verbatim Responses to Question 23B.

1. I don't believe I had the emotional maturity to deal with the Vietnam experience in the first place. Readjustment was so difficult that it is nearly indescribable. It took about 2-3 years to gain a semblance of normality. I stayed alone quite a bit. Problems with nightmares and flashbacks.
2. Life style of training for Olympics all day long to civilian life of getting an education in college and a job.
3. Adjusting from single life to married life due to the service.
4. I had to adjust to losing one leg and some use of the other leg.
5. (should have skipped: listed "some difficulty")
A small problem being accepted by people younger and older than me. The younger and their peace movement activity & the older (World War II vets) with being in a war that had a no win situation.
6. The civilians had no idea what the war was about and still don't know. Only someone who was there will ever know.
7. (should have skipped: listed "some difficulty")
The idea drilled in to kill the enemy.

Non-standard responses

Item Events: Self-corrects on 23A # of instances: 1
Respondent circles "2" for "mental adjustment"
and notes that he is circling "4" for health # of instances: 1
Respondent answers B when not required..... # of instances: 2

% accurate (with conventional coding/editing procedures): 100%

Item non-response: 0%

Discussion and recommendations

The process of questionnaire edit revealed that some respondents had needed more space for writing answers to 23B.

In the focus groups, a number of participants expressed their feelings that the instruction indicating that only those who had experienced "considerable difficulty" should answer 23B was far too restrictive. Those who had experienced "some difficulty" felt frustrated in not being given the opportunity to relate their problems.

Generally, focus group participants felt that the question scratched only the surface of homecoming/readjustment issues, although it was the intention of the investigators that Q.23. be the main outlet for the telling of homecoming problems. As such, the item did not adequately elicit the nature and depth of response which the investigators had hoped for.

It is therefore recommended that this item be supplemented by a number of questions, dealing with opportunities to share feelings about the military experience with selected categories of people, with abilities to become reinvolved in civilian life, and explicitly comparing degree of adjustment to civilian life with twin's adjustment (see Appendix 3, Qs.27-30).

	Very	Often	Sometimes	Never	Never
2. Had trouble falling asleep, staying asleep or sleeping too much.....	1 (05%)	2 (12%)	3 (18%)	4 (23%)	5 (32%)
3. Had reported dreams or nightmares about things that happened to you while in the military.....	1 (00%)	2 (10%)	3 (15%)	4 (20%)	5 (25%)
4. Had painful memories of things that happened to you while in the military.....	1 (01%)	2 (07%)	3 (17%)	4 (24%)	5 (29%)
5. Avoided activities that might remind you of things that happened to you while in the military.....	1 (01%)	2 (08%)	3 (12%)	4 (17%)	5 (22%)
6. Found yourself in a situation where you started to feel and act as though a disturbing event you experienced in the military was happening all over again.....	1 (00%)	2 (08%)	3 (12%)	4 (16%)	5 (24%)
7. Had times when other feelings or actions became stronger when you were in situations that remind you of times in the military.....	1 (01%)	2 (13%)	3 (14%)	4 (23%)	5 (27%)
8. Felt ashamed or guilty about the kind of things you did to survive while in the military.....	1 (01%)	2 (05%)	3 (08%)	4 (16%)	5 (20%)
9. Had trouble concentrating.....	1 (04%)	2 (27%)	3 (08%)	4 (16%)	5 (45%)
10. Had trouble with your memory.....	1 (04%)	2 (20%)	3 (18%)	4 (15%)	5 (43%)
11. Have been irritable and short-tempered.....	1 (10%)	2 (29%)	3 (25%)	4 (31%)	5 (3%)
12. Had episodes of angry or aggressive behavior.....	1 (06%)	2 (16%)	3 (26%)	4 (49%)	5 (3%)
13. Lost interest in usual daily activities.....	1 (05%)	2 (21%)	3 (17%)	4 (43%)	5 (14%)
14. Felt distant from others, even those people you care about.....	1 (04%)	2 (23%)	3 (20%)	4 (50%)	5 (3%)
15. Felt that life is not meaningful.....	1 (00%)	2 (16%)	3 (12%)	4 (71%)	5 (3%)
16. Felt jump and easily started or felt that you had to stay on guard all the time.....	1 (01%)	2 (17%)	3 (12%)	4 (67%)	5 (3%)

24. In the past 12 months how frequently have you experienced the following problems? (CIRCLE ONE FOR EACH LINE, 1-5)

John F. Kennedy

Q.24. continued

Non-standard responses

Item Errors: 24.j. and k.: Respondent circles two answers, "3" and "4."
24.o.: Respondent circles two answers, "4" and "5."
24.: One respondent skipped the entire item.

Item Events: Self-correction at item f.....* of instances: 1
Circles and puts in check marks too.....* of instances: 1
Self corrects at item m.....* of instances: 1

% accurate (with conventional coding/editing procedures): 98%

Item non-response: 1%

Discussion and recommendations

Generally, focus group discussants thought the items were easy to understand, and did not cover content that they would feel reluctant to report. One participant, however, found item a. (sleep problems) vague. Given the performance levels revealed by the item analysis, it is recommended that the question be retained in its present form.

7. Fertility and marital history (Qs 25-30)

25. Since your discharge from active military duty, have you and your partner(s) ever had problems having children? (CIRCLE ONE)

		<u>Number</u>	<u>Percent</u>
Yes.....	1	10	12.8
No.....	2	<u>68</u>	<u>87.2</u>
		78	100%

Non-standard responses

Item events: Self-corrects error..... * of instances: 1
Circles "no" instead of "2"..... * of instances: 2
Circles "yes" instead of "1"..... * of instances: 1

% accurate (with conventional coding/editing procedures): 100%

Item non-response: 0%

Discussion and recommendations

While item analysis indicated that the question yields readily codeable responses, focus group discussions suggested some ways in which the question could be sharpened. Thus, the phrase "Since your discharge from active military duty" would seem inappropriate insofar as some respondents may still be in the military. Also, the vagueness of "any problems" and the lack of a time frame might be rectified by focusing the question on any period of a year or more in which attempts to conceive a child were unsuccessful. Finally, in its pretest form the item does not distinguish between individuals who respond "No" because they have tried to have children without problems, and those who say "No" because they have never tried to have children at all. In order that the item not yield findings biased in the direction of no problems with conceptions, we recommend the new format depicted in Qs. 35 and 36 in Appendix 3. The two alternative items are adapted from the CDC questionnaire.

26. How many children have you ever fathered? (ENTER NUMBER. PUT A "0" IN ANY EXTRA BOX ON THE LEFT)

CHILDREN (Response range: 0-6; mean: 1.46)

25 respondents (32%) reported having no children. Of the remaining 68% with children, the mean number was 2.15. N = 78.

Non-standard responses

Item events: Writes in "maybe 3" (2 described in Q 27)..... * of instances: 1
Fails to zero-fill (but result unambiguous)..... * of instances: 2
Writes "1 1/2" to mark current pregnancy..... * of instances: 2

% accurate (with conventional coding/editing procedures): 100%

Item non-response: 0%

Discussion and recommendations

Item edit and focus group discussions uncovered a number of potential ambiguities in this question. In particular, how are current pregnancies, miscarriages, abortions, still births, and neonatal deaths to be counted? In order to be certain that such ambiguities not affect the integrity of the data collected, it is recommended that the number of natural children fathered be taken from the live birth question which follows, and supplemented by an additional question relating to current pregnancy (see Appendix 3, Qs. 35 and 36).

27. In the table below we would like you to enter information about your natural (not adopted) children. Please include all live births, even if a child is no longer living.

Please indicate: (A) The date of birth of each child; (B) the child's mother's age at the time of the birth; and (C) whether each child had any abnormality, birth defects, or handicaps. Briefly describe any birth defect in the space provided (D). If a child is no longer living, please enter date of death in (E).

	A.	B.	C.	D.	E.
Natural Children	Date of Birth Month Day Year	Mother's Age At Child's Birth (ENTER YEARS)	Any Birth Defects? (CIRCLE) Yes - No	Description of Birth Defects, Abnormality, or Handicap	If Deceased, Date of Death Month Day Year
1st Child	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 50-55/	<input type="text"/> <input type="text"/> 56-57/	Y N 58/	59-60/	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 61-66/
2nd Child	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 67-72/	<input type="text"/> <input type="text"/> 73-74/	Y N 75/	76-77/	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> (BEGIN DECK 4) 10-15/
3rd Child	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 16-21/	<input type="text"/> <input type="text"/> 22-23/	Y N 24/	25-26/	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 27-32/
4th Child	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 33-38/	<input type="text"/> <input type="text"/> 39-40/	Y N 41/	42-43/	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 44-49/
5th Child	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 50-55/	<input type="text"/> <input type="text"/> 56-57/	Y N 58/	59-60/	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 61-66/
6th Child	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 67-72/	<input type="text"/> <input type="text"/> 73-74/	Y N 75/	76-77/	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> (BEGIN DECK 5) 10-15/
Other Children					16/

Q.27. findings continued

A total of 114 children were reported.

A. Range of dates of birth for:	B. Mean age of mother at child's birth:
first child: 1955-1982	23.9
second child: 1958-1984	25.9
third child: 1960-1984	25.4
fourth child: 1969-1983	27.6
fifth child: 1976,1981	29
sixth child: 1983	33

C. Nine respondents reported a total of 13 children born with birth abnormalities or defects.

D. Verbatim description of birth abnormalities

- (R reports three children. Two born post- VN reported to have birth defects.)
Child 2: Tumor. Hole in heart.
Child 3: Webbed foot. Extra thumb.
- (R reports four children. "No" to birth defect for youngest, although "birth abnormality" reported, so coded as "Yes" to birth defect.)
Child 1: Jundice in color.
- (R reports two births, both with abnormalities, as well as a miscarriage.)
Child 1: Skin rash comes and goes. Has dizzy spells.
Child 2: Born 6 fingers on left hand. Has constant skin rash.
- (R reports two children, firstborn with birth abnormality.)
Child 1: Abnormal. [Verbatim description]
- (R reports two children, firstborn with birth abnormality.)
Child 1: Mentally retarded.
- (R reports three children. Latter two said to have birth abnormality.)
Child 2: Positional deformity of right foot.
Child 3: Developmentally delayed and speech delayed. Unknown origin.
- (R reports two children. Second has abnormality.)
Child 2: Skin rashes and growth on shoulder called Nevus (Sp?)[R's question]
- (R reports two children. Both reported to have abnormalities.)
Child 1: Leg's crooked.
Child 2: Strolismuss in eyes.
- (R reports four children. Birth abnormality reported for third birth.)
Child 3: Discolored skin on leg.

E. No deaths of children were reported.

Q.27, continued

Non-standard responses

Item Error: Illegitimate skip of entire section.....* of instances: 1 (x 1 child)

Column A

Item Error: Birthdate month and day left blank.....* of instances: 2

Item event: Fails to zero-fill month and day of birth.....* of instances: 1

Column B

Item Error: "Twenty something" put for "Mother's age".....* of instances: 1

Item event: Self-corrects response to B.....* of instances: 2

Column C

Item Error: Fails to circle "yes" or "no"* of instances: 3

Column D

Item Error: writes in only "abnormal.".....* of instances: 1

Item event: writes in "none" but should have skipped.....* of instances: 1

Column E

No errors or item events.

Total Number of Items: 5 columns x 114 children = 570 items

% accurate (with conventional coding/editing procedures): 99%

Item non-response: 1%

Discussion and recommendations

Focus group discussions and item edit confirmed that this question was effective in eliciting the desired information. It is recommended that it be retained in its present form.

28.A. Have you ever been the father of a stillborn child? (CIRCLE ONE)	<u>Number</u>	<u>Percent</u>
Yes (GO TO B).....1	1	1.3
No (GO TO Q.29).....2	<u>77</u>	<u>98.7</u>
	78	100%

IF YES:

B. In what year(s) did this happen? (WRITE IN YEAR OR YEARS)

1. 1191

(One respondent had had one stillborn child only)

2. 1191

3. 1191

Non-standard responses

Item events: Circles "no" but not "2".....* of instances: 3

Circles "no" and "2".....* of instances: 2

% accurate (with conventional coding/editing procedures): 100%

Item non-response: 0%

Discussion and recommendations

Neither item analysis nor the focus group discussions revealed any difficulty with this question. It is recommended that it be retained as is.

29.A. To your knowledge, did any partner of yours ever have a miscarriage?

(CIRCLE ONE)

		Number	Percent
Yes (GO TO B).....	1	11	14.1
No (GO TO Q. 30).....	2	57	73.1
Not applicable (GO TO Q. 30).....	3	8	10.3
DON'T KNOW (GO TO Q. 30).....	8	<u>2</u>	<u>2.6</u>
		78	100%

IF YES:

B. How many are you aware of? (WRITE IN NUMBER, PUT A "0" IN ANY EXTRA BOX ON THE LEFT)

 MISCARRIAGES

(One respondent reported 3 miscarriages; one reported 2; and nine reported 1)

C. In what year(s) did they occur? (WRITE IN YEAR OR YEARS)

1. 119

2. 119

3. 119

Non-standard responses

- 29.A. Item events: Circles "yes" instead of "1"..... * of instances: 1
 Circles "no" instead of "2"..... * of instances: 2
 29.B. Item events: Misses skip and fills in "00"..... * of instances: 4
 29.C. Error: Fails to fill in year (one miscarriage) * of instances: 1

% accurate (with conventional coding/editing procedures): A=100%, B=100%, C=99%

Item non-response: 1%

Discussion and recommendations

One focus group discussant raised the issue of whether abortions counted as miscarriages. However, given the general understanding of miscarriage as an unplanned spontaneous event as opposed to a deliberate human intervention, the question as phrased appeared to pose no threat of misunderstanding. It is recommended that the item be retained as is.

		<u>Number</u>	<u>Percent</u>
30. A. Have you ever been married?			
	Yes (GO TO B)..... 1	66	84.6
	No (GO TO Q. 31)..... 2	12	15.4
		78	100%

IF YES:

B. In the table below, please list the month and year in which you were married. If your first marriage ended because of death or divorce, indicate the date you were widowed or divorced. If you were married and/or divorced more than once, please complete the remainder of the table.

	Married	Divorced	Widowed
	Month Year	Month Year	Month Year
1st Marriage	_ _ _ _	_ _ _ _	_ _ _ _
2nd Marriage	_ _ _ _	_ _ _ _	_ _ _ _
3rd Marriage	_ _ _ _	_ _ _ _	_ _ _ _
4th Marriage	_ _ _ _	_ _ _ _	_ _ _ _

(Response frequencies: 66 married, 15 divorced, 0 widowed, 8 second marriages, 0 second divorces)

Non-standard responses

- 30.A. Item event: Circles "Yes" instead of "1" * of instances: 3
 30.B. Item event: Fails to zero-fill month..... * of instances: 1
 Item error: "Yes" to A but leaves B blank..... * of instances: 3

% accurate (with conventional coding/editing procedures): A = 100%, B = 96%

Item non-response: 2%

Discussion and recommendations

Focus group discussion confirmed that the item was well understood. It is recommended that the question be retained in its current form.

8. Income (Q. 31)

The next question concerns your total family income. Income is important for analyzing and interpreting the health information we receive from veterans. For example, income information helps us to learn whether persons in one income group have certain conditions more or less frequently than people in another income group.

31. What was your total combined family income (that is, for both yourself and your partner, if any) during the past 12 months? Include money from jobs, social security, unemployment payments, retirement income, public assistance and so forth. (CIRCLE ONE)

	<u>Number</u>	<u>Percent</u>
Less than \$ 5,000.....01	2	2.6
\$ 5,000 - \$9,999.....02	0	0.0
\$ 10,000 - \$14,999.....03	1	1.3
\$ 15,000 - \$19,999.....04	8	10.3
\$ 20,000 - \$24,999.....05	13	16.7
\$ 25,000 - \$29,999.....06	15	19.2
\$ 30,000 - \$34,999.....07	12	15.4
\$ 35,000 - \$39,999.....08	11	14.1
\$ 40,000 - \$49,999.....09	6	7.7
\$ 50,000 or more.....10	<u>10</u>	<u>12.8</u>
	78	100%

Non-standard responses

Item error: circles both 04 and 05.....* of instances: 1

% Accurate (with conventional coding/editing procedures): 99%

Item non-response: 0%

Discussion and recommendations

It was particularly gratifying that 100% item response was obtained for the income question, since income items are notoriously sensitive. Both item analysis and focus group discussion showed the item performing well. It is recommended that it be retained in its present form.

9. Locating information (Qs.32-37)

Findings and Non-standard responses

- 32. Respondent name, address, phone number.** All information provided in full. No errors or item events.
- 33. Social Security Number.**
Errors: Fails to provide social security number..... * of instances: 2
- 34. Respondent's birthdate.**
Item event: Fails to zero-fill month of birth. * of instances: 1
- 35. Twin brother's name, address, phone number.**
Errors: Omits all information on brother..... * of instances: 2
Omits street, number and city from address..... * of instances: 1
Omits brother's telephone number..... * of instances: 2
- 36. Whether twin brother is living.**
All information provided in full. One brother deceased. No errors or item events.
- 37. Name, address, phone number of contact person for future locating.**
Errors: Illegitimate skip of Q. 37..... * of instances: 2
Incomplete telephone number..... * of instances: 1

<u>% Accurate (with conventional coding/editing procedures):</u>	<u>Non-response:</u>
32: 100%	0%
33: 97.5%	2.5%
34: 100%	0%
35: 93.6% complete information; 3.8% partial information.	4%
36: 100%	0%
37: 96% complete information; 1.3% partial information.	1%

Discussion and recommendations

On the basis of item analysis and focus group discussion, it is recommended that the locating (address updating) section (Q 32 - 37) be retained unchanged.

IV. Summary and Recommendations

The performance of the items in the Survey of Health is summarized below.

<u>Item Number</u>	<u>% Accurate</u>	<u>% Non-response</u>
1.	100%	0%
2.	99	0
3.	100	0
4.	99	<1
5.	>99	<1
6.	100	0
7.	100	0
8.	97.4	0
9.	100	0
10.	100	0
11.	100	0
12.	>99	<1
13.	>99	<1
14.	100	0
15.	100	0
16.	99	<1
17.	100	0
18.	97.5	2.5
19.	>99	<1
20.	99	0
21.	100	0
22.	100	0
23.	100	0
24.	98	1
25.	100	0
26.	100	0
27.	99	1
28.	100	0
29.	>99	1
30.	98	2
31.	99	0
32.	100	0
33.	97.5	2.5
34.	100	0
35.	96	4
36.	100	0
37.	98	1

As the summary makes apparent, the Survey of Health enjoyed an unusually high level of respondent accuracy in completing the questions, and a similarly high level of item response. (The figures for Item Accuracy include any illegitimate skips or non-responses to items.) Out of almost 15,600 response possibilities (78 respondents x 200 variables) there were only 66 non-responses (.4%).

In the item-by-item review of findings, it was recommended that three items be dropped from the questionnaire for the main survey. The recommended deletions are: Q. 12., a question on average alcohol consumption over one's entire drinking history, which a number of respondents found confusing; Q. 16.D., an indirect measure of a smoker's "pack years;" and Q. 26., a too-vague question about the number of children ever fathered.

NORC also recommended that some items be moved within the questioning sequence. In particular, it was recommended that the items about mental or emotional problems, embedded in lists of physical health problems in pretest questions 17. and 19., be removed from the physical health context and placed later in the questionnaire near other items that deal with psychological health issues, becoming items 32., 33., and 34 (see Appendix 3). A slight modification of the question was also recommended. Rather than ask whether the respondent has consulted a physician about any emotional problem, the respondent is asked whether he has consulted "...a health care professional (such as a physician, psychologist, or social worker)...." Broadening the reference to "health care professional" rather than just "physician" is less likely to result in underreporting of emotional problems.

Several items that did not appear in the pretest questionnaire were recommended for addition to the main survey instrument. They are, by question number in the proposed survey instrument reproduced in Appendix 3:

Additions to the occupation sequence:

9.E. How many years have you worked at this job?

10. After your discharge from active military duty, how long did it take you to find a full-time job?

The above two items are adapted from the Legacies of Vietnam (Egendorf, et al., 1981) occupation questionnaire, #C-40.

Additional category in the educational attainment item:

11.E. Vocational or technical school after high school.

Substitute in cigarette consumption sequence:

17.C. About how long has it been since you last smoked cigarettes regularly?

19. About how old were you when you first started smoking cigarettes regularly?

Addition to list of physical health problems:

20.13. Joint or skeletal disorders, such as arthritis, swollen joints, etc.

Addition to sequence of information on hospitalization for health problems:

22.D. When were you first hospitalized for this problem?

25. While in the military, did you request a Vietnam duty assignment?

The above item is adapted from the June, 1984 draft of the CDC questionnaire for the study of the Vietnam experience and Herbicide Orange.

As part of an expanded sequence on the homecoming experience:

27.B. After your discharge from active military duty, how often did you talk to the following individuals about your experiences in the military? List: parents, wife or girlfriend, twin brother, friends, other Vietnam veterans.

28. After your discharge from active military duty, were you eager to get involved in everything, or did you not want to participate in things with other people?

The above two items are adapted from the Homecoming Questionnaire (items C2-6 and C2-9) from the Legacies of Vietnam research.

As part of the revised section on fertility history:

35. Is your wife (or partner) now pregnant?

36.A. Have you and your partner(s) ever tried for a period of a year or more to conceive a child?

[IF YES]: B. Were you able to conceive a child after a year of trying?

These items are adapted from the June, 1984 draft of the CDC questionnaire.

These changes result in a questionnaire of substantially similar burden to respondents, but without the opportunities for frustration presented to respondents in the pre-test survey due to a small number of vague and inadequate questions and response options.

NORC is confident that the recommended changes in the questionnaire will result in an even more successful fielding of the Survey of Health with the main study sample.

Appendix 1

1. Cover letter of introduction to Survey of Health
2. Pretest version, Survey of Health
3. Follow-up letter to non-respondents

NATIONAL RESEARCH COUNCIL
ASSEMBLY OF LIFE SCIENCES

2101 Constitution Avenue Washington, D. C. 20418

TWIN REGISTRY

June 1984

Address of Veteran

Dear [Name of Veteran]:

We need your help in a new study, of great interest and importance to medicine, on the health of twins. This study provides a very unusual opportunity to learn more about the health effects of military service, and the inheritance of many important illnesses. The plan is to create a registry of twins who are veterans of the Vietnam era. We are writing to ask that you participate in this effort by completing the enclosed questionnaire and returning it in the prepaid envelope.

The study is a purely scientific one which is being conducted by the National Academy of Sciences-National Research Council, with the cooperation of the Veterans Administration and the Department of Defense. NORC, a research center at the University of Chicago, is responsible for collecting the survey information. The study can be carried out only with the help of the twins themselves, and we want you to take part in the study by supplying the information asked for on the attached form.

All information you supply will be held in strict confidence and will be available only to the medical investigators working on this study. The study has nothing to do with any compensation, claims, or other contacts you may have with the Veterans Administration. No individual will be identified in the published results of the study.

The data are being collected under authority of Title 38, Sec 4101 of the Code of Federal Regulations, which authorizes the VA to conduct medical research.

Twin pairs who participate in the registry may be asked, from time-to-time, to participate in research studies. Your involvement in any study is entirely voluntary. The purpose of each study will be explained fully so that you can make an informed decision about your participation.

It is hoped that a great deal can be learned about genetic effects upon health and length of life from the registry. We sincerely hope that you will be able to help us by completing and returning the enclosed material. If you have any questions about the registry or studies of twins, please write to Dr. Mary O'Brien, or call her, collect, at 312/962-8967.

Sincerely,

C. D. Robinette

C. Dennis Robinette, Ph.D.
Director
National Research Council
Twin Registry

Mary O'Brien

Mary O'Brien, Ph.D.
Director
NORC Twin Registry
Data Collection

VIETNAM ERA TWIN STUDY
SURVEY OF HEALTH

NOTICE: All information you supply will be held in strict confidence and will be available only to the medical investigators working on this study. The study has nothing to do with any compensation, claims, or other contacts you may have with the Veterans Administration. No individual will be identified in the published results of the study.

BEGIN DECK 1

CASE ID: 0 _____

1-7/

BEFORE YOU BEGIN...PLEASE READ THESE INSTRUCTIONS

For some questions in this survey you will simply write answers in your own words. Other questions, however, ask you to follow instructions and use the answer categories provided. You will find instructions for responding included with each question, in CAPITAL LETTERS within parantheses. Below are examples of all the different instructions you will see, and the correct way to answer each type of question.

INSTRUCTION 1: (CIRCLE ONE)

1. What is the color of your eyes? (CIRCLE ONE)

- Blue.....1
- Brown.....②
- Green.....3
- Another color.....4

IF THE COLOR OF YOUR EYES IS BROWN, YOU WOULD CIRCLE THE NUMBER TO THE RIGHT OF "BROWN."

INSTRUCTION 2: (CIRCLE ALL THAT APPLY)

2. Last week, did you do any of the following? (CIRCLE ALL THAT APPLY)

- a. Work for pay.....①
- b. Attend classes.....1
- c. Watch TV.....①
- d. Visit friends.....1
- e. Exercise.....①

IF YOU WORKED FOR PAY, EXERCISED, AND WATCHED TV LAST WEEK, YOU WOULD CIRCLE THE NUMBERS TO THE RIGHT OF THE ITEMS, AS SHOWN.

INSTRUCTION 3: (CIRCLE ONE FOR EACH LINE)

3. Do you plan to do any of the following next week? (CIRCLE ONE FOR EACH LINE)

- | | Not | | |
|--------------------------|-------|-------|----|
| | Yes | Sure | No |
| a. Visit a relative..... | 1.... | 2.... | ③ |
| b. Go to a museum..... | 1.... | ②.... | 3 |
| c. Go to a library..... | ①.... | 2.... | 3 |
| d. Watch sports on TV.. | ①.... | 2.... | 3 |

IF YOU DON'T PLAN TO VISIT A RELATIVE NEXT WEEK, MAY GO TO A MUSEUM, AND DEFINITELY ARE GOING TO GO TO A LIBRARY AND WATCH SPORTS ON TV, YOU WOULD CIRCLE THE NUMBERS AS SHOWN

INSTRUCTION 4: (WRITE IN NUMBER. PUT A "0" IN ANY EXTRA BOXES ON THE LEFT)

4. How many cups of coffee do you drink each day, on average? (WRITE IN NUMBER. PUT A "0" IN ANY EXTRA BOXES ON THE LEFT)

0	5	Cups of Coffee
---	---	----------------

IF YOU DRINK 5 CUPS OF COFFEE DAILY, YOU WOULD WRITE IN THE NUMBERS AS SHOWN.

INSTRUCTION 5: (WRITE IN NUMBER)

5. What is your date of birth? (WRITE IN NUMBER)

0	7	0	6	5	2
Month		Day		Year	

IF YOU WERE BORN ON THE SIXTH OF JULY, 1952, YOU WOULD WRITE IN THE NUMBERS AS SHOWN, INCLUDING THE "0" IN THE UNUSED BOXES.

1. Do you have a twin brother? (CIRCLE ONE)

Yes, living (GO TO Q.2).....1

Yes, deceased (GO TO Q.2).....2

{ No.....3
 { Triplet or higher.....4
 ↓

10/

IF "NO" OR "TRIPLET", PLEASE STOP HERE AND RETURN FORM IN THE ENVELOPE PROVIDED

2. As children, were you and your twin "as alike as two peas in a pod," or of only ordinary family resemblance? (CIRCLE ONE)

As alike as two peas in a pod.....1

Of only ordinary family resemblance...2

DON'T KNOW.....8

11/

3. Do you yourself believe that you and your twin are identical (monozygotic) twins, or do you believe that you are fraternal (dizygotic) twins? (CIRCLE ONE)

Identical (monozygotic).....1

Fraternal (dizygotic).....2

DON'T KNOW.....8

12/

4. When you were children, how often did the following persons have difficulty in telling you and your twin brother apart? (CIRCLE ONE FOR EACH LINE)

	<u>All of</u> <u>the time</u>	<u>Some of</u> <u>the time</u>	<u>Never</u>	<u>DON'T</u> <u>KNOW</u>	<u>DOES NOT</u> <u>APPLY</u>	
a. Parents.....	1.....	2.....	3.....	8		13/
b. Other Brothers and Sisters.....	1.....	2.....	3.....	8.....	6	14/
c. Grandparents.....	1.....	2.....	3.....	8.....	6	15/
d. Classmates.....	1.....	2.....	3.....	8		16/
e. Teachers.....	1.....	2.....	3.....	8		17/
f. Strangers.....	1.....	2.....	3.....	8		18/

5. The following list describes characteristics that you and your twin brother may or may not have shared when you were children. For each characteristic listed, please consider your childhood years (before you were teenagers), and describe whether you and your twin brother were very similar, somewhat similar or very different. (CIRCLE ONE FOR EACH LINE)

<u>When we were children our:</u>	<u>Very</u> <u>Similar</u>	<u>Somewhat</u> <u>Similar</u>	<u>Very</u> <u>Different</u>	<u>DON'T</u> <u>KNOW</u>	
a. Eye color was.....	1	2	3	8	19/
b. Hair color was.....	1	2	3	8	20/
c. Hair type was.....	1	2	3	8	21/
d. Heights were.....	1	2	3	8	22/
e. Weights were.....	1	2	3	8	23/
f. Teeth were.....	1	2	3	8	24/
g. Voices were.....	1	2	3	8	25/
h. Muscular strength was.....	1	2	3	8	26/
i. Temperaments were.....	1	2	3	8	27/
j. Musical abilities were.....	1	2	3	8	28/
k. Language abilities were.....	1	2	3	8	29/
l. Manual skills (dexterity) were.....	1	2	3	8	30/

6. About how tall are you without shoes? (WRITE IN NUMBER OF FEET AND INCHES. IF ZERO INCHES, WRITE IN "00")

FEET 31/

 INCHES 32-33/

7. About how much do you weigh without clothes or shoes? (WRITE IN NUMBER OF POUNDS)

POUNDS 34-36/

8. A. Are you presently employed part-time or full-time? (CIRCLE ONE)

Yes, full-time (GO TO B).....1

Yes, part-time (GO TO B).....2 37/

Not employed (GO TO Q.9).....3

IF PRESENTLY EMPLOYED:

B. What kind of business or industry is this? (Example: TV and radio manufacture, retail shoe store, State Labor Department, farm, etc.)

38-40/

C. What kind of work are you doing? (Example: Electrical engineer, stock clerk, typist, farmer, etc.)

41-43/

D. What are your most important activities or duties? (Example: Typing, filing, selling new cars, finishing concrete, etc.)

44-45/

9. What is the highest grade or year of school you have completed and gotten credit for? (CIRCLE THE ONE HIGHEST GRADE OR YEAR)

a. None..... 00

b. Elementary..... 01 02 03 04 05 06 07 08

c. High School..... 09 10 11 12

46-47/

d. College..... 13 14 15 16

e. Some Graduate School..... 17

f. Graduate or Professional Degree..... 18

In order to get an accurate picture of each veteran's general health, everyone is asked the next few questions about alcoholic beverages and smoking.

10. Have you had more than 20 alcoholic drinks in your entire life? (CIRCLE ONE)

Yes (GO TO Q.11).....1

48/

No (GO TO Q.16).....2

11. How old were you when you first started drinking alcoholic beverages regularly? (WRITE IN AGE)

YEARS OLD 49-50/

Never drink alcoholic beverages regularly.....00

12. A. During the entire time that you have been drinking alcoholic beverages, how many days per week or month do you drink alcoholic beverages, on the average? (WRITE IN EITHER DAYS PER WEEK OR DAYS PER MONTH)

DAYS PER WEEK 51/

or

DAYS PER MONTH 52-53/

B. If a DRINK is considered one can or bottle of beer or one glass of wine, or one mixed drink or shot of hard liquor, how many DRINKS would you have on the average, on those days when you drink? (WRITE IN NUMBER OF DRINKS. PUT A "0" IN ANY EXTRA BOX ON THE LEFT)

DRINKS 54-55/

13. Was there a period in your life (of at least 6 months) when your consumption was more than this?

Yes (GO TO B).....1 56/
No (GO TO Q.14).....2

IF YES:

B. When was this (WRITE IN YEARS)

to
57-58/ 59-60/

C. On about how many days per week or month would you drink more alcoholic beverages, on the average? (WRITE IN EITHER DAYS PER WEEK OR DAYS PER MONTH)

DAYS PER WEEK 61/

or

DAYS PER MONTH 62-63/

D. How many drinks would you have, on the average, on those days when you were drinking more? (WRITE IN NUMBER OF DRINKS. PUT A "0" IN ANY EXTRA BOX ON THE LEFT)

DRINKS 64-65/

14. A. Do you still drink alcoholic beverages?

Yes (GO TO B).....1 66/
No (GO TO Q.15).....2

IF YES:

B. On about how many days per week or month do you currently drink alcoholic beverages, on the average? (WRITE IN EITHER DAYS PER WEEK OR DAYS PER MONTH)

DAYS PER WEEK 67/

or

DAYS PER MONTH 68-69/

14. (continued)

C. How many drinks do you have, on the average, on those days when you drink? (WRITE IN NUMBER OF DRINKS. PUT A "0" IN ANY EXTRA BOX ON THE LEFT)

DRINKS 70-71/

GO TO Q.16

15. How old were you when you stopped drinking? (WRITE IN AGE)

YEARS OLD 72-73/

16. A. Have you smoked at least 100 cigarettes in your life? (CIRCLE ONE)

- Yes (GO TO B).....1 74/
- No (GO TO Q.17).....2

IF YES:

B. Do you smoke cigarettes now? (CIRCLE ONE)

- Yes.....1 75/
- No.....2

C. On the average, about how many cigarettes a day (do/did) you smoke? (WRITE IN NUMBER SMOKED. PUT A "0" IN ANY EXTRA BOXES ON THE LEFT)

CIGARETTES 76-78/

D. About how long has it been since you last smoked cigarettes fairly regularly? (CIRCLE ONE)

- Currently smoke.....1
- Days.....2
- Weeks.....3 79/
- Months.....4
- Years.....5
- Never smoked regularly.....6

17. Do you currently have any of the following health problems? (CIRCLE YES OR NO FOR EACH LINE, 1-16)

	<u>Yes</u>	<u>No</u>	
1. Accidental injury.....	1	2	10/
2. High blood pressure/hypertension.....	1	2	11/
3. Respiratory conditions, such as lung trouble, persistent coughing, etc.....	1	2	12/
4. Cancer.....	1	2	13/
5. Heart trouble.....	1	2	14/
6. Stroke.....	1	2	15/
7. Kidney, bladder, or urinary problems, such as stones, infections, etc.....	1	2	16/
8. Skin problems, such as acne or skin rash.....	1	2	17/
9. Mental or emotional problems.....	1	2	18/
10. Diabetes.....	1	2	19/
11. Stomach or digestive disorders, such as ulcers, inflammations, etc.....	1	2	20/
12. Liver problems, such as hepatitis, cirrhosis, etc.....	1	2	21/
13. Blood disorders, such as anemia, blood clots, etc.....	1	2	22/
14. Nerve disorders, such as epilepsy, migraines, etc.....	1	2	23/
15. Visual problems.....	1	2	24/
16. Hearing problems.....	1	2	25/

18. Please indicate which statement below best describes your military duty status: (CIRCLE ONE)

Released from active military duty during the years 1965-75.....1

Released from duty after 1975.....2 26/

Still on active military duty.....3

19. The questions below concern your health over the entire period since your active duty during the Vietnam Era, 1965-1975.

If you were released from active military duty during the years 1965-1975, please describe your health since your date of release.

If you are still on active duty, or released after 1975, describe your health since 1975.

In responding, please include any current health problems you described in Q.17. (ALWAYS ANSWER A AND THEN ANSWER B AND C AS APPROPRIATE FOR EACH LINE, 1-16)

A. Since active military duty 1965-75, have you had this problem?

B. Have you consulted a physician about this problem?

C. Have you ever been hospitalized overnight for this problem?

IF YES TO THIS, ANSWER B ==>>>

IF YES TO THIS, ANSWER C ==>>>

	A.	B.	C.
1. Accidental Injury	Yes...1 ==>>> No....2 27/	Yes...1 ==>>> No....2 28/	Yes...1 No....2 29/
2. High Blood Pressure/Hypertension	Yes...1 ==>>> No....2 30/	Yes...1 ==>>> No....2 31/	Yes...1 No....2 32/
3. Respiratory Conditions such as Lung Trouble, Persistent Coughing, etc.	Yes...1 ==>>> No....2 33/	Yes...1 ==>>> No....2 34/	Yes...1 No....2 35/
4. Cancer	Yes...1 ==>>> No....2 36/	Yes...1 ==>>> No....2 37/	Yes...1 No....2 38/
5. Heart Trouble	Yes...1 ==>>> No....2 39/	Yes...1 ==>>> No....2 40/	Yes...1 No....2 41/
6. Stroke	Yes...1 ==>>> No....2 42/	Yes...1 ==>>> No....2 43/	Yes...1 No....2 44/
7. Kidney, Bladder, or Urinary Problems such as Stones, Infections, etc.	Yes...1 ==>>> No....2 45/	Yes...1 ==>>> No....2 46/	Yes...1 No....2 47/

19. (continued)

A. Since active military duty 1965-75, have you had this problem?

B. Have you consulted a physician about this problem?

C. Have you ever been hospitalized overnight for this problem?

IF YES TO THIS, ANSWER B >>>>

IF YES TO THIS, ANSWER C >>>>

	A.	B.	C.
8. Skin Problems such as Acne or Skin Rash	Yes...1 >>>> No....2 48/	Yes...1 >>>> No....2 49/	Yes...1 No....2 50/
9. Mental or Emotional Problem	Yes...1 >>>> No....2 51/	Yes...1 >>>> No....2 52/	Yes...1 No....2 53/
10. Diabetes	Yes...1 >>>> No....2 54/	Yes...1 >>>> No....2 55/	Yes...1 No....2 56/
11. Stomach or Digestive Disorders, such as Ulcers, Inflammations, etc	Yes...1 >>>> No....2 57/	Yes...1 >>>> No....2 58/	Yes...1 No....2 59/
12. Liver Problems, such as Hepatitis, Cirrhosis, etc.	Yes...1 >>>> No....2 60/	Yes...1 >>>> No....2 61/	Yes...1 No....2 62/
13. Blood Disorders, such as Anemia, Blood Clots, etc.	Yes...1 >>>> No....2 63/	Yes...1 >>>> No....2 64/	Yes...1 No....2 65/
14. Nerve Disorders, such as Epilepsy Migraines, etc.	Yes...1 >>>> No....2 66/	Yes...1 >>>> No....2 67/	Yes...1 No....2 68/
15. Visual Problems	Yes...1 >>>> No....2 69/	Yes...1 >>>> No....2 70/	Yes...1 No....2 71/
16. Hearing Problems	Yes...1 >>>> No....2 72/	Yes...1 >>>> No....2 73/	Yes...1 No....2 74/

20. Would you say that your health in general is excellent, very good, good, fair, or poor? (CIRCLE ONE)

- Excellent.....5
- Very Good.....4
- Good.....3 75/
- Fair.....2
- Poor.....1

21. A. Compared to your twin brother's health, how would you rate your health? Would you say your health is . . . (CIRCLE ONE)

- Better than your brother's (GO TO B).....1
- About the same as your brother's (GO TO Q.22)....2 76/
- Worse than your brother's (GO TO B).....3
- Doesn't apply, because brother
is not living (GO TO Q.22).....6

(IF HEALTH IS BETTER OR WORSE):

B. In what way is your health different from your brother's health?

77-78/

22. A. When you were in the military, were you stationed in Vietnam, Laos, or Cambodia; in the waters in or around these countries; or fly in missions over these areas? (CIRCLE ONE)

Yes (GO TO B).....1

10/

No (GO TO Q.23A).....2

IF YES:

B. Below is a list of 18 different combat roles and experiences that men had during the Vietnam war. For each statement, please indicate whether you had that combat experience. (CIRCLE YES OR NO FOR EACH LINE, 1-18)

	<u>Yes</u>	<u>No</u>	
1. In an artillery unit which fired on the enemy...1 .. 2			11/
2. Flew in an aircraft (reconnaissance, or fixed wing F-14, B-52, etc.).....1 .. 2			12/
3. Flew helicopter attack gunships or medvacs.....1 .. 2			13/
4. Stationed at a forward observation post.....1 .. 2			14/
5. Tunnel rat checking enemy base camps.....1 .. 2			15/
6. Served on river patrol or gunboat.....1 .. 2			16/
7. Demolitions expert in the field.....1 .. 2			17/
8. Assigned to Graves and Registration to retrieve dead bodies from the field.....1 .. 2			18/
9. Served as a medic in combat.....1 .. 2			19/
10. Received incoming fire.....1 .. 2			20/
11. Encountered mines and booby traps.....1 .. 2			21/
12. Received sniper or sapper fire.....1 .. 2			22/
13. Unit patrol ambushed.....1 .. 2			23/
14. Flew in aircraft (fixed wing or helicopters) and was shot down.....1 .. 2			24/
15. Engaged VC and/or NVA in firefight.....1 .. 2			25/
16. Saw Americans killed, and/or saw Vietnamese killed.....1 .. 2			26/
17. Wounded.....1 .. 2			27/
18. Captured by the enemy.....1 .. 2			28/

23 A. Overall, how would you describe your readjustment to civilian life after your release from active duty? Would you say that returning to civilian life caused you . . . (CIRCLE ONE)

- Considerable difficulty (GO TO B).....1
- Some difficulty (GO TO Q.24).....2
- Very little difficulty (GO TO Q.24).....3 29/
- None, or practically no difficulty (GO TO Q.24).....4
- DOES NOT APPLY; I AM STILL IN THE MILITARY (GO TO Q.24).....6

IF CONSIDERABLE DIFFICULTY:

B. Please describe the difficulties you had.

30-31/

24. In the past 12 months how frequently have you experienced the following problems? (CIRCLE ONE FOR EACH LINE, a-o)

	<u>Very</u> <u>Often</u>	<u>Often</u>	<u>Some-</u> <u>times</u>	<u>Almost</u> <u>Never</u>	<u>Never</u>	
a. Had trouble falling asleep, staying asleep or sleeping too much.....	1	2	3	4	5	32/
b. Had repeated dreams or nightmares about things that happened to you while in the military.....	1	2	3	4	5	33/
c. Had painful memories of things that happened to you while in the military.....	1	2	3	4	5	34/
d. Avoided activities that might remind you of things that happened to you while in the military.....	1	2	3	4	5	35/
e. Found yourself in a situation where you started to feel and act as though a disturbing event you experienced in the military was happening all over again.....	1	2	3	4	5	36/

24. (continued)

	<u>Very</u> <u>Often</u>	<u>Often</u>	<u>Some-</u> <u>times</u>	<u>Almost</u> <u>Never</u>	<u>Never</u>	
f. Had times when other feelings or actions became stronger when you were in situations that reminded you of times in the military.....	1	2	3	4	5	37/
g. Felt ashamed or guilty about the kind of things you did to survive while in the military.....	1	2	3	4	5	38/
h. Had trouble concentrating.....	1	2	3	4	5	39/
i. Had trouble with your memory.....	1	2	3	4	5	40/
j. Have been irritable and short-tempered.....	1	2	3	4	5	41/
k. Had explosions of angry or aggressive behavior.....	1	2	3	4	5	42/
l. Lost interest in your usual daily activities.....	1	2	3	4	5	43/
m. Felt distant from everyone, even those people you care about.....	1	2	3	4	5	44/
n. Felt that life is not meaningful.....	1	2	3	4	5	45/
o. Felt jumpy and easily startled or felt that you had to stay on guard all the time.....	1	2	3	4	5	46/

25. Since your discharge from active military duty, have you and your partner(s) ever had problems having children? (CIRCLE ONE)

Yes.....1 47/

No.....2

26. How many children have you ever fathered? (ENTER NUMBER. PUT A "0" IN ANY EXTRA BOX ON THE LEFT)

CHILDREN 48-49/

27. In the table below we would like you to enter information about your natural (not adopted) children. Please include all live births, even if a child is no longer living.

Please indicate: (A) The date of birth of each child; (B) the child's mother's age at the time of the birth; and (C) whether each child had any abnormality, birth defects, or handicaps. Briefly describe any birth defect in the space provided (D). If a child is no longer living, please enter date of death in (E).

	A.	B.	C.	D.	E.										
Natural Children	Date of Birth Month Day Year	Mother's Age At Child's Birth (ENTER YEARS)	Any Birth Defects? (CIRCLE) Yes - No	Description of Birth Defects, Abnormality, or Handicap	If Deceased, Date of Death Month Day Year										
1st Child	<table border="1"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> 50-55/					<table border="1"><tr><td> </td><td> </td></tr></table> 56-57/			Y N 58/	59-60/	<table border="1"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> 61-66/				
2nd Child	<table border="1"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> 67-72/					<table border="1"><tr><td> </td><td> </td></tr></table> 73-74/			Y N 75/	76-77/	<table border="1"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> (BEGIN DECK 4) 10-15/				
3rd Child	<table border="1"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> 16-21/					<table border="1"><tr><td> </td><td> </td></tr></table> 22-23/			Y N 24/	25-26/	<table border="1"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> 27-32/				
4th Child	<table border="1"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> 33-38/					<table border="1"><tr><td> </td><td> </td></tr></table> 39-40/			Y N 41/	42-43/	<table border="1"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> 44-49/				
5th Child	<table border="1"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> 50-55/					<table border="1"><tr><td> </td><td> </td></tr></table> 56-57/			Y N 58/	59-60/	<table border="1"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> 61-66/				
6th Child	<table border="1"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> 67-72/					<table border="1"><tr><td> </td><td> </td></tr></table> 73-74/			Y N 75/	76-77/	<table border="1"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> (BEGIN DECK 5) 10-15/				
Other Children					16/										

28. A. Have you ever been the father of a stillborn child? (CIRCLE ONE)

Yes (GO TO B).....1

17/

No (GO TO Q.29).....2

IF YES:

B. In what year(s) did this happen? (WRITE IN YEAR OR YEARS)

1. 18-19/

2. 20-21/

3. 22-23/

29. A. To your knowledge, did any partner of yours ever have a miscarriage? (CIRCLE ONE)

Yes (GO TO B).....1

No (GO TO Q.30).....2

Not Applicable (GO TO Q.30).....6 24/

DON'T KNOW (GO TO Q.30).....8

IF YES:

B. How many are you aware of? (WRITE IN NUMBER, PUT A "0" IN ANY EXTRA BOX ON THE LEFT)

MISCARRIAGES 25-26/

C. In what year(s) did they occur? (WRITE IN YEAR OR YEARS)

1. 27-28/

2. 29-30/

3. 31-32/

30. A. Have you ever been married?

Yes (GO TO B).....1

33/

No (GO TO Q.31).....2

IF YES:

B. In the table below, please list the month and year in which you were married. If your first marriage ended because of death or divorce, indicate the date you were widowed or divorced. If you were married and/or divorced more than once, please complete the remainder of the table.

	Married		Divorced		Widowed				
	Month	Year	Month	Year	Month	Year			
1st Marriage	<input type="text"/>	<input type="text"/>	34-37/	<input type="text"/>	<input type="text"/>	38-41/	<input type="text"/>	<input type="text"/>	42-45/
2nd Marriage	<input type="text"/>	<input type="text"/>	46-49/	<input type="text"/>	<input type="text"/>	50-53/	<input type="text"/>	<input type="text"/>	54-57/
3rd Marriage	<input type="text"/>	<input type="text"/>	58-61/	<input type="text"/>	<input type="text"/>	62-65/	<input type="text"/>	<input type="text"/>	66-69/
4th Marriage	<input type="text"/>	<input type="text"/>	70-73/	<input type="text"/>	<input type="text"/>	74-77/	<input type="text"/>	<input type="text"/>	10-13/

(BEGIN DECK 6)

The next question concerns your total family income. Income is important for analyzing and interpreting the health information we receive from veterans. For example, income information helps us to learn whether persons in one income group have certain conditions more or less frequently than people in another income group.

31. What was your total combined family income (that is, for both yourself and your partner, if any) during the past 12 months? Include money from jobs, social security, unemployment payments, retirement income, public assistance and so forth. (CIRCLE ONE)

Less than \$ 5,000.....01

\$ 5,000 - \$ 9,999.....02

\$10,000 - \$14,999.....03

\$15,000 - \$19,999.....04

\$20,000 - \$24,999.....05

14-15/

\$25,000 - \$29,999.....06

\$30,000 - \$34,999.....07

\$35,000 - \$39,999.....08

\$40,000 - \$49,999.....09

\$50,000 or more.....10

CASE ID 0 _____

ADDRESS UPDATING INFORMATION

The last set of questions will help us to make sure that we have the correct address for both you and your twin brother in case we need to contact you in future years for additional health surveys.

32. Please print your name, address, and telephone number (where you can be reached in the coming year).

Your Full Name _____

Number and Street Address _____ Apt. _____

City _____ State _____ Zip Code _____

Telephone Number - - 17/
Area Code

33. Your Social Security Number - - 18-26/

34. Your Date of Birth | | 27-32/
Month Day Year

35. If your twin brother is alive, please print his name, current address and telephone number.

Your Twin Brother's Name _____

Number and Street Address _____ Apt. _____

City _____ State _____ Zip Code _____

Telephone Number - - 34/
Area Code

36. A. If your twin brother is dead, in what year did he die? 35-36/
1 9

B. In what city, state, and country did he die?

City _____ State _____ Country _____

37. Since we may need to contact you again at some time, please give us the name, address and telephone number of a person other than your twin who will always know where you can be reached.

Full Name _____

Number and Street Address _____ Apt. _____

City _____ State _____ Zip Code _____

Telephone Number - - 39/
Area Code

THANK YOU FOR YOUR ASSISTANCE

Your responses will be kept strictly confidential. Please return this questionnaire to NORC in the envelope provided.

June 20, 1984

Dear Veteran Twin:

I am the Project Director for the Vietnam Era Twins Study (VETS) Survey of Health, and I'm writing to you because we need your help.

Several weeks ago we sent to you a letter, a questionnaire, and a stamped return envelope for sending the questionnaire back to us. A copy of the same materials is enclosed with this letter.

Since that time a member of the project staff called and spoke with you or someone in your household. He was calling to make sure that the questionnaire had reached you, and to answer any questions you might have about the study. You, or the household member we spoke with, assured us that the questionnaire had indeed arrived at your home, and that you would likely be sending it back to us shortly.

Unfortunately, we have not yet received your questionnaire. It is possible that it is in the mail to us right now. If so, please accept our sincere thanks, and just discard the enclosed materials. If you have not had a chance to fill out your questionnaire, or have misplaced it, we ask that you take 15-20 minutes right now to complete the copy enclosed with this letter and send it off to us.

As the letter explaining the study states, this study of the health of twins will provide extremely valuable information to medical researchers about many important illnesses. The findings of the study can not be considered accurate, however, if only a limited number of the twins we contact reply. Already close to 100 Chicago-area veteran twins have responded to the survey. Please join them, and contribute to medical knowledge by responding today.

If it is more convenient for you, we will be happy to collect your answers over the phone. Please call me, Mary O'Brien, at (312) 962-8967, or Matt Deshler, (312) 962-1045. We will be happy to arrange a time to call you back and interview you. Whether mailed to us or given over the phone, your responses will be kept strictly confidential.

Receiving your answers as soon as possible is very important for the success of the study. To be included in the preliminary report, which will be presented to the federal Office of Management and Budget in early July, we must have your responses within a week of your receipt of this letter.

As a token of our appreciation, enclosed you will find \$5.00 for your help.

Very sincerely,

Mary O'Brien, Ph.D.

Appendix 2

- 1. Focus group participants**
- 2. Focus group agenda**

List of People Attending Veteran Twins Focus Group at
NORC, June 13 and 14, 7-9 p.m.

Wednesday, June 13

Thursday, June 14

Veterans

[Names removed to preserve confidentiality]

Other Guests

Jack Goldberg

William True

Bill Henderson

John Leavitt

Dennis Robinette

Seth Eisen

NORC Staff

Mary O'Brien

Mary O'Brien

Matt Deshler

Matt Deshler

Martha Van Haitsma

Stephen Ingels

AGENDA FOR VETERAN TWINS FOCUS GROUP

June 13 & 14, 1984

- I. Introduction by Mary O'Brien of NORC
Description of the evening's agenda
- II. Introduction of those present: Names, where we're from
Veterans please include:
 - your branch of service
 - your period of service
 - whether you served in SouthEast Asia
 - whether you are a fraternal or identical twin, if you know this
- III. Review of the cover letter sent with the survey
Strengths? Weaknesses? Recommendations to strengthen its appeal?
- IV. Review of the questionnaire
Length: How long did it take to fill out? Too long? About right?
Could even be added to without discouraging cooperation?
Item-by-item review of the questions. Review of question sequences
or sections, as well (e.g., alcohol questions)
- V. Additions to the questionnaire
Veterans' views: Health issues not covered? Military experiences
that might be related to current health not asked about? etc.
Guests' ideas on additional questions, and veterans' reactions
- VI. Anything else: Questions about this study, about twin research,
about the military experience, about being twins, etc.

Appendix 3

1. Revised cover letter, recommended for main survey
2. Revised Survey of Health, recommended for main survey

(as on NRC letterhead)

July 9, 1984

Address of Veteran

Dear [Name of Veteran]:

We need your help in a new study, of great interest and importance to medicine, on the health of twins. This study provides a very unusual opportunity to learn more about the health effects of military service, and the inheritance of many important illnesses. The plan is to create a registry of twins who are veterans of the Vietnam era. We are writing to ask that you participate in this effort by completing the enclosed questionnaire and returning it in the prepaid envelope.

The study is a purely scientific one which is being conducted by the National Academy of Sciences-National Research Council, with the cooperation of the Veterans Administration. NORC, a research center at the University of Chicago, is responsible for collecting the survey information. The study can be carried out only with the help of the twins themselves, and we want you to take part in the study by supplying the information asked for on the attached form.

All information you supply will be held in strict confidence and will be available only to the medical investigators working on this study. The study has nothing to do with any compensation, claims, or other contacts you may have with the Veterans Administration. No individual will be identified in the published results of the study.

Twin pairs who participate in the registry may be asked, from time-to-time, to participate in research studies. Your involvement in any study is entirely voluntary. The purpose of each study will be explained fully so that you can make an informed decision about your participation.

It is hoped that a great deal can be learned about genetic effects upon health and length of life from the registry. We sincerely hope that you will be able to help us by completing and returning the enclosed material. If you have any questions about the registry or studies of twins, please write to Dr. Mary O'Brien, or call her, collect, at 312/962-8967.

Sincerely,

C. Dennis Robinette, Ph.D.
Director
National Research Council
Twin Registry

Mary O'Brien, Ph.D.
Director
NORC Twin Registry
Data Collection

VIETNAM ERA TWIN STUDY

SURVEY OF HEALTH

NOTICE: The information asked for in this survey is being collected under authority of Title 38, Section 41 of the Code of Federal Regulations, which authorizes the VA to conduct medical research.

All information you supply will be held in strict confidence and will be available only to the medical investigators working on this study. The study has nothing to do with any compensation, claims, or other contacts you may have with the Veterans Administration. No individual will be identified in the published results of the study.

BEGIN DECK 1

CASE ID: _____

1-7/

BEFORE YOU BEGIN...PLEASE READ THESE INSTRUCTIONS

For some questions in this survey you will simply write answers in your own words. Other questions, however, ask you to follow instructions and use the answer categories provided. You will find instructions for responding included with each question, in CAPITAL LETTERS within parantheses. Below are examples of all the different instructions you will see, and the correct way to answer each type of question.

INSTRUCTION 1: (CIRCLE ONE)

1. What is the color of your eyes? (CIRCLE ONE)

- Blue.....1
- Brown.....②
- Green.....3
- Another color.....4

IF THE COLOR OF YOUR EYES IS BROWN, YOU WOULD CIRCLE THE NUMBER TO THE RIGHT OF "BROWN."

INSTRUCTION 2: (CIRCLE ALL THAT APPLY)

2. Last week, did you do any of the following? (CIRCLE ALL THAT APPLY)

- a. Work for pay.....①
- b. Attend classes.....1
- c. Watch TV.....①
- d. Visit friends.....1
- e. Exercise.....①

IF YOU WORKED FOR PAY, EXERCISED, AND WATCHED TV LAST WEEK, YOU WOULD CIRCLE THE NUMBERS TO THE RIGHT OF THE ITEMS, AS SHOWN.

INSTRUCTION 3: (CIRCLE ONE FOR EACH LINE)

3. Do you plan to do any of the following next week? (CIRCLE ONE FOR EACH LINE)

- | | Not | | |
|--------------------------|-----------|-------|----|
| | Yes | Sure | No |
| a. Visit a relative..... | 1..... | 2.... | ③ |
| b. Go to a museum..... | 1.... | ②...3 | |
| c. Go to a library..... | ①...2.... | 3 | |
| d. Watch sports on TV.. | ①...2.... | 3 | |

IF YOU DON'T PLAN TO VISIT A RELATIVE NEXT WEEK, MAY GO TO A MUSEUM, AND DEFINITELY ARE GOING TO GO TO A LIBRARY AND WATCH SPORTS ON TV, YOU WOULD CIRCLE THE NUMBERS AS SHOWN

INSTRUCTION 4: (WRITE IN NUMBER. PUT A "0" IN ANY EXTRA BOXES ON THE LEFT)

4. How many cups of coffee do you drink each day, on average? (WRITE IN NUMBER. PUT A "0" IN ANY EXTRA BOXES ON THE LEFT)

0	5
---	---

 Cups of Coffee

IF YOU DRINK 5 CUPS OF COFFEE DAILY, YOU WOULD WRITE IN THE NUMBERS AS SHOWN.

INSTRUCTION 5: (WRITE IN NUMBER)

5. What is your date of birth? (WRITE IN NUMBER)

0	7	0	6	5	2
Month	Day	Year			

IF YOU WERE BORN ON THE SIXTH OF JULY, 1952, YOU WOULD WRITE IN THE NUMBERS AS SHOWN, INCLUDING THE "0" IN THE UNUSED BOXES.

Vietnam Era Twin Study

Survey of Health

This survey concerns the health of twins who served in the U.S. military. While some of the questions may not appear to be directly related to health issues, they all ask for information that has been shown in other studies to be associated with the physical or psychological health of veterans, twins, or both.

1. Do you have a twin brother? (CIRCLE ONE)

Yes, living (GO TO Q.2).....1

Yes, deceased (GO TO Q.2).....2

No.....3

Triplet or higher.....4

IF "NO" OR "TRIPLET", PLEASE STOP HERE AND RETURN FORM IN THE ENVELOPE PROVIDED

2. As children, were you and your twin "as alike as two peas in a pod," or of only ordinary family resemblance? (CIRCLE ONE)

As alike as two peas in a pod.....1

Of only ordinary family resemblance...2

DON'T KNOW.....8

3. Do you yourself believe that you and your twin are identical (monozygotic) twins, or do you believe that you are fraternal (dizygotic) twins? (CIRCLE ONE)

Identical (monozygotic).....1

Fraternal (dizygotic).....2

DON'T KNOW.....8

4. When you were children, how often did the following persons have difficulty in telling you and your twin brother apart? (CIRCLE ONE FOR EACH LINE)

	<u>All of the time</u>	<u>Some of the time</u>	<u>Never</u>	<u>DON'T KNOW</u>	<u>DOES NOT APPLY</u>
a. Parents.....	1.....	2.....	3.....	8	
b. Other Brothers and Sisters.....	1.....	2.....	3.....	8.....	6
c. Grandparents.....	1.....	2.....	3.....	8.....	6
d. Classmates.....	1.....	2.....	3.....	8	
e. Teachers.....	1.....	2.....	3.....	8	

5. The following list describes characteristics that you and your twin brother may or may not have shared when you were children. For each characteristic listed, please consider your childhood years (before you were teenagers), and describe whether you and your twin brother were very similar, somewhat similar or very different. (CIRCLE ONE FOR EACH LINE)

<u>When we were children our:</u>	<u>Very Similar</u>	<u>Somewhat Similar</u>	<u>Very Different</u>	<u>DON'T KNOW</u>
a. Eye color was.....	1	2	3	8
b. Hair color was.....	1	2	3	8
c. Hair type was.....	1	2	3	8
d. Heights were.....	1	2	3	8
e. Weights were.....	1	2	3	8
f. Teeth were.....	1	2	3	8
g. Voices were.....	1	2	3	8
h. Muscular strength was.....	1	2	3	8
i. Temperaments were.....	1	2	3	8
j. Musical abilities were.....	1	2	3	8
k. Language abilities were....	1	2	3	8
l. Manual skills (dexterity) were.....	1	2	3	8

-
6. About how tall are you without shoes? (WRITE IN NUMBER OF FEET AND INCHES. IF ZERO INCHES, WRITE IN "00")

FEET 31/ INCHES

-
7. About how much do you weigh without clothes or shoes? (WRITE IN NUMBER OF POUNDS)

POUNDS

8. Are you a part-time or full-time student? (CIRCLE ONE)

- Yes, full-time.....1
- Yes, part-time.....2
- No, not a student.....3

9. A. Are you presently employed part-time or full-time? (CIRCLE ONE)

- Yes, full-time (GO TO B).....1
- Yes, part-time (GO TO B).....2
- Not employed (GO TO Q.10).....3

IF PRESENTLY EMPLOYED:

B. What kind of business or industry is this? (Example: TV and radio manufacture, retail shoe store, State Labor Department, farm, etc.)

C. What kind of work are you doing? (Example: Electrical engineer, stock clerk, typist, farmer, etc.)

D. What are your most important activities or duties? (Example: Typing, filing, selling new cars, finishing concrete, etc.)

E. How many years have you worked at this job?
(WRITE IN NUMBER OF YEARS. IF LESS THAN ONE YEAR, WRITE IN "00")

--	--

YEARS

10. After your discharge from active military duty, how long did it take you to find a full-time job? (CIRCLE ONLY ONE)

- a. Less than one month.....1
- b. Less than six months.....2
- c. Less than one year.....3
- d. Greater than one year.....4
- e. Does not apply; became a student after discharge.....5
- f. Does not apply; still on active military duty.....6

11. What is the highest grade or year of school you have completed and gotten credit for? (CIRCLE THE ONE HIGHEST GRADE OR YEAR)

- a. None..... 00
- b. Elementary..... 01 02 03 04 05 06 07 08
- c. High School..... 09 10 11 12
- d. College..... 13 14 15 16
- e. Vocational or technical school after high school..... 17
- f. Some Graduate School..... 18
- g. Graduate or Professional Degree..... 19

In order to get an accurate picture of each veteran's general health, everyone is asked the next few questions about alcoholic beverages and smoking.

12. Have you had more than 20 alcoholic drinks in your entire life? (CIRCLE ONE)

Yes (GO TO Q.13).....1

No (GO TO Q.17).....2

13. How old were you when you started drinking alcoholic beverages regularly? (WRITE IN AGE)

		YEARS OLD
--	--	-----------

Never drink alcoholic beverages regularly (WRITE "00" IN BOXES ABOVE).....00

14. A. Do you still drink alcoholic beverages?

Yes (GO TO B).....1

No (GO TO Q.16).....2

IF YES:

B. On about how many days per week do you currently drink alcoholic beverages, on the average? (WRITE IN DAYS PER WEEK)

DAYS PER WEEK

C. How many drinks do you have, on the average, on those days when you drink? (WRITE IN NUMBER OF DRINKS. PUT A "0" IN ANY EXTRA BOX ON THE LEFT)

DRINKS

15. Was there a period in your life (of at least 6 months) when your consumption was more than this?

Yes (GO TO B).....1

No (GO TO Q.17).....2

IF YES:

B. When was this (WRITE IN YEARS)

1	9		
---	---	--	--

 to

1	9		
---	---	--	--

57-58/

C. On about how many days per week would you drink more alcoholic beverages, on the average? (WRITE IN DAYS PER WEEK)

DAYS PER WEEK

D. How many drinks would you have, on the average, on those days when you were drinking more? (WRITE IN NUMBER OF DRINKS. PUT A "0" IN ANY EXTRA BOX ON THE LEFT)

DRINKS PER DAY

GO TO Q.17

IF YOU NO LONGER DRINK:

16. How old were you when you stopped drinking? (WRITE IN AGE)

YEARS OLD

17. A. Have you smoked at least 100 cigarettes in your life? (CIRCLE ONE)

Yes (GO TO B).....1

No (GO TO Q.20).....2

IF YES:

B. Do you smoke cigarettes now? (CIRCLE ONE)

Yes (GO TO Q.18).....1

No (GO TO C).....2

C. About how long has it been since you last smoked cigarettes regularly? (WRITE IN YEARS. IF LESS THAN ONE YEAR, WRITE IN "00")

YEARS

Never smoked cigarettes regularly (WRITE "00" IN BOXES ABOVE)

18. On the average, about how many cigarettes a day (do/did) you smoke? (WRITE IN NUMBER SMOKED. PUT A "0" IN ANY EXTRA BOXES ON THE LEFT)

CIGARETTES

19. About how old were you when you first started smoking cigarettes regularly? (WRITE IN AGE. PUT A "0" IN ANY EXTRA BOXES ON THE LEFT)

YEARS OLD

Never smoked cigarettes regularly (WRITE "00" IN BOXES ABOVE)

20. Do you currently have any of the following health problems? (CIRCLE YES OR NO FOR EACH LINE, 1-16)

	<u>Yes</u>	<u>No</u>
1. High blood pressure/hypertension (INCLUDE EVEN IF CONTROLLED BY MEDICATION).....	1	2
2. Respiratory conditions, such as lung trouble, persistent coughing, etc.....	1	2
3. Cancer.....	1	2
4. Heart trouble.....	1	2
5. Stroke.....	1	2
6. Kidney, bladder, or urinary problems, such as stones, infections, kidney failure, etc.....	1	2
7. Persistent skin conditions, such as severe acne, rashes, etc.....	1	2
8. Diabetes.....	1	2
9. Stomach or digestive disorders, such as ulcers, inflammations, etc.....	1	2
10. Liver problems, such as hepatitis, cirrhosis, etc.....	1	2
11. Blood disorders, such as anemia, blood clots, etc.....	1	2
12. Nerve disorders, such as epilepsy, migraines, etc.....	1	2
13. Joint or skeletal disorders, such as arthritis, swollen joints, etc.....	1	2
14. Hearing problems.....	1	2
15. Other (PLEASE SPECIFY) _____	1	2

21. Please indicate which statement below best describes your military duty status: (CIRCLE ONE)

- Released from active military duty during the years 1965-75.....1
- Released from duty after 1975.....2
- Still on active military duty.....3

22. The questions below concern your health over the entire period since your active duty during the Vietnam Era, 1965-1975.

If you were released from active military duty during the years 1965-1975, please describe your health since your date of release.

If you are still on active duty, or released after 1975, describe your health since 1975.

In responding, please include any current health problems you described in Q.20. (ALWAYS ANSWER A AND THEN ANSWER B, C AND D AS APPROPRIATE FOR EACH LINE, 1-16)

A. Since active military duty 1965-75, have you had this problem?	B. Have you consulted a physician about this problem?	C. Have you ever been hospitalized overnight for this problem?	D. In what year were you first hospitalized for this problem?
---	---	--	---

IF YES TO THIS, ANSWER B ==>>>	IF YES TO THIS, ANSWER C ==>>>	IF YES TO THIS, ANSWER D ==>	
-----------------------------------	-----------------------------------	---------------------------------	--

A.	B.	C.	D.
----	----	----	----

	A.	B.	C.	D.
1. High Blood Pressure/Hypertension (INCLUDE EVEN IF CONTROLLED BY MEDICATION)	Yes...1 ==>>> No....2	Yes...1 ==>>> No....2	Yes...1 No....2	1 9
2. Respiratory Conditions such as Lung Trouble, Persistent Coughing, etc.	Yes...1 ==>>> No....2	Yes...1 ==>>> No....2	Yes...1 No....2	1 9
3. Cancer	Yes...1 ==>>> No....2	Yes...1 ==>>> No....2	Yes...1 No....2	1 9
4. Heart Trouble	Yes...1 ==>>> No....2	Yes...1 ==>>> No....2	Yes...1 No....2	1 9
5. Stroke	Yes...1 ==>>> No....2	Yes...1 ==>>> No....2	Yes...1 No....2	1 9
6. Kidney, Bladder, or Urinary Problems, such as Stones, Infections, Kidney Failure, etc.	Yes...1 ==>>> No....2	Yes...1 ==>>> No....2	Yes...1 No....2	1 9

2. (continued)

	A. Since active military duty 1965-75, have you had this problem?	B. Have you consulted a physician about this problem?	C. Have you ever been hospitalized overnight for this problem?	D. In what year were you first hospitalized for this problem
	IF YES TO THIS, ANSWER B >>>>	IF YES TO THIS, ANSWER C >>>>	IF YES TO THIS, ANSWER D >>>>	
	A.	B.	C.	D.
7. Persistent Skin Conditions, such as Severe Acne, Rashes, etc.	Yes...1 >>>> No....2	Yes...1 >>>> No....2	Yes...1 No....2	1 9
3. Diabetes	Yes...1 >>>> No....2	Yes...1 >>>> No....2	Yes...1 No....2	
9. Stomach or Digestive Disorders, such as Ulcers, Inflammations, etc	Yes...1 >>>> No....2	Yes...1 >>>> No....2	Yes...1 No....2	1 9
0. Liver Problems, such as Hepatitis, Cirrhosis, etc.	Yes...1 >>>> No....2	Yes...1 >>>> No....2	Yes...1 No....2	1 9
1. Blood Disorders, such as Anemia, Blood Clots, etc.	Yes...1 >>>> No....2	Yes...1 >>>> No....2	Yes...1 No....2	1 9
2. Nerve Disorders, such as Epilepsy, Migraines, etc.	Yes...1 >>>> No....2	Yes...1 >>>> No....2	Yes...1 No....2	1 9
3. Joint or Skeletal Disorders, such as Arthritis, Swollen Joints, etc.	Yes...1 >>>> No....2	Yes...1 >>>> No....2	Yes...1 No....2	1 9
4. Hearing Problems	Yes...1 >>>> No....2	Yes...1 >>>> No....2	Yes...1 No....2	
5. Other (PLEASE SPECIFY) _____	Yes...1 >>>> No....2	Yes...1 >>>> No....2	Yes...1 No....2	1 9

23. Would you say that your health in general is excellent, very good, good, fair, or poor? (CIRCLE ONE)

- Excellent.....5
- Very Good.....4
- Good.....3
- Fair.....2
- Poor.....1

24. A. Compared to your twin brother's health, how would you rate your health? Would you say your health is . . . (CIRCLE ONE)

- Better than your brother's (GO TO B).....1
- About the same as your brother's (GO TO Q.25)....2
- Worse than your brother's (GO TO B).....3
- Doesn't apply, because brother
is not living (GO TO Q.25).....6

(IF HEALTH IS BETTER OR WORSE):

B. In what way is your health different from your brother's health?

25. While in the military, did you request a Vietnam duty assignment? (CIRCLE ONE)

- Yes.....1
- No.....2

26. A. When you were in the military, were you stationed in Vietnam, Laos, or Cambodia; in the waters in or around these countries; or fly in missions over these areas? (CIRCLE ONE)

Yes (GO TO B).....1

No (GO TO Q.27A).....2

IF YES:

B. Below is a list of 18 different combat roles and experiences that men had during the Vietnam War. For each statement, please indicate whether you had that combat experience during the Vietnam War. (CIRCLE YES OR NO FOR EACH LINE, 1-18)

- | | <u>Yes</u> | <u>No</u> |
|--|------------|-----------|
| 1. In an artillery unit which fired on the enemy...1 .. | 1 | 2 |
| 2. Flew in an aircraft (reconnaissance, or fixed wing F-14, B-52, etc.).....1 .. | 1 | 2 |
| 3. Flew helicopter attack gunships or medvacs.....1 .. | 1 | 2 |
| 4. Stationed at a forward observation post.....1 .. | 1 | 2 |
| 5. Tunnel rat checking enemy base camps.....1 .. | 1 | 2 |
| 6. Served on river patrol or gunboat.....1 .. | 1 | 2 |
| 7. Demolitions expert in the field.....1 .. | 1 | 2 |
| 8. Assigned to Graves and Registration to retrieve dead bodies from the field.....1 .. | 1 | 2 |
| 9. Served as a medic in combat.....1 .. | 1 | 2 |
| 10. Received incoming fire.....1 .. | 1 | 2 |
| 11. Encountered mines and booby traps.....1 .. | 1 | 2 |
| 12. Received sniper or sapper fire.....1 .. | 1 | 2 |
| 13. Unit patrol ambushed.....1 .. | 1 | 2 |
| 14. Flew in aircraft (fixed wing or helicopters) and was shot down.....1 .. | 1 | 2 |
| 15. Engaged VC and/or NVA in firefight.....1 .. | 1 | 2 |
| 16. Saw Americans killed, and/or saw Vietnamese killed.....1 .. | 1 | 2 |
| 17. Wounded.....1 .. | 1 | 2 |
| 18. Captured by the enemy.....1 .. | 1 | 2 |

27. A. Are you still on active military duty? (CIRCLE ONE)

Yes (GO TO Q.31).....1

No (GO TO B).....2

IF NO:

B. After your discharge from active military duty, how often did you talk to the following individuals about your experiences in the military? (CIRCLE ONE FOR EACH LINE)

	<u>Very</u> <u>Often</u>	<u>Often</u>	<u>Occa-</u> <u>sionally</u>	<u>Rarely</u>	<u>DOES NOT</u> <u>APPLY</u>
a. Parents.....	1.....	2.....	3.....	4.....	6
b. Wife or Girlfriend....	1.....	2.....	3.....	4.....	6
c. Twin Brother..	1.....	2.....	3.....	4.....	6
d. Friends.....	1.....	2.....	3.....	4	
e. Other Vietnam- era Veterans..	1.....	2.....	3.....	4	

28. After your discharge from active military duty were you eager to get involved in everything, or did you not want to participate in things with other people? Were you . . . (CIRCLE ONE)

Very reluctant to get involved.....1

Somewhat reluctant to get involved....2

Somewhat eager to get involved.....3

Very eager to get involved.....4

29 A. Overall, how would you describe your adjustment to civilian life after your release from active duty? Would you say that returning to civilian life caused you . . . (CIRCLE ONE)

- Considerable difficulty1
- Some difficulty2
- Very little difficulty3
- None, or practically no difficulty.....4
- Does not apply; I am still in the military6

30. A. Compared to your twin brother's adjustment to civilian life, how would you rate your adjustment to civilian life? Would you say your adjustment was . . . (CIRCLE ONE)

- Easier than your brother's (GO TO B).....1
- About the same as your brother's (GO TO Q.31)....2
- More difficult than your brother's (GO TO B).....3
- Does not apply because brother is either not living or still on active duty (GO TO Q.31).....4

IF ADJUSTMENT WAS EASIER OR MORE DIFFICULTY:

B. In what way was your adjustment to civilian life different from your brother's adjustment to civilian life?

31. In the past 6 months how frequently have you experienced the following problems? (CIRCLE ONE FOR EACH LINE, a-o)

- | | <u>Very</u>
<u>Often</u> | <u>Often</u> | <u>Some-</u>
<u>times</u> | <u>Almost</u>
<u>Never</u> | <u>Never</u> |
|---|-----------------------------|--------------|------------------------------|-------------------------------|--------------|
| a. Had trouble falling asleep, staying asleep or sleeping too much..... | 1 | 2 | 3 | 4 | 5 |
| b. Had repeated dreams or nightmares about things that happened to you while in the military..... | 1 | 2 | 3 | 4 | 5 |

31. (continued)

	<u>Very</u> <u>Often</u>	<u>Often</u>	<u>Some-</u> <u>times</u>	<u>Almost</u> <u>Never</u>	<u>Never</u>
c. Had painful memories of things that happened to you while in the military.....	1	2	3	4	5
d. Avoided activities that might remind you of things that happened to you while in the military.....	1	2	3	4	5
e. Found yourself in a situation where you started to feel and act as though a disturbing event you experienced in the military was happening all over again.....	1	2	3	4	5
f. Had times when other feelings or actions became stronger when you were in situations that reminded you of times in the military.....	1	2	3	4	5
g. Felt ashamed or guilty about the kind of things you did to survive while in the military.....	1	2	3	4	5
h. Had trouble concentrating.....	1	2	3	4	5
i. Had trouble with your memory.....	1	2	3	4	5
j. Have been irritable and short-tempered.....	1	2	3	4	5
k. Had explosions of angry or aggressive behavior.....	1	2	3	4	5
l. Lost interest in your usual daily activities.....	1	2	3	4	5
m. Felt distant from everyone, even those people you care about.....	1	2	3	4	5
n. Felt that life is not meaningful.....	1	2	3	4	5
o. Felt jumpy and easily startled or felt that you had to stay on guard all the time.....	1	2	3	4	5

32. A. Have you ever consulted a health care professional (such as a physician, psychologist, or social worker) about a mental or emotional problem? (CIRCLE ONE)

Yes (GO TO B).....1

No (GO TO Q.33).....2

IF YES:

B. In what year did you first consult a health care professional about this problem? (WRITE IN YEAR)

1	9		
---	---	--	--

33. A. Have you ever been hospitalized for a mental or emotional problem? (CIRCLE ONE)

Yes (GO TO B).....1

No (GO TO Q.34).....2

IF YES:

B. In what year were you first hospitalized for this problem? (WRITE IN YEAR)

1	9		
---	---	--	--

34. Do you currently have a mental or emotional problem? (CIRCLE ONE)

Yes.....1

No.....2

The final set of questions concerns health issues regarding your family life.

35. Is your wife (or partner) now pregnant? (CIRCLE ONE)

Yes.....1

No.....2

DOES NOT APPLY.....6

36. A. Have you and your partner(s) ever tried for a period of a year or more to conceive a child?

Yes, we tried for a year or more (GO TO B).....1

No, it took us less than one year to conceive a child.....2

No, I have not tried to have a child.....3

IF YES:

B. Were you able to conceive a child after a year of trying?

Yes.....1

No.....2

38. A. Have you ever been the father of a stillborn child? (CIRCLE ONE)

Yes (GO TO B).....1

No (GO TO Q.39).....2

IF YES:

B. In what year(s) did this happen? (WRITE IN YEAR OR YEARS)

1.

1	9		
---	---	--	--

2.

1	9		
---	---	--	--

3.

1	9		
---	---	--	--

39. A. To your knowledge, did any partner of yours ever have a miscarriage? (CIRCLE ONE)

Yes (GO TO B).....1

No (GO TO Q.40).....2

Not Applicable (GO TO Q.40).....6

DON'T KNOW (GO TO Q.40).....8

IF YES:

B. How many are you aware of? (WRITE IN NUMBER, PUT A "0" IN ANY EXTRA BOX ON THE LEFT)

--	--

 MISCARRIAGES

C. In what year(s) did they occur? (WRITE IN YEAR OR YEARS)

1.

1	9		
---	---	--	--

2.

1	9		
---	---	--	--

3.

1	9		
---	---	--	--

40. A. Have you ever been married?

Yes (GO TO B).....1

No (GO TO Q.41).....2

IF YES:

B. In the table below, please list the month and year in which you were married. If your first marriage ended because of death or divorce, indicate the date you were widowed or divorced. If you were married and/or divorced more than once, please complete the remainder of the table.

	Married		Divorced		Widowed	
	Month	Year	Month	Year	Month	Year
1st Marriage						
2nd Marriage						
3rd Marriage						
4th Marriage						

The next question concerns your total family income. Income is important for analyzing and interpreting the health information we receive from veterans. For example, income information helps us to learn whether persons in one income group have certain conditions more or less frequently than people in another income group.

41. What was your total combined family income (that is, for both yourself and your partner, if any) during the past 12 months? Include money from jobs, social security, unemployment payments, retirement income, public assistance and so forth. (CIRCLE ONE)

- Less than \$ 5,000.....01
- \$ 5,000 - \$ 9,999.....02
- \$10,000 - \$14,999.....03
- \$15,000 - \$19,999.....04
- \$20,000 - \$24,999.....05
- \$25,000 - \$29,999.....06
- \$30,000 - \$34,999.....07
- \$35,000 - \$39,999.....08
- \$40,000 - \$49,999.....09
- \$50,000 or more.....10

Appendix 4

1. Coding and editing specifications for data entry of Survey of Health responses

I. GENERAL INSTRUCTIONS

- A. Leading zeros should appear in output file.
- B. All survey caseID's are prefixed with a preprinted "0" which should be punched. Thus, the caseID is seven (7) digits long.
- C. Each questionnaire represents six decks of data on the output file. The first seven characters of each deck are the caseID with a five digit sequential number, a one digit twin number (always 1 or 2) and a one digit check digit. The eighth and ninth columns of each deck will be the deck number (ranging from 01 - 06). (NOTE: Deck Number is not columned on the quex, but is printed at the top of each page on the sample quex with the deck number to be punched/columns to punch them in indicated in red pencil. For example, on page 2 is marked "01/8-9" to indicate that deck number 01 is punched in columns 8-9 of that deck).
The following columns are filled for each deck:

<u>DECK</u>	<u>FILLED COLUMNS</u>	<u>ALWAYS BLANK</u>
1	1-37, 46-79	38-45, 80
2	1-76	77-80
3	1-29, 32-58 61-75	30-31, 59-60, 76-80
4	1-24, 27-41, 44-58, 61-75	25-26, 42-43, 59-60, 76-80
5	1-77	78-80
6	1-39	40-80

The decks should all be eighty (80) columns long with the unfilled columns left blank.

- D. There are skip patterns in the questionnaire such that every respondent will not answer every question. If Q1 (Question 1) is answered with the value of "3" or "4", that is the only information that need be punched for that case, and is the only information which should appear on the survey form. If the answer is "1" or "2", however, the respondent should complete the questionnaire. For those who answer "1" or "2" to Q1, the following questions must be answered:

Questions that ALL respondents (who respond "1" or "2" to Q1)
MUST answer: (SHOULD NOT BE BLANK ON QUEX)

QUESTION	DECK	COLS	QUESTION	DECK	COLS
CASEID - 8A	1	1 - 37	Q19.12A	2	60
Q9 - Q10	1	46 - 48	Q19.13A	2	63
Q16A	1	74	Q19.14A	2	66
Q17 - Q19.1A	2	10 - 27	Q19.15A	2	69
Q19.2A	2	30	Q19.16A	2	72
Q19.3A	2	33	Q20 - Q21A	2	75 - 76
Q19.4A	2	36	Q22A	3	10
Q19.5A	2	39	Q23A	3	29
Q19.6A	2	42	Q24 - Q26	3	32 - 49
Q19.7A	2	45	Q28A	5	17
Q19.8A	2	48	Q29A	5	24
Q19.9A	2	51	Q30A	5	33
Q19.10A	2	54	Q31 - Q37	6	14 - 39
Q19.11A	2	57			

NOTE: These items have a "*" beside them on the attached sample quex and in the field specific instructions below.

- E. If an item with an asterisk beside it (indicating it may not be skipped) IS left blank by the respondent, enter asterisks (***) in those columns. Asterisks should be written in by coders to indicate that the special character "*" should be entered in those columns.
- F. On the last page, the respondent's caseID will appear in the upper left hand corner of the page. This should NOT be punched. The caseID appears always and only in the first seven columns of every eighty column deck.
- G. On the last page, only the respondent's social security number and date of birth, and his twin's date of death (if applicable) will be punched as such. The other locating information will be punched as 1 (present) or left blank (absent). If the column number is circled in red by NORC coders, then a "1" should be punched. If the column has an R (reject) beside it, then it should be left blank.
- H. All questionnaires should be 100% verified in the following fields:

QUESTION	DECK	COLUMNS
CASEID: SEQUENTIAL #	1-6	1-5
TWIN NUMBER	1-6	6
CHECK DIGIT	1-6	7
DECK NUMBER	1-6	8-9
Q1	1	10
Q2	1	11
Q18	2	26
Q22A	3	10
Q31	6	14-15
Q33	6	18-26
Q34	6	27-32

- I. CaseID appears on the cover page. Ignore page 1-- these are simply instructions to the respondent.
- J. NORC coders will mark the questionnaires in red pencil. Columns to be left blank will be marked with "R" (reject). Whole sections or entire pages to be left blank will have an "R--->" (R,arrow) to mark the span of columns to be left blank. All corrections will be in red pencil, including the asterisk convention (marking missing data where the respondent should have answered) and corrected respondent error such as failure to right justify, zero-fill, or follow a skip pattern. The red pencil edit markings take precedence over the respondent's own marks.

II. FIELD SPECIFIC INSTRUCTIONS

		POSITION IN OUTPUT FILE				
QUESTION	DECK	COLUMN	VALID VALUES	COMMENTS		
*CASEID	SEQUENTIAL	1	1-5	00001 - 00215	100% VERIFIED	NEVER BLANK
	TWIN #	1	6	1,2	100% VERIFIED	NEVER BLANK
	CHECK DIGIT	1	7	0-9	100% VERIFIED	NEVER BLANK
* DECK NUMBER	1	8-9	01	100% VERIFIED	NEVER BLANK	
* Q1	1	10	1-4	100% VERIFIED IF Q1 = "3" OR "4", END KEYPUNCH. IF Q1 = "1" OR "2", Q2 - Q8A NEVER BLANK		
* Q2	1	11	1,2,8	100% VERIFIED		
* Q3	1	12	1,2,8			
* Q4	Q4A	1	13	1-3,8		
	Q4B	1	14	1-3,6,8		
	Q4C	1	15	1-3,6,8		
	Q4D	1	16	1-3,8		
	Q4E	1	17	1-3,8		
	Q4F	1	18	1-3,8		
* Q5	Q5A	1	19	1-3,8		
	Q5B	1	20	1-3,8		
	Q5C	1	21	1-3,8		
	Q5D	1	22	1-3,8		
	Q5E	1	23	1-3,8		
	Q5F	1	24	1-3,8		
	Q5G	1	25	1-3,8		
	Q5H	1	26	1-3,8		
	Q5I	1	27	1-3,8		
	Q5J	1	28	1-3,8		
	Q5K	1	29	1-3,8		
	Q5L	1	30	1-3,8		

QUESTION	DECK	COLUMNS	VALID VALUES	COMMENTS
* Q6				
Q6.1	1	31	4-7	100% VERIFIED
Q6.2	1	32-33	00-12	100% VERIFIED
* Q7	1	34-36	050-400	
* Q8A	1	37	1-3	
Q8B	1	38-40	ALWAYS BLANK	ALWAYS BLANK
Q8C	1	41-43	ALWAYS BLANK	ALWAYS BLANK
Q8D	1	44-45	ALWAYS BLANK	ALWAYS BLANK
* Q9	1	46-47	00-18	
* Q10	1	48	1-2	
Q11	1	49-50	05-41,96,97,99, BLANK	
Q12A1	1	51	0-7, BLANK	
Q12A2	1	52-53	00-31, BLANK	
Q12B	1	54-55	00-99, BLANK	
Q13A	1	56	1-2, BLANK	
Q13B1	1	57-58	55-84, BLANK	
Q13B2	1	59-60	55-84, BLANK	
Q13C1	1	61	0-7, BLANK	
Q13C2	1	62-63	00-31, BLANK	
Q13D	1	64-65	00-99, BLANK	
Q14A	1	66	1-2, BLANK	
Q14B1	1	67	0-7, BLANK	
Q14B2	1	68-69	00-31, BLANK	
Q14C	1	70-71	00-99, BLANK	
Q15	1	72-73	12-41, BLANK	
* Q16A	1	74	1-2	

QUESTION	DECK	COLUMNS	VALID VALUES	COMMENTS
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Q16B	1	75	1-2, BLANK	
Q16C	1	76-78	000-150, BLANK	
Q16D	1	79	1-6, BLANK	
	1	80	ALWAYS BLANK	

BEGIN DECK 2

DECK NUMBER	2	8-9	02	100% VERIFIED
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*Q17	Q17.1	2	10	1-2
	Q17.2	2	11	1-2
	Q17.3	2	12	1-2
	Q17.4	2	13	1-2
	Q17.5	2	14	1-2
	Q17.6	2	15	1-2
	Q17.7	2	16	1-2
	Q17.8	2	17	1-2
	Q17.9	2	18	1-2
	Q17.10	2	19	1-2
	Q17.11	2	20	1-2
	Q17.12	2	21	1-2
	Q17.13	2	22	1-2
	Q17.14	2	23	1-2
	Q17.15	2	24	1-2
	Q17.16	2	25	1-2

* Q18	2	26	1-3	100% VERIFIED
-------	---	----	-----	---------------

* Q19A1	2	27	1-2
Q19B1	2	28	1-2, BLANK
Q19C1	2	29	1-2, BLANK
* Q19A2	2	30	1-2
Q19B2	2	31	1-2, BLANK
Q19C2	2	32	1-2, BLANK
* Q19A3	2	33	1-2
Q19B3	2	34	1-2, BLANK
Q19C3	2	35	1-2, BLANK
* Q19A4	2	36	1-2
Q19B4	2	37	1-2, BLANK
Q19C4	2	38	1-2, BLANK
* Q19A5	2	39	1-2
Q19B5	2	40	1-2, BLANK
Q19C5	2	41	1-2, BLANK
* Q19A6	2	42	1-2
Q19B6	2	43	1-2, BLANK
Q19C6	2	44	1-2, BLANK
* Q19A7	2	45	1-2
Q19B7	2	46	1-2, BLANK
Q19C7	2	47	1-2, BLANK
* Q19A8	2	48	1-2

<u>QUESTION</u>	<u>DECK</u>	<u>COLUMNS</u>	<u>VALID VALUES</u>	<u>COMMENTS</u>
Q19B8	2	49	1-2, BLANK	
Q19C8	2	50	1-2, BLANK	
* Q19A9	2	51	1-2	
Q19B9	2	52	1-2, BLANK	
Q19C9	2	53	1-2, BLANK	
* Q19A10	2	54	1-2	
Q19B10	2	55	1-2, BLANK	
Q19C10	2	56	1-2, BLANK	
* Q19A11	2	57	1-2	
Q19B11	2	58	1-2, BLANK	
Q19C11	2	59	1-2, BLANK	
* Q19A12	2	60	1-2	
Q19B12	2	61	1-2, BLANK	
Q19C12	2	62	1-2, BLANK	
* Q19A13	2	63	1-2	
Q19B13	2	64	1-2, BLANK	
Q19C13	2	65	1-2, BLANK	
* Q19A14	2	66	1-2	
Q19B14	2	67	1-2, BLANK	
Q19C14	2	68	1-2, BLANK	
* Q19A15	2	69	1-2	
Q19B15	2	70	1-2, BLANK	
Q19C15	2	71	1-2, BLANK	
* Q19A16	2	72	1-2	
Q19B16	2	73	1-2, BLANK	
Q19C16	2	74	1-2, BLANK	
* Q20	2	75	1-5	NOTE THAT CODES ARE IN DESCENDING ORDER IN THE QUEX
* Q21A	2	76	1-3,6	
Q21B	2	77-78	ALWAYS BLANK	ALWAYS BLANK
	2	79-80	ALWAYS BLANK	ALWAYS BLANK
BEGIN DECK 3				
DECK NUMBER	3	8-9	03	100% VERIFIED
Q22A	3	10	1-2	100% VERIFIED
Q22B1	3	11	1-2, BLANK	
Q22B2	3	12	1-2, BLANK	
Q22B3	3	13	1-2, BLANK	
Q22B4	3	14	1-2, BLANK	
Q22B5	3	15	1-2, BLANK	
Q22B6	3	16	1-2, BLANK	
Q22B7	3	17	1-2, BLANK	
Q22B8	3	18	1-2, BLANK	
Q22B9	3	19	1-2, BLANK	
Q22B10	3	20	1-2, BLANK	
Q22B11	3	21	1-2, BLANK	
Q22B12	3	22	1-2, BLANK	
Q22B13	3	23	1-2, BLANK	

QUESTION	DECK	COLUMNS	VALID VALUES	COMMENTS
Q22B14	3	24	1-2, BLANK	
Q22B15	3	25	1-2, BLANK	
Q22B16	3	26	1-2, BLANK	
Q22B17	3	27	1-2, BLANK	
Q22B18	3	28	1-2, BLANK	

* Q23A	3	29	1-4,6	
Q23B	3	30-31	ALWAYS BLANK	ALWAYS BLANK

*Q24C	3	32	1-5	
Q24B	3	33	1-5	
Q24C	3	34	1-5	
Q24D	3	35	1-5	
Q24E	3	36	1-5	
Q24F	3	37	1-5	
Q24G	3	38	1-5	
Q24H	3	39	1-5	
Q24I	3	40	1-5	
Q24J	3	41	1-5	
Q24K	3	42	1-5	
Q24L	3	43	1-5	
Q24M	3	44	1-5	
Q24N	3	45	1-5	
Q24O	3	46	1-5	

* Q25	3	47	1-2	
* Q26	3	48-49	00-50	

Q27A1MO	3	50-51	01-12, BLANK	
Q27A1DAY	3	52-53	01-31, BLANK	
Q27A1YR	3	54-55	56-84, BLANK	
Q27B1	3	56-57	13-50, BLANK	
Q27C1	3	58	1-2, BLANK	NOTE: Y=1 N=2
Q27D1	3	59-60	ALWAYS BLANK	ALWAYS BLANK
Q27E1MO	3	61-62	01-12, BLANK	
Q27E1DAY	3	63-64	01-31, BLANK	
Q27E1YR	3	65-66	56-84, BLANK	
Q27A2MO	3	67-68	01-12, BLANK	
Q27A2DAY	3	69-70	01-31, BLANK	
Q27A2YR	3	71-72	56-84, BLANK	
Q27B2	3	73-74	13-50, BLANK	
Q27C2	3	75	1-2, BLANK	NOTE: Y=1 N=2
Q27D2	3	76-77	ALWAYS BLANK	ALWAYS BLANK
	3	78-80	ALWAYS BLANK	ALWAYS BLANK

BEGIN DECK 4				
DECK NUMBER	4	8-9	04	100% VERIFIED
Q27E2MO	4	10-11	01-12, BLANK	
Q27E2DAY	4	12-13	01-31, BLANK	
Q27E2YR	4	14-15	56-84, BLANK	

<u>QUESTION</u>	<u>DECK</u>	<u>COLUMNS</u>	<u>VALID VALUES</u>	<u>COMMENTS</u>
Q27A3MO	4	16-17	01-12, BLANK	
Q27A3DAY	4	18-19	01-31, BLANK	
Q27A3YR	4	20-21	56-84, BLANK	
Q27B3	4	22-23	13-50, BLANK	
Q27C3	4	24	1-2, BLANK	NOTE: Y=1 N=2
Q27D3	4	25-26	ALWAYS BLANK	ALWAYS BLANK
Q27E3MO	4	27-28	01-12, BLANK	
Q27E3DAY	4	29-30	01-31, BLANK	
Q27E3YR	4	31-32	56-84, BLANK	
Q27A4MO	4	33-34	01-12, BLANK	
Q27A4DAY	4	35-36	01-31, BLANK	
Q27A4YR	4	37-38	56-84, BLANK	
Q27B4	4	39-40	13-50, BLANK	
Q27C4	4	41	1-2, BLANK	NOTE: Y=1 N=2
Q27D4	4	42-43	ALWAYS BLANK	ALWAYS BLANK
Q27E4MO	4	44-45	01-12, BLANK	
Q27E4DAY	4	46-47	01-31, BLANK	
Q27E4YR	4	48-49	56-84, BLANK	
Q27A5MO	4	50-51	01-12, BLANK	
Q27A5DAY	4	52-53	01-31, BLANK	
Q27A5YR	4	54-55	56-84, BLANK	
Q27B5	4	56-57	13-50, BLANK	
Q27C5	4	58	1-2, BLANK	NOTE: Y=1 N=2
Q27D5	4	59-60	ALWAYS BLANK	ALWAYS BLANK
Q27E5MO	4	61-62	01-12, BLANK	
Q27E5DAY	4	63-64	01-31, BLANK	
Q27E5YR	4	65-66	56-84, BLANK	
Q27A6MO	4	67-68	01-12, BLANK	
Q27A6DAY	4	69-70	01-31, BLANK	
Q27A6YR	4	71-72	56-84, BLANK	
Q27B6	4	73-74	13-50, BLANK	
Q27C6	4	75	1-2, BLANK	NOTE: Y=1 N=2
Q27D6	4	76-77	ALWAYS BLANK	ALWAYS BLANK
	4	78-80	ALWAYS BLANK	ALWAYS BLANK

BEGIN DECK 5

DECK NUMBER	5	8-9	05	100% VERIFIED
Q27E6MO	5	10-11	01-12, BLANK	
Q27E6DAY	5	12-13	01-31, BLANK	
Q27E6YR	5	14-15	56-84, BLANK	
Q27F	5	16	1-2, BLANK	1= +6 CHILDREN BLANK= 1-6 CHILDREN OR NO CHILDREN

* Q28A 5 17 1-2

Q28B1	5	18-19	56-84, BLANK
Q28B2	5	20-21	56-84, BLANK
Q28B3	5	22-23	56-84, BLANK

* Q29A 5 24 1,2,6,8

Q29B 5 25-26 00-10, BLANK

QUESTION DECK COLUMNS VALID VALUES COMMENTS

```

-----
| Q29C.1      5      27-28      56-84, BLANK
| Q29C.2      5      29-30      56-84, BLANK
| Q29C.3      5      31-32      56-84, BLANK
-----

```

```

* Q30A      5      33      1-2

```

```

-----
| Q30B1.AMO   5      34-35      01-12, BLANK
| Q30B1.AYR   5      36-37      56-84, BLANK
| Q30B1.AMO   5      38-39      01-12, BLANK
| Q30B1.AYR   5      40-41      56-84, BLANK
| Q30B1.AMO   5      42-43      01-12, BLANK
| Q30B1.AYR   5      44-45      56-84, BLANK
| Q30B2.AMO   5      46-47      01-12, BLANK
| Q30B2.AYR   5      48-49      56-84, BLANK
| Q30B2.AMO   5      50-51      01-12, BLANK
| Q30B2.AYR   5      52-53      56-84, BLANK
| Q30B2.AMO   5      54-55      01-12, BLANK
| Q30B2.AYR   5      56-57      56-84, BLANK
| Q30B3.AMO   5      58-59      01-12, BLANK
| Q30B3.AYR   5      60-61      56-84, BLANK
| Q30B3.AMO   5      62-63      01-12, BLANK
| Q30B3.AYR   5      64-65      56-84, BLANK
| Q30B3.AMO   5      66-67      01-12, BLANK
| Q30B3.AYR   5      68-69      56-84, BLANK
| Q30B4.AMO   5      70-71      01-12, BLANK
| Q30B4.AYR   5      72-73      56-84, BLANK
| Q30B4.AMO   5      74-75      01-12, BLANK
| Q30B4.AYR   5      76-77      56-84, BLANK

```

BEGIN DECK 6

```

DECK NUMBER  6      8-9      06      100% VERIFIED
| Q30B4.AMO  6      10-11     01-12, BLANK
| Q30B4.AYR  6      12-13     56-84, BLANK
-----

```

```

* Q31      6      14-15     01-10,99      100% VERIFIED

```

```

-----
| Q32A      6      16      1, BLANK      1= COLUMNS CIRCLED
| Q32B      6      17      1, BLANK      IN RED
-----

```

```

* Q33      6      18-26 000000000-999999999      100% VERIFIED

```

```

-----
| Q34MONTH   6      27-28     01-12      100% VERIFIED
| *Q34DAY    6      29-30     01-31      100% VERIFIED
| Q34YEAR    6      31-32     43-56      100% VERIFIED
-----

```

```

-----
| Q35A      6      33      1, BLANK      1= COLUMNS CIRCLED
| Q35B      6      34      1, BLANK      IN RED
-----

```

QUESTION	DECK	COLUMNS	VALID VALUES	COMMENTS
Q36A	6	35-36	43-83, BLANK	1= COLUMN CIRCLED IN RED
Q36B	6	37	1, BLANK	
Q37A	6	38	1, BLANK	1= COLUMN CIRCLED IN RED
Q37B	6	39	1, BLANK	