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TITLE: The Health Status of Women in the Military: An Epidemiological Study of Active Duty Navy And Marine Corps Personnel

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The views, opinions and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy or decision unless so designated by other documentation.
This study was designed to provide baseline health and risk factor information to estimate the prevalence of a wide range of health conditions and to make relevant comparisons both within military subpopulations and between military and civilian populations. The study approach includes the administration of an extensive self-report health questionnaire to a population-based sample of active-duty Navy and Marine Corps women and a comparison sample of active-duty and Marine Corps men. Clinically based structured telephone interviews and physical measurements also were administered to a subsample of the surveyed population. To produce rates comparable with national and other military data, the survey instruments were based on standardized measures used in previous national and military health surveys. The data from this study are being used to evaluate a variety of women's health and physical parameters of importance to the Navy and Marine Corps, including the identification of women's health problems, risk factors, and health care needs and practices in the following general issue areas: reproductive, medical/nutritional, psychosocial, lifestyle, occupational/environmental, and health services. They also were being used to identify appropriate populations for subsequent studies, experiments, and interventions needed to address specific health issues regarding women's health in the military and their operational readiness.
FOREWORD

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INTRODUCTION

PROBLEM

The shift in the U.S. military from a conscription-based to an all-volunteer force in 1973, along with increased social acceptance of woman’s involvement in traditionally male-dominated occupations, created new opportunities for an increasing number of women in the military. Consequently, the proportion of the military population who are women has been increasing. In the early 1980s, less than 10% of the Armed Forces were women [4,5], but by 1993 that percentage was approximately 12% of the force for a total of 72,449 women [6]. Women make up from 11% to 15% of the active-duty Army, Navy, and Air Force personnel and 4% of Marine Corps personnel [6]. Approximately 15% of women are officers in the Armed Forces overall, which is comparable to the percentage of military men who are officers.

Since 1948, with the passage of the Women’s Armed Services Integration Act, women have served in the same units as men, rather than in special all-female units [7]. Although women in the U.S. military traditionally have tended to be in administrative support or health-related occupational specialties, such as nursing, all occupations in principle are open to women except those related to direct offensive ground combat [8-10]. In the recent war in the Persian Gulf, however, approximately 33,000 women served in combat-support roles, including airplane and helicopter pilots, construction and repair, and artillery direction [11].

In addition to safety concerns for women who might be near direct combat operations, concerns have been raised about the potential impact of military service upon women’s health, such as the risk of stress-related health problems associated with minority status in a predominantly male environment, the risk of reproductive hazards associated with exposure to hazardous materials, or the risk of injury if women are in more physically demanding occupational specialties as opposed to administrative or medical specialties. Similarly, concern has also been raised about the potential impact of women’s health problems upon overall military readiness [8]. Thus, research on the health status and health behaviors of military women can play an important role in helping to ensure their full participation in all aspects of military service and to guarantee them safety and well-being.

Partly in reflection of the large proportion of males in the military, however, much prior research on the health of military personnel has either involved all-male samples within individual services [12-15], or it has included both military women and men but has generally not provided gender-specific estimates [e.g., 16,17]. Prior health-related studies that have been conducted among military women, such as the 1989 DOD Women’s Health Survey [18], the 1992 Navy Personnel Research and Development Center (NPRDC) survey of pregnancy among enlisted women, and Hoiberg and White’s [8] study of hospitalizations among Navy women, have tended to focus on a narrow aspect of military women’s health issues (e.g., pregnancy, hospitalizations) or have not allowed estimation of baseline disease prevalence rates.
In addition, military population surveys do not offer the same degree of detailed epidemiologic data on health status and health behaviors as are available for the civilian population through such studies as the National Health and Nutrition Examination Survey (NHANES) [19-21], the National Health Interview Survey (NHIS) [22], the Behavioral Risk Factor Surveillance System (BRFSS) [23], and the Epidemiologic Catchment Area (ECA) study [24]. Three recent DoD-wide surveys provided population-based health data on active-duty members: the Worldwide Survey of Substance Abuse and Health Behaviors Among Military Personnel [25], the 1992 DOD Survey of Military Medical Care Beneficiaries [26], and the 1989 DOD Women’s Health Survey [18]. Unfortunately, none of these prior studies allowed estimation of baseline disease prevalence rates. In general terms, however, it was shown that the number of illnesses experienced by active-duty members per year (as measured by the number of survey respondents who reported the number of times they were sick in the past 12 months with symptoms such as feeling flushed or sweaty or having a runny nose or eyes, chills, nausea or vomiting, stomach cramps, diarrhea, muscle pains, or severe headaches) significantly increased between 1985 and 1992 with a particularly high level in 1988 [18]. The present study was designed to provide the disease-specific and sex-specific rates to understand such illness patterns and to identify particular health problems in specific groups.

As previously noted, an increasing proportion of U.S. military personnel are now women, and their military role is increasingly being expanded to include nontraditional occupations. Consequently, the nature and distribution of health care problems in the Navy and Marine Corps are likely to change, and the health care system will need to adapt to effectively meet the health care needs of personnel. Thus, the development of baseline data to monitor changes in health status and health care delivery needs within the DOD as a whole and the naval service in particular is of critical importance to the maintenance of military readiness.

In 1956, Congress passed the National Health Survey Act authorizing a series of national programs to measure and monitor the health status of the U.S. population. Three of these programs, which have been revised and expanded over the years and continue to be carried out by the National Center for Health Statistics (NCHS), are NHANES [19-21], NHIS [22], and the National Maternal and Infant Health Survey (NMIHS) [27]. With their nationally representative samples, these surveys permit estimates of the prevalence of specifically defined diseases in the U.S. civilian, noninstitutionalized population, including cases not previously identified. They also "permit estimation of the distribution within the population of a broad variety of health-related measurements, including not only physical measurements such as height, weight, and various skinfolds, but also physiological measurements, such as diastolic blood pressure and serum cholesterol level, and psychological measurements"[19]. Another series of studies initiated by the National Institute of Mental Health (NIMH) more than a decade ago provided the first information on the prevalence of newly defined (on the basis of revised clinical criteria) mental disorders in the general population and on what proportion of individuals with these disorders received mental health services. This program, the Epidemiologic Catchment Area (ECA) study, used a complex sampling and weighting procedure at five sites to obtain estimates of the rate of mental illness in the U.S. population [24].
Prevalence estimates obtained from these studies provide a baseline for understanding the mix of disorders present and the extent to which untreated cases exist in the population. Such basic prevalence rates are necessary for the adequate planning and provision of health care services. Furthermore, the identification of mild or subclinical conditions provides great potential for early intervention and prevention of the disability associated with the full-blown illness. In addition to identifying base rates of illness, these studies permit the identification of high-risk subgroups within the population, those with unusually high rates of illness as well as those with unusually low rates. This identification constitutes the first step in etiologic discovery, and in conjunction with information about potential risk factors, permits the examination of a wide range of causally related hypotheses. Another important aspect of these studies is their linkage of epidemiologic and health services research. With this linkage, it is possible to identify diagnostic and sociodemographic groups who are least adequately served, as well as provide a baseline against which to measure the effectiveness of new treatment and prevention programs.

The numerous advantages of the above type of data on civilians have been realized only to a very limited degree in research on military populations. Further, it is expected that as the demographic compositions of the Navy and Marine Corps change, the nature and distribution of health-care problems as well as the health care system itself will change, further necessitating the application of these type of data to address military health issues.

BACKGROUND

Six general issue areas have been identified as requiring baseline information important to military readiness and are discussed below: reproductive, medical and physiological, psychosocial, lifestyle, occupational/environmental, and health services.

Reproductive. Reproductive issues are of major concern not only for policy purposes (staffing ships and combat positions) but for specialized health care needs as well. The majority of active-duty women are at the peak of their reproductive years. Reproductive issues will become of even greater importance to military leaders as the percentage of women increases in the military, particularly as they relate to the possible effect of expanded combat and ship experience and other occupational (chemical, radiological and biologic) exposures associated with specific duties [29]. For example, maternal factors affecting the length of pregnancy include exposure to organic solvents [30], electromagnetic radiation [31], lead exposure [32], alcohol consumption [33], passive smoke [34], contaminated tap water [35], heavy lifting [36], and heavy caffeine consumption [37].

According to the Naval Environmental Health Center [38], a number of reproductive health hazards are found at both ship and shore commands. Specifically, cadmium, mercury, benzene, glycol ethers (EE/ME), perchloroethylene, polychlorinated biphenyl, and vinyl chloride should be considered priority materials for shipboard and shore minimization action. Chloroprene (rubber manufacturing), carbon disulfide, ethylene oxide, ethylene thiourea, ethylene dibromide, halogenated anesthetic gases, and nitrous oxide are substances that most likely would be found at
shore facilities.

This study obtains information on reproductive history and existing gynecological and obstetrical (OB/GYN) conditions. In addition, perceptions, attitudes, and health care use patterns regarding existing utilization of OB/GYN facilities and services are surveyed.

**Medical/physiological and nutrition.** National health surveys (NHANES and NHIS) have served as important parts of the nation's health monitoring systems. These surveys have established the normative distributions for certain population parameters, such as height, weight, blood pressure, and nutrition. In addition, these surveys have ascertained the prevalence of certain chronic diseases as well as the prevalence of risk factors for given conditions. This information is essential in identifying health care needs and facilitating health care planning. Currently, no baseline information exists on underlying conditions typically seen in an acute-care setting for military personnel. In the present study, vision disability, tuberculosis, a variety of acute and chronic diseases, gastrointestinal problems, anemia, diabetes, respiratory conditions, hearing and speech, liver and gallbladder conditions, kidney and bladder disease, allergies, hypertension, cardiovascular conditions, and chronic back and joint pain (arthritis) are among the current and past medical conditions surveyed. In addition, many machines and vehicles are designed based on physical parameters standardized against the average male [39]. The physical measurements obtained in this survey, among other advantages, permit a validation or generation of new body surface formulae for females.

Nutritional status also has been a major component of the national surveys and is included in this study as a way to ascertain the nutritional status across all sectors of the military. Although it is known that women in the military have higher nutritional knowledge scores than men do [40], it also has been established that women in general have different nutritional needs than men, such as more iron, more calcium, and fewer calories [41], and that naval female personnel, in particular, may require supplemental iron to meet the recommended dietary amount [42]. This study permits an evaluation of active-duty women's nutritional status relative to that of their male counterparts. Also, since the common predictors of economic status and availability are relatively stable in the military, this survey examines the effect of lifestyle and cultural conditions on this nutritional status.

**Psychosocial.** Mental disorders are the second leading cause for hospitalization among both enlisted men (after injuries) and enlisted women (after pregnancy-related conditions) in the Navy [43]. While psychiatric incidence rates are high for both sexes, some studies have suggested that women may have much higher rates than men have. For example, a study of sex differences in sick-call diagnoses aboard U.S. Navy ships found significantly higher rates of personality disorder, stress, and adjustment reactions, and other symptoms/syndromes (e.g., eating and sleep disorders) among women [44]. Two- to four-fold differences in psychiatric hospitalization rates (excluding alcoholism) were found for women in earlier cohort studies [43,45 respectively]. Also, female soldiers deployed during the Persian Gulf War were almost twice as likely as men to be diagnosed with psychiatric disorders [46]. Some investigators have suggested that women are at
higher risk for disorder because women find military life more difficult and stressful than do men. Others have suggested that higher rates reflect women's greater propensity to use health services. Further, most studies have not controlled for known demographic, psychosocial, or service-related differences between the sexes in the assessment of their disorder rates. In view of the increased proportion of women in the military and their greater exposure to stressful situations, such as nontraditional occupations, deployment, and combat that may increase the risk of mental disorder or distress, the military must be prepared to plan for the delivery of increased mental health services and must identify high-risk groups to target mental health promotion efforts. This study provides the epidemiologic data needed to address these issues by determining the prevalence of the most commonly diagnosed mental disorders in women - depression, personality, eating and anxiety, including Posttraumatic Stress Disorder, as well as the prevalence of psychiatric distress symptomatology. This study also examines possible risk factors associated with these rates such as life events, coping skills, quality of life, perceived stress, personality, interpersonal relations, and social support.

Lifestyle. Awareness has increased in the medical and psychological communities that men and women differ in their risks for a variety of illnesses as well as in their appropriation of health-related behaviors. Women’s health-risk and behavior issues are particularly salient in the U.S. Navy and Marine Corps, where women's roles are expanding to embrace all occupational specialties, including those associated with deployment and combat, thereby exposing women to new physical and psychological demands and potential health hazards. Further, it is unknown to what extent poor health behaviors (e.g., smoking, caffeine use) may potentiate the effects of stress in women or to what extent their co-occurrence in an operational environment may add psychological and biological burdens [47]. To evaluate the effect of an expanded role for women, a clear understanding of health, life-style, and fitness variables must be ascertained to serve as a basis for subsequent evaluations. This study examines an array of health- and fitness-related variables in women, including exercise and dietary habits, sleep patterns, cigarette smoking, substance use, aerobic fitness, muscle strength, general health habits and attitudes, and perceived health status. These variables are evaluated as potential risk factors for specific diseases and are used in comparative analyses with males.

Occupational/Environmental. The integration of women into nontraditional ratings raises a number of questions concerning the impact of such jobs on women's health, the mechanisms employed by women to cope with new occupational demands, and the requirements for Navy medicine to provide care to women engaged in the full spectrum of occupational sites and situations. This study will examine the differences in health and occupational stress among Navy women assigned to both traditional and nontraditional jobs, and it will compare the women’s health and fitness status, as well as their job satisfaction, perceived job stress, including sexual harassment/discrimination, and job performance to that of their male counterparts. Further, most of the research on the effects of occupational and environmental stress in the workplace has been on men, and few studies have examined potential gender differentials. Certainly an important source of occupational stress in the military is exposure to combat and sustained operations. Although many epidemiologic studies have examined the effects of warfare exposure on male
active-duty members, no epidemiologic studies have been conducted on the effects of combat or deployment stress in active-duty women. Therefore, an important aspect of this study is an examination of the physical and psychological correlates of occupational and combat stress.

Health services. It is well documented that women utilize health care resources more frequently than do men [48-50]. In the United States, women in the reproductive age group use physician services at almost one and a half times the rate of men in that group, exclusive of utilization associated with pregnancy. Several studies on military populations have indicated that military women utilize health-care resources more frequently than do military men. Navy enlisted women had considerably higher rates of hospitalization than did enlisted men, with pregnancy-related conditions accounting for nearly one third of women's hospitalizations [43]. Navy shipboard women were also found to use health care resources at a significantly higher rate than did men, with a female-to-male visit ratio of 1.44 for all visits and 1.21 when all sex-specific diagnoses are excluded [51]. A study of health status of women in the Army demonstrated that Army women used health care resources more frequently than did Army men [52].

A 1989 DoD Women's Health Survey of more than 5,000 active-duty women in all four services found that the majority of women were satisfied or very satisfied with the quality of medical services for both the last non-OB/GYN visit and the last OB/GYN visit, although some dissatisfaction was reported with specific aspects of medical treatment (e.g., time waited, priority shown, time to learn of test results) [18]. There were also differences across the services, with women in the Air Force reporting better access to medical services and higher satisfaction with those services than did women in the other services.

Identifying factors associated with military women's health care utilization, satisfaction, and access will help target areas for improvement in health care delivery to women across all services. For example, investigators have reported various psychological, social, physical, and behavioral factors associated with sex differences in health care utilization. Differences in health care utilization among men and women have been attributed to greater apparent morbidity among women than men [53], the effects of employment (both positive and negative models) among women, and factors in the Health Belief Model. Such factors include predisposing variables (i.e., attitudes, beliefs, and knowledge regarding health care and treatment), enabling factors (i.e., conditions that facilitate or inhibit the use of health care resources), and need variables (i.e., subjective and objective evaluations of health status) [54].

Regarding utilization in the present study, rates of hospitalization for all Navy men and women are available in an automated database containing hospitalization records and career history data maintained at NHRC. However, very little systematic information is available on outpatient medical visits, outpatient utilization rates, or access and satisfaction issues. This information is obtained in the present survey. The Health Services Section of the survey includes psychological, behavioral, and social factors shown to be important in various theoretical models of health and illness behavior, including perceived barriers and benefits, predisposing, enabling, and need characteristics. In the present survey, items addressing specific access issues and satisfaction with
health services were taken from the 1989 DOD Women's Health Survey, thus providing both an epidemiology and health services link, and an update of the 1989 survey findings to track changes in women's utilization patterns and satisfaction with their health care over the last 5 years.

PURPOSE/HYPOTHESES

The purpose of the present study was to conduct a large-scale military population-based women's health survey that included biological and physical measurements. This survey was designed to assess the health of active-duty Navy and Marine Corps women and men and to test a multitude of specific hypotheses regarding differences in rates of health status and health services utilization indicators and risk factors among various comparison subgroups and the nature of the relationships between the various health outcomes, risk factors, and perceived health care. For example, it is hypothesized that: (1) Military women differ from their male and civilian counterparts on as yet unidentified health problems and risk factors; (2) An inverse relationship exists between adverse occupational and environmental exposures/stressors and measures of physical and mental health that varies for men and women; (3) Sociodemographic and psychosocial variables account for a significant amount of the variance observed between reproductive behaviors and outcomes; and (4) Military women's health care needs differ from men's and vary by health, fitness, reproductive status, psychosocial, sociodemographic and occupational/environmental exposure subgroups. Additional hypotheses are discussed in the statistical analysis section.

TECHNICAL OBJECTIVES

The technical objectives of this study were as follows:

1. Produce estimates of means and proportions for 6 categories of health variables, including reproductive history; current and past medical conditions; health behaviors; mental health status; environmental exposures; and health care utilization, by sex, race, ethnic, age, and military status subgroups of U. S. Navy and Marine Corps women

2. Estimate the prevalence of selected diseases, conditions, and risk factors in Navy and Marine Corps women, such as thyroid disease, asthma, obesity, pregnancy, and others

3. Make comparisons between women versus men, sea versus shore, junior enlisted versus senior enlisted, different rating groups, surface versus aviation, and continental United States versus overseas

4. Make comparisons of prevalence information between the Navy and Marine Corps and civilian female populations

5. Develop baseline information for future status and trends of Navy and Marine Corps women's risk factor and health information
6. Contribute to the understanding of disease etiology in female populations by collecting and analyzing risk-factor information

**APPROACH**

The information obtained in this study provides the means to evaluate women’s health status in the Navy and Marine Corps by providing the baseline for future comparisons, as the demographic profile of the military changes over the next few years and as women move into traditionally male-dominated occupations. This information is collected in a methodology similar to the national civilian surveys and, therefore, is comparable to civilian population data. This can reaffirm or guide current policies on occupation and medical care in the military.

In addition, the Navy and Marine Corps may need to re-examine their policies ranging from health care utilization to women’s health issues. Despite the Department of the Navy’s directive to maintain an optimal state of health and well-being [1], neither the Navy nor Marine Corps possess the type or amount of epidemiologic or health services data that are required to optimally support or to ensure continuous quality improvement of these efforts. This research rectifies that inadequacy by providing baseline information on the prevalence and distribution of diseases, health risks, and health care behaviors in a representative sample of shore-based active-duty Navy and Marine Corps personnel. The data from this study are used to evaluate a variety of health and physical readiness-related questions of vital importance to their operational readiness. Among the relevant directives and instructions, in addition to Naval Medical Research and Development Commands (NMRDC’s) are: OPNAVINST 6100.2 [1] and NMRDC’s fiscal year (FY) 1993 guidance [2]. Further, the baseline nature of this survey provides data relevant to all of the four broad topic areas recommended for long-term research on the health of military women [3]. Results of this research project are intended to be used directly by Navy and Marine Corps medical and line decision-makers in policy formation.

**BODY**

**SAMPLE**

*First-stage sample: geographic locations.* For ease of logistics and to take the opportunity to obtain physical measurements, the sampling design was based on first-stage sampling units (FSUs). An FSU is defined as a geographic center from which a number of individuals from a variety of commands would be selected to participate in the study. The FSUs were chosen based on geographic location and ability to provide women to fill the designated sampling strata. Geocodes (ZIP, APO/FPO, and UIC/RUC/MCC) were used to form geographic clusters proportional to population size. To ensure that the group-administered questionnaire was administered in a cost-effective fashion, the sampling frame required that at least one organizational unit with 300 available individuals was contained in each FSU. First-stage strata included 3 Continental U.S. (CONUS) strata (Navy Afloat, Navy Ashore, and Marine Corps) and 2 Outside Continental U.S. (OCONUS) strata (Navy and Marine Corps). Master Navy personnel
files resident at NHRC were used to construct the first-stage sampling frame for the Navy. Marine Corps personnel files were obtained directly from Marine Corps headquarters. Population counts were obtained for each gender/race/paygrade group for each ZIP/FPO code/UIC combination. Inclusion criteria included having at least one year of active duty, not absent without authorization, and having a permanent change of station (PCS) beyond our anticipated data collection completion date. These files were sent to Research Triangle Institute (RTI) which matched them to the first-stage frame used for the 1995 DoD Worldwide Survey by ZIP/FPO and then geographically stratified to obtain the total number of FSUs. Of this total (202), 40 FSUs were randomly selected.

Second-stage sample: selection of individuals. Second-stage sampling units (SSUs) are the individual active-duty personnel within each of the first-stage units. After sample strata and FSUs were identified, a random sample of persons to be surveyed was selected from the Marine Corps and Navy master personnel lists using a random number sequence file. RTI generated the random number sequence file based on the desired cell sizes (see next section). This file was then sent back to NHRC where it was matched to the updated master personnel files. As each name was associated with a line on the list or roster, a random sample of line numbers within each cell could be selected with equal probability, without replacement of individuals, and allow for changes in the personnel complement that may have occurred since the population counts were obtained.

Sample size determination with statistical power calculation. Strata included sex (male/female), paygrade (enlisted/chief/officer), race (white/other), for a total of 12 cells. The minimum number per cell was based on the overall sampling rate of a proposed 10% of the military population and concomitant precision requirements. Due to low numbers of blacks and women in certain occupational ratings, those particular strata were oversampled. Analyses will combine strata if response rates fail to achieve necessary minimum sample sizes for 80% power. The following table shows the selected sample size for each study component.

<table>
<thead>
<tr>
<th></th>
<th>Marine Corps</th>
<th>Navy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questionnaires (original)</td>
<td>3,649</td>
<td>17,041</td>
</tr>
<tr>
<td>Questionnaires (revised sample)</td>
<td>4,703</td>
<td>21,160</td>
</tr>
<tr>
<td>Physical measurements</td>
<td>400</td>
<td>600</td>
</tr>
<tr>
<td>Telephone interviews</td>
<td>400</td>
<td>600</td>
</tr>
</tbody>
</table>

The precision requirements were those used by NHANES:

a. A prevalence statistic of 10% should have a relative standard error (RSE) less than 30%; and

b. Differences of at least 10% in health or nutrition statistics between any two subdomains should be detected with a type I error of no more than 0.05 and a type II error of no more than 0.10 (2). (In the sample sizes for our original sample allocation, differences of 0.10 can be detected between most of the subgroups with at least 90% power for proportions in the 0.05 to
0.10 range. Exceptions included some of the comparisons involving Marine Corps females, where the power was generally at least 80%. Calculations are under way to determine the effect of the reduced sample size and response rates on these power estimates.)

Further details regarding the sampling design and frame are available in chapter 3 of RTI’s technical proposal (see Appendix A).

MEASURES

Survey questionnaire. The self-report questionnaire broke the six general issue areas reviewed above into 17 classes of variables: demographics, medical history, current medical conditions, health perceptions, mental health, quality of life/stress, health care, self-care, lifestyle, health promotion, social support, psychosocial factors, personality traits, job satisfaction/stress, casualty events, occupational/environmental exposures, and reproductive history (see Appendix B). The goal was to produce estimates of health characteristics, risk factors, and health care utilization that could be compared within military subpopulations and with civilian data. Priority was given to well-established instruments with published, reliable, psychometric properties, appropriateness to an active-duty military population, and brevity. Emphasis was on using questions from the standardized NHANES and NHIS for comparability. The draft questionnaire was sent to numerous investigators to review for quality and priority of content. Among the standardized instruments included in the survey are: The Medical Outcome Survey-Short Form (MOS 36) [55], the Center for Epidemiologic Studies - Depression Scale (CES-D) [56], Hopkins Checklist - Short Form (Hopkins - 21) [57], the Rosenberg Self-Esteem Scale [58, 59], the State-Trait Anxiety Scale (short form) [60], the State-Trait Anger Inventory (short-form) [61], and House’s Job Pressures and Stresses and Job Satisfaction scales [62]. Copyright permissions were obtained for the latter three scales and the remaining scales were public domain. Other instruments from which single or more individual items were obtained included the National Health Interview Survey (NHIS 88-94), the Social Adjustment Scale [63, 64], the Andrews and Withey quality of life instrument, the DoD Health Care Survey [65], the DoD Women’s Health Survey, the NHANES III (88-89), NHRC’s Shipboard Health Survey, NHRC’s Occupational History Survey, NHRC’s Health and Nutrition Survey, NHRC’s Health and Physical Readiness Survey, NHRC’s Follow-Up for Fitness Survey, NHRC’s Airlant Carrier Tobacco Use Survey, Healthier People, 1992 DoD Worldwide Survey of Substance Abuse, the Army’s Health Risk Appraisal (HRA), and the CDC’s Behavioral Risk Factor Questionnaire [66]. Other stress and trauma measures appropriate to a military population were adapted from a combination of published sources [67-70]. Interitem reliability statistics (Chronbach’s Alpha coefficients) were examined to determine the best reliability/number of items ratio when data were available.

Physical and cardiovascular measurements. Body measurements were limited to noninvasive procedures and were taken by trained corpsmen. These measurements included blood pressure, heart rate, height, weight, neck, waist and hip circumference, triceps skinfold and subscapular skinfold. All equipment was prepared and calibrated in accordance with standardized protocols. This equipment included 2 digital scales, 2 calipers, 3 automated blood pressure cuffs
with digital readouts and pulse registration, 2 handgrip dynamometers, and 6 tape measures.

**Telephone interviews.** The Quick Diagnostic Interview Schedule (DIS) [71] was the instrument used in this study and is a shortened, computerized version of the Diagnostic Interview Schedule used previously in the well-known ECA studies discussed previously and described in Robbins and Regier [24]. The Quick DIS asks the minimum number of questions needed to make a diagnostic decision for selected diagnoses of interest in this study (major depression, Generalized Anxiety Disorder, Somatization, and Alcohol Abuse). It is designed to be administered by lay interviewers with little or no previous training (see Appendix G).

**PROCEDURES**

**Study approvals.** Consent forms were developed and distributed with all mail questionnaire packets. Participants in group administrations were asked to have the person seated next to them sign as a witness (see Appendix C). OPNAV control numbers and Committee for the Protection of Human Subjects (CPHS) approval were obtained for all three aspects of the survey (see Appendix D).

**Pilot testing.** Pilot testing of the questionnaire and physical measurement protocols were conducted on a sample of women in the Marine Corps (Camp Pendleton) and the Navy (San Diego). Ten sailors and ten Marines (5 men and women each) from local commands were asked to complete and evaluate the questionnaire. The questionnaire took an average of 45 minutes to complete. Modifications were made as needed to improve inclusiveness and clarity. Volunteers also were asked to step through the measurement process. Two 3-person measurement teams were trained by an experienced anthropometrist. A 2-week practice and reliability-testing period was conducted in which the measurement teams practiced and retrained until all members tested within 1 cm for circumferences and achieved a 90% reliability with the skinfold measurements. Pilot testing of the telephone survey was conducted on 8 individuals (2 per interviewer) who responded positively to the written request for volunteers included with their questionnaire during the on-site survey pilot testing.

**Field team training.** All necessary definitions and instructions regarding how questionnaire administration should proceed, how physical measurements should be taken, and how to conduct the telephone survey were compiled into staff instruction manuals covering all study procedures (see Appendices E-G). Specialized training was given to all data collection staff members in the specific procedures they performed in the survey. When necessary, periodic retraining was provided to achieve consistency over the entire survey period.

**On-site advance contacts and logistics.** A message from the Naval Bureau of Medicine (BUMED) was drafted and sent to the largest medical facility in each FSU to obtain command-level support for this study (see Appendix H). The message requested that each FSU appoint a military liaison officer (MLO) to coordinate on-site preparations for survey administration, such as the receipt of questionnaires from the printers. MLOs were also asked to identify an
appropriate place for the survey administration and to help reschedule participants unable to attend their assigned survey session (see Appendix I). Commanding officers (COS) of commands with individuals selected for the study were notified by CO-to-CO letters and informed of the purpose of study and which members of their command had been selected to participate. A senior member of the research project was available to meet with commands, as requested, to discuss the study. Commands were asked to distribute prescheduled appointment notices to the selected individuals within the command. These individuals were asked to contact their MLO if unable to attend their prescheduled session.

On-site administration and examination process: questionnaire. Selected individuals were asked to report to an examination center where trained study personnel from RTI administered the questionnaire. Study personnel transported all completed questionnaires from the study sites in sealed boxes to the optical scanning contractor where computerized data entry was managed. As contractors, these study personnel did not have direct access to the data except during the boxing up of the questionnaires for shipping. Both the questionnaires and computerized files are transferred to NHRC where data are being analyzed, stored, and maintained. Although the above procedures were originally intended to include the entire sample, as noted below, operational commitments mandated a change in this methodology to include only those selected sites in which physical measurements were taken. All other individuals received mail questionnaires via their COS. Reminder mailouts were sent approximately 4-5 weeks after the initial mailout to individuals who had not yet responded. Certificates of Participation were given to all participants completing the questionnaire. Response rates are being compared between mail and on-site group administrations of the questionnaire (see following section for latest response rates available).

On-site administration and examination process: physical measurements. At four FSUs, physical measurements were taken by trained military corpsmen and recorded on a recording sheet. Measurements were taken directly following the administration of the written survey. This ensured that all participants had been seated for at least 30 min prior to having their blood pressure and heart rate taken and were not being measured immediately after exercising or working. A standardized protocol for the measurement of cardiovascular and physical parameters was developed based on a combination of the standardized NHANES and Navy anthropometric protocols [72] (see Appendix F). Blood pressure feedback forms and wellness newsletters were distributed to all participants in the physical measurements survey.

Administration and examination process: telephone interviews. On a special handout that accompanied the questionnaire, all participants were asked if they would be willing to participate in a telephone interview about their health and mental health, and if so, to provide phone numbers and preferred contact times. Based on criteria met for a high level of psychosocial distress as determined by cutoff scores on self-administered screening instruments included in the written questionnaire (CES-D and Hopkins-21) and scored at NHRC, selected individuals who responded positively about participating in a telephone interview were contacted to schedule their interview. Volunteers are being compared to nonvolunteers to examine potential for bias and necessity for statistical control, as per the "exhaustive approach" (Rosenthal & Rosnow, 1991). Although 30
interviews were conducted face-to-face on-site following the physical measurements survey, most interviews are being conducted in private offices at NHRC. Interviewers enter questionnaire responses directly into personal computers. Completed interviews are being scored by computer software thus ensuring the anonymity of results.

RESULTS

Despite significant progress, outlined as follows, as a result of funding delays, operational commitments, and logistical constraints, milestones for this study were delayed and the general approach was modified from its original representative sample and data collection strategy. The delay in the receipt of funds and contracting mechanisms necessitated a scaling back of the amount of data originally planned to be obtained from this study by collecting cardiovascular and physical measurements on only a random subsample of survey participants rather than the entire sample, and by conducting most of the clinical interviews by telephone rather than face-to-face. These design modifications minimized on-site data collection time and costs; however, they introduced an element of caution as fewer data were available on the reliability of the telephone interview than were available for the face-to-face interview. Since NCHS personnel were unable to provide project direction as originally intended, this project was directed by in-house personnel with sample allocation/weighting and questionnaire administration being contracted through RTI.

With a sampling strategy similar to that of the DoD’s Worldwide Survey of Substance Abuse, Phase 1, originally consisted of the group administration of a self-report questionnaire to a population-based, two-stage cluster sample of active-duty Navy and Marine Corps men and women worldwide, stratified by race and paygrade/rating group. Phase 2 data collection consisted of the mailout of survey instruments to eligible nonrespondents of Phase 1 and to areas where group sessions were not feasible. Due to a shipboard study that addressed similar health issues, modifications to this approach were made: (1) There would be no surveying (including mail questionnaires) of shipboard personnel including those attached to submarines, or other mobile units, and (2) Only those commands in which the 1,000 participants to receive physical measurements were drawn from would receive on-site group administrations of the questionnaire. All others would receive mail questionnaires. Not all commands agreed to participate and the following additional modifications were made: (3) The entire chain of command of all study participants would be fully informed of the study purpose and protocols and agree to participate, and (4) The San Diego Naval Medical Center would not be surveyed (mail or otherwise). Given these modifications, a revised plan for data collection was developed, detailed as follows. Revised milestones are discussed in the Statement of Work for the continuation proposal (see Appendix J).

All ships and the San Diego Naval Medical Center were excluded from the sample restricting generalizability to shore-based personnel only and precluding the ability to make direct shore and ship comparisons on approximately 80% of the individual questionnaire items. A reallocation of the entire sample and an increase in sample size to 25,868 was necessitated to ensure adequate cell sizes and to compensate for the projected decrease in response rate.

- Data collection proceeded in two phases: Phase 1 in which a mailed questionnaire was
sent to 866 commands for distribution to selected study subjects and Phase 2 in which a much smaller number of commands received on-site group administration of the questionnaire with approximately one third to one quarter of the respondents receiving physical measurements.

- Phase 1 data collection included 2 separate mailings: (1) An introductory letter was sent explaining the purpose of the study with an enclosed confirmation card that COS could return indicating they would like to have additional information regarding the study. A list of the study subjects to receive a questionnaire was provided for information. All commands requesting additional information received telephone calls and/or personal briefings from a senior member of the study staff. (2) Between four and five weeks later, a second mailing went out to the commands with a cover letter asking that the enclosed questionnaires be distributed to the study subjects. Subjects used self-addressed stamped envelopes to return their completed questionnaires. Certificates of Participation were included in their questionnaire packets. In Phase 2, only those commands contributing participants to the physical measurement portion of the survey received on-site group administration of questionnaires. This reduced the number of FSUs to receive group administrations from 45 to 5 and the number of individual commands from 1,818 to 379. The total number of individuals to be sampled in these commands was 4,405 from which 1,000 were asked to have physical measurements taken. The MLOs for these 5 FSUs were retained to help coordinate site visit logistics. All commands contributing more than 10 individuals to the sample (N=103) received a heads-up telephone call by a military officer staff member to inform them of the study and the coming CO-to-CO letter. As in Phase 1, CO-to-CO letters were sent informing each of the commands of the purpose of the study and preaddressed confirmation cards allowed commands to indicate their request for further briefing. This card also gave commands the opportunity to respond if there was a problem with their proposed testing schedule. Individual appointment notices were included with the time and location of the testing session. Follow-up phone calls and/or personal briefings were made, as requested, prior to the site visits.

Overall to date, significant progress has been made in this study in terms of the completion of the questionnaire, including a thorough investigation of the literature, the selection and modification of individual instruments, the pilot testing, reviewing, revising, and its printing in scannable format. Sampling parameters were determined for both first- and second-stage sampling frames. Population files were obtained, and software to direct the sample selection was written and tested. The FSUs and SSUs were selected for both the Navy and Marine Corps. The computerized data collection instrument for obtaining physical and anthropometric measurements at the test sites was developed, the user's manual written, the equipment obtained, and training and pilot testing conducted. Contractual arrangements for staffing, data collection services, and survey tracking and scanning were arranged. Field team members were recruited, and training manuals were written. Logistic arrangements for on-site visits were developed, briefings made, and official Navy messages written and sent. In addition to several in-house presentations including a briefing to Admiral Dysart in September 1995, this study was presented to the DoD Human Factors
Engineering Technical Advisory Group in November 1995 and to the DoD Women’s Military Health Workshop, Institute for the Advancement of Social Work Research in January 1996. Abstracts have also been accepted for upcoming annual meetings of the American Psychological Association and the American Public Health Association (see following section). Further, a statistician was recruited, and preparations for database management, including development of the coding manuals, has been completed. Further details on the progress of this study can be obtained from RTI Progress Reports 1-4, available from the Principal Investigator upon request.

Currently, data collection is nearly complete with 2 waves of mail questionnaires distributed, all physical measurements taken, and all face-to-face interviews completed. As of February 16, 6340 questionnaires have been received from naval personnel and 1,542 from Marine Corps personnel for response rates of 30.0% and 32.8%, respectively. In total, 7,882 questionnaires have been received for an overall response rate of 30.5%. Physical measurement data were collected on 668 males and 627 females to yield a total of 1,295 surveys, or 56% of the participants from the on-site group administrations. Approximately 114 telephone interviews have been completed to date. As described in the Conclusions section, the third mailout wave, the remaining telephone surveys, and statistical analyses are being completed under a continuation proposal.

CONCLUSIONS

As the largest population-based health survey of active-duty Navy and Marine Corps personnel ever undertaken, the continuation and conclusion of data collection and analyses for this study was funded under the title, “The Health Status of Women in the Military: An Epidemiologic Study of Active-Duty Navy and Marine Corps Personnel, Part II, of the Defense Women’s Health Research Program.”

GENERAL PLAN FOR DATA MANAGEMENT AND ANALYSIS

At the present time, data collection is being finalized and data are being optically scanned, edited and validated. Sampling weights will be assigned to each sample member and consist of two components: an initial sampling weight and a factor to adjust for nonresponse (see Appendix A for further details). A preliminary data file will be available to begin analyses by the end of February. To achieve correct variance estimates given these weights and the complex multistage sampling design, the software package SUDAAN has been obtained. The SAS-callable SUDAAN was developed at RTI for the specific purpose of analyzing data from complex surveys and permits statistical analyses of weighted data in a reliable and consistent fashion. Data analysis and hypothesis testing will proceed in two steps: (1) description of the study cohorts and examination of univariate distributions for scale development, and (2) bivariate and multivariate analysis of the interrelationships between major variables. At the univariate level, frequency distributions will be obtained for each study variable, and data will be scrutinized for out-of-range values. Continuous variables will be examined to check assumptions of normality, and appropriate transformations will be made as required. Scatter plots and residuals will be examined to determine distribution shapes and identify outliers at the bivariate level. Decisions
regarding the management of outliers will be made on an individual case-by-case basis. Questionnaire, physical measurement, and telephone interview files will be linked by SSN. These files also will be linked to resident career history and hospitalization records to provide data validation analyses for selected medical history parameters. Preliminary analyses of the data will include the calculation of lifetime and point prevalence rates of medical conditions adjusted for sex, race, and paygrade. Descriptive analyses will include comparisons of the remaining 14 classes of variables by sex, race, and paygrade and assessing significant differences between subgroups using t-tests, analysis of variance (ANOVA) and chi-square tests where appropriate.

The general statistical analysis of the study will proceed in two phases. Phase 1 will analyze each of the 6 categories of health variables across population subgroups. The 6 categories of health variables are measured by standardized instruments relating to current and past medical conditions, health behaviors, mental health status, environmental exposures, health care utilization, and reproduction history. The subgroups will be constructed according to the strata used to formulate the sample. First, differences among female groups will be examined. Comparisons will be made across race (white vs. nonwhite), military status (enlisted lower paygrade vs. enlisted higher paygrade vs. officer), and geographical location (CONUS vs. OCONUS vs. Float). Comparisons also will be made across various combinations of the subgroups and will be done separately for Navy and Marine Corps personnel. The female population then will be compared to the male population for each of the subgroups. The female military population will also be compared to the civilian female population on several health aspects. This will be accomplished using civilian population survey data obtained from the NCHS data tapes. Two types of statistical tests will be utilized to analyze the subgroups. For all prevalence rates and categorical data, a chi-square analysis will be conducted, and for all interval level data, a t-test or ANOVA will be conducted where appropriate.

Phase 2 will study the relationship of various health variables across the 6 categories. These multivariate studies will examine the interrelationships in and among the population subgroups. This will determine the extent to which the relationship is being determined by one particular subgroup and the degree that the relationship generalizes to the military population as a whole. Logistic regression analyses, when the dependent variable is a bivariate variable, or multiple linear regression analyses, when the dependent variable is an interval level variable, will be conducted on these data.

SPECIFIC STATISTICAL ANALYSES

The statistical package that will be utilized to analyze the data was solely determined by the sampling plan used to conduct the survey. The sampling strategy was conducted as a two-stage probability sample, with installations selected at the first stage and personnel assigned to selected installations chosen at the second stage. This created a sampled population with assigned sampling weights given to each subject. SUDAAN is a statistical package that can take into account both these sampling weights and the nonresponse rates for each strata to obtain proper variance estimates for the various tests of hypothesis that will be conducted. Since SUDAAN
interfaces with the SAS statistical package, SAS will be utilized as a front end to read in the data and call SUDAAN to carry out the analysis.

In all tests of hypotheses, an alpha level of 0.05 will be used to determine significance. Since multiple comparisons will be conducted between the subgroups, the alpha level will be augmented with a Bonferroni procedure. The sample size was chosen to detect a difference of 10% in subgroup rates. The power to detect this difference is at a level of 90% except for some comparisons involving Marine Corp females, where the power drops to 80%. The assumptions for each of the statistical analyses will be also tested to assure the validity of the test.

The specific statistical analyses will be organized around health status and health care issues. One of the most prominent features of this survey is the ability to examine the military preparedness of active-duty women. Military preparedness in this context refers to the health status of the individual and her ability to perform in a wartime situation. The analyses will look at present disease states, past disease states, short-term illness, current and past pregnancy, exposure to environmental hazards, mental states, and exposure to death/accidents/combat. It also will be an important task of the analyses to determine any relationships among these variables. Of particular importance are the hypothesized associations between environmental exposure and current health condition, the correlation of age and pregnancy rate, the association between sociodemographic characteristics and pregnancy rates, the relationship between family planning usage and birth control on pregnancy rates, the effect of casualty events on psychological functioning, and the relationship of psychologic functioning to current health condition. These relationships will help determine the current and future readiness of women in the military and will point to the most effective interventions to maximize military readiness.

The second most prominent feature of the survey is the ability to determine health care usage, effectiveness of prevention programs, and, since Congress has ordered the DoD to reduce its health care costs, the particular interventions that may minimize unnecessary health care utilization. For example, relationships between mental stability, self-esteem, quality of life, current perceived health conditions, stress, and physical/sexual/emotional abuse on health care utilization will be assessed. The effect of family planning and birth control on pregnancy rates, and the relationship between environmental exposure and pregnancy complication (e.g., low birthweight, preterm births) will be analyzed. The correlation between age and number of children with family planning counseling and birth control will be determined. Body fat distribution and weight standard status will be examined relative to their effects on health behaviors, mental and physical health problems, and health-care utilization. Additional analyses will determine the effect of lifestyle choices (e.g., amount of cigarette smoking and alcohol drinking) on physiological conditions, health care utilization, and prevention program utilization. Knowledge of the availability of health promotion programs also will be examined. Since it is imperative to contain health care costs, further analyses will identify the primary medical conditions the military health care system is facing, the geographical location of the conditions, the demographic makeup of the personnel with the conditions, the utilization of present prevention programs, and additional prevention program needs (e.g., reduction of environmental
exposure, increased mental health counseling). Other health care issues of more specialized interest that will be examined include the number and health status of single mothers in the military, and an evaluation of the health belief model as it relates to military and civilian health-care utilization, including the availability of and satisfaction with OB/GYN support. Technical briefings and reports on these areas will be prepared and disseminated as analyses are completed. In general, descriptive, analytical, and methodological reports will be published. To expedite publication of more detailed analyses, special tabulations and analyses will be furnished on request to various individuals and groups both inside and outside the military.

REFERENCES


2. Flynn, FY93 Naval Medical Research and Development Center guidance.


and Criminal Justice (4), 155-163.


LIST OF NHRC STAFF AND CONTRACT PERSONNEL RECEIVING PAY FROM CONTRACT SUPPORT*

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Laurel Lockwood Hourani, Ph.D., M.P.H., Principal Investigator  50%
Linda Trent, M.A., Associate Investigator  10%
Suzanne Hurtado, M.P.H., Associate Investigator  5%
Sue Hilton, M.A., Data Manager  25%

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Lynn Powers, Ph.D., Telephone Interviewer Team Leader  20%
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* 3 Parttime Military Personnel, 1 Military Liaison Officer, 2 Team Members received travel and overhead from study funds but not pay

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APA MEETING ABSTRACT

Title: The Mental Health Status of Women in the Navy and Marine Corps: Preliminary Findings from the 1995 Perceptions of Wellness and Readiness Assessment (POWR '95)

Presenter: Laurel L. Hourani, Ph.D., M.P.H., Naval Health Research Center, San Diego, CA 92186, (619)553-8460

The Department of the Navy lacks baseline epidemiologic and health services data to adequately assess the mental health status of women in the United States Navy and Marine Corps. As women in the military move into potentially stressful non-traditional occupations previously held by men only and as a higher proportion of women comprise the operational force and are exposed to combat-supportive positions, essential baseline information is required to monitor the effect of these changes on women's health and to appropriately anticipate and plan for their health care needs. Patterned after the large national health surveys, the 1995 Perceptions of Wellness and Readiness Assessment (POWR '95) was designed to provide baseline health and risk factor information to estimate the prevalence of a wide range of physical and mental health conditions and to make relevant comparisons both within military subpopulations and between military and civilian populations. As part of POWR '95, a population-based 2-stage cluster sample of over 24,000 active-duty Navy and Marine Corps women and men were screened for above-normal levels of psychosocial distress and depressive symptomatology using standard cutpoints on the CES-D and Hopkins-21. All participants with above-normal psychosocial distress and a 10% matched sample of participants scoring within the normal range and providing a telephone number are asked to participate in a clinically-based structured telephone interview. The computerized telephone version of the Quick DIS-III-R is administered by trained interviewers to make all DSM-III-R diagnoses of somatization, depressive, anxiety, eating, alcohol abuse and antisocial personality disorders. Preliminary analyses of the data include lifetime and 1-year prevalence rates of mental disorders adjusted for sex, race and paygrade. An evaluation of the screening measures as predictors of caseness is also presented.
TECHNICAL ADVISORY GROUP MEETING ABSTRACT

TITLE: The Health Status of Women in the Military: The 1995 Perceptions of Wellness and Readiness Assessment (POWR '95)

PRESENTER: Laurel Hourani, Ph.D., Naval Health Research Center, P.O. Box 85122, San Diego, CA 92186-5122 (619)553-8460

The Department of the Navy lacks baseline epidemiologic and health services data to adequately assess the health status of women in the United States Navy and Marine Corps. This baseline data is needed at present to appropriately anticipate and plan for health care needs as the role of women in the military changes over the next five years. POWR '95 was designed to provide baseline health and risk factor information to estimate the prevalence of a wide range of health conditions and to make relevant comparisons both within military subpopulations and between military and civilian populations. The study approach includes the administration of an extensive self-report health questionnaire to a population-based sample of active-duty Navy and Marine Corps women and a comparison sample of active duty and Marine Corps men. Clinically-based structured telephone interviews and cardiovascular (blood pressure, heart rate) and physical measurements (height, weight, body circumferences, skinfold thickness) are also administered to a subsample of the surveyed population. In order to produce rates comparable with national and other military data, the survey instruments are based on standardized measures used in previous national and military health surveys. The data from this study will be used to evaluate a variety of women's health and physical parameters of importance to the Navy and Marine Corps including the identification of women's health problems, risk factors and health care needs and practices in the following general issue areas: reproductive, medical/nutritional, psychosocial, lifestyle, occupational/environmental, and health services. It will also be used to identify appropriate populations for subsequent studies, experiments and interventions needed to address specific health issues regarding women's health in the military and their operational readiness. The information provided by this survey will be particularly timely as the next five years will see the demographic character of the military change as a higher proportion of women comprise the operational force and Navy and Marine Corps women expand into positions previously held by men only. This study will provide the essential baseline information required to monitor the effect of these changes on women's health and health care needs.
The majority of active duty women are at the peak of their reproductive years and reproductive issues are becoming of greater importance to military leaders as the percentage of women increases in the military. In addition to a lack of baseline data regarding pregnancy rates, timing, motivation, access to health care, and outcome, other occupational (chemical, radiological and biologic) exposures associated with their new duties are of concern. It has been suggested that a number of reproductive health hazards such as electromagnetic radiation, lead exposure, heavy lifting, and organic solvents are found at both ship and shore commands. This paper presents information on reproductive history, existing gynecological and obstetrical (OB/GYN) conditions, and occupational exposures from the 1995 Perceptions of Wellness and Readiness Assessment, a comprehensive population-based self-report survey of 25,000 active-duty Navy and Marine Corps personnel worldwide. In addition, perceptions, attitudes, and health care use patterns regarding existing utilization of OB/GYN facilities and services are presented.
3. SAMPLING DESIGN

RTI has developed sampling designs for the DoD Worldwide Surveys that have consistently satisfied the DoD's analytic and budgetary requirements. These designs have been based on rigorous statistical precepts and include such features as use of optimal sample allocations to meet precision requirements. We will draw upon our experience with the DoD Worldwide Surveys in designing the sample for the 1995 Survey on Health Status of Women in the Navy and Marine Corps. In this section, we describe how we propose to adapt these proven sampling strategies for use in the 1995 Survey on Health Status of Women in the Navy and Marine Corps.

3.1 OVERVIEW OF THE SAMPLING DESIGN

The sample design for the 1995 Survey on Health Status of Women in the Navy and Marine Corps will be based on a two-stage probability sample, with installations selected at the first stage and personnel assigned to selected installations chosen at the second stage. This approach allows us to restrict the sample to a predetermined number of installations while preserving the inferential capability of the sample. In addition, we will use stratification to further control the sample distribution with respect to organizational and demographic characteristics. This is the same type of design that RTI has used for the 1982, 1985, 1988, and 1992 DoD Worldwide Surveys and is currently using for the 1995 DoD Survey of Health Related Behaviors Among Military Personnel. The first-stage sampling frame for the Navy and Marine Corps for the 1995 DoD survey will be used as the basis for the first-stage frame for the 1995 Survey on Health Status of Women in the Navy and Marine Corps.

As in the current 1995 DoD survey, we will also control the geographic distribution of the sample by stratifying by the following cost strata: Continental U.S. (CONUS), outside of the Continental U.S. (OCONUS), and Naval afloat units in CONUS.¹ We have included Naval afloat units as a separate cost stratum because they require more preparation and coordination during field data collection than do shore-based units. We believe that the number of cost strata will maintain the global coverage of the sample. We present details of our sample allocation strategy for these strata in Section 3.3.4.

¹In previous surveys, we used ZIP codes to identify the location of afloat units. Although this method was relatively successful for ZIPs that identified a single large ship, it was problematic for some ZIPs that identified several smaller ships that often were geographically dispersed. We are hoping to avoid this problem in the 1995 survey by using geolocation codes (geocodes) instead of ZIP codes to identify the location of afloat units. (See Section 3.3.1 for details.)
3. SAMPLING DESIGN

We recommend that the total sample size for the survey consist of approximately 18,500 Navy and Marine Corps personnel selected from approximately 45 geographic locations worldwide, and we have based our cost estimates on these figures. This sample size is based on precision requirements and targeted sample sizes suggested by NHRC (approximately 10% of the women in each Service and an equal number of men), and response and eligibility rates obtained in the 1992 Worldwide Survey of Substance Abuse and Health Behaviors Among Military Personnel.

We assume that the eligible population of survey participants will be the same as in the Worldwide Surveys, namely all active-duty military personnel except recruits, cadets, persons absent without official leave (AWOL), and persons who had a permanent change of station (PCS) at the time of data collection. Our sampling design is well-suited to this population. In particular, the nonresponse follow-up provides a cost-effective means of evaluating the potentially biasing effects of personnel who are unavailable for the Phase 1 group-administered sessions.

As was also the case in the Worldwide Surveys, we propose that all nonrespondents who are eligible for the survey also be eligible for the nonresponse follow-up. In the 1992 survey, 61% of the eligible nonrespondents had this status mostly because of routine temporary duty assignments (TDY) or leave. If such nonrespondents were to be considered "excused" from data collection because of TDY or leave, and we are unable to include them in our estimates, our results could be noticeably biased. In addition, ignoring "excused" nonrespondents could have a differential effect on Service-level estimates because the availability of Navy and Marine Corps personnel has been consistently lower than for the other Services. We present details of our proposed nonresponse follow-up activities in Section 3.3.3.

In Section 3.4, we present our sample weighting and nonresponse compensation procedures. We suggest using weighting class adjustments and poststratification to adjust for the effects of nonresponse.

3.2 DESIGN OBJECTIVES

The specified precision requirements for the 1995 Survey on Health Status of Women in the Navy and Marine Corps are:

(a) A prevalence statistic of 10% should have a relative standard error (RSE) less than 30%; and

(b) Differences of at least 10% in health or nutrition statistics between any two subdomains should be detected with a type I error of no more than 0.05 and a type II error of no more than 0.10.

Domains of interest for the study are those defined by

(a) Service (Navy, Marine Corps);
(b) gender (Male, Female);
3. SAMPLING DESIGN

(c) race (White, Other); and
(d) paygrade (E1-E6, E7-E9, Officer).

Further, the targeted responding eligible sample sizes for the study were specified by NHRC as approximately 800 Marine Corps women, 800 Marine Corps men, 5,000 Navy women, and 5,000 Navy men. These numbers of women are slightly more than 10% of the numbers of women in each of the Services.

To satisfy precision requirement (a), we developed equations to describe the variable survey costs and sampling variances given the salient features of the design. These features, collectively termed "design effects," included estimates of the intracluster correlation among individuals in the same first-stage unit, the first- and second-stage stratum sizes, and the nonresponse subsampling fraction. We obtained estimates of the data collection costs from previous surveys with similar designs, and we obtained the minimum cost allocations by solving the equations simultaneously (subject to the precision constraints).

The effective sample size needed to satisfy precision constraint (a) is 100 persons per domain. The effective sample size is the actual sample size divided by the design effect, where the design effect is the ratio of the variance under the sample design divided by the variance under a simple random sample design.

We obtained allocations for a variety of domains and domain-level relative standard errors (RSEs) to obtain a sample allocation that satisfied both the approximate targeted sample size as well as the precision constraint that RSEs be less than 30%. In Table 3.1, we present the domains and the targeted RSEs we considered in designing the survey. The prevalence for each of the domains was assumed to be 10%. We considered domains defined by first-, second-, and third-order interactions of Service, gender, paygrade, and race. We tried to target RSEs that were less than 30%. Domains defined by the full cross of the factors were not considered in the design because they would have required a very large sample size. Navy and Marine Corps women of the "other race" in the E7-E9 and Officer paygrades are very rare groups, and setting precision constraints for this domain made for an unacceptably large sample size. However, the resulting sample sizes should result in acceptable levels of precision for making estimates for most of the domains defined by the cross of gender, paygrade, and race. The resulting sample sizes are actually large enough for some of the domains that estimates will be more precise (i.e., have smaller RSEs) than indicated in Table 3.1. Details of the sample allocation are presented in Section 3.3.4.

The sample sizes per subgroup needed to satisfy precision constraint (b) are determined by the sizes of the two proportions being compared. With $p_1=0.15$ and $p_2=0.05$, an effective sample size of 183 per subgroup is needed; with $p_1=0.20$ and $p_2=0.10$, an effective sample size of 263 per subgroup is needed; and with $p_1=0.30$ and $p_2=0.20$, an effective sample size of 390 per subgroup is needed. In the sample sizes for our sample allocation, differences of 0.10 can be detected between most of the subgroups defined in Table 3.2 with at least 90% power for proportions in the 0.05 to 0.10 range.
3. SAMPLING DESIGN

Table 3.1 Domains and Relative Standard Errors Used as the Basis for the Sampling Design

<table>
<thead>
<tr>
<th>Reporting Domain</th>
<th>Number of Domains</th>
<th>Targeted Relative Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navy and Marine Corps, total</td>
<td>1</td>
<td>10%</td>
</tr>
<tr>
<td>Navy</td>
<td>1</td>
<td>8%</td>
</tr>
<tr>
<td>Marine Corps</td>
<td>1</td>
<td>10%</td>
</tr>
<tr>
<td>Gender (Male, Female)</td>
<td>2</td>
<td>15%</td>
</tr>
<tr>
<td>Paygrade (E1-E6, E7-E9, Officer)</td>
<td>3</td>
<td>10%</td>
</tr>
<tr>
<td>Race (White, Other)</td>
<td>2</td>
<td>25%</td>
</tr>
<tr>
<td>Navy: Gender</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td>Marine Corps: Gender</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>Navy: Paygrade</td>
<td>3</td>
<td>10%</td>
</tr>
<tr>
<td>Marine Corps: Paygrade</td>
<td>3</td>
<td>20%</td>
</tr>
<tr>
<td>Navy: Race</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>Marine Corps: Race</td>
<td>2</td>
<td>20%</td>
</tr>
<tr>
<td>Navy: Gender by Paygrade</td>
<td>6</td>
<td>20%</td>
</tr>
<tr>
<td>Marine Corps, Male: Paygrade</td>
<td>3</td>
<td>20%</td>
</tr>
<tr>
<td>Marine Corps, Female: Paygrade</td>
<td>3</td>
<td>30%</td>
</tr>
<tr>
<td>Navy: Gender by Race</td>
<td>4</td>
<td>10%</td>
</tr>
<tr>
<td>Marine Corps: Gender by Race</td>
<td>4</td>
<td>25%</td>
</tr>
<tr>
<td>Navy: Paygrade by Race</td>
<td>6</td>
<td>20%</td>
</tr>
<tr>
<td>Marine Corps, Paygrade by Race</td>
<td>6</td>
<td>28%</td>
</tr>
</tbody>
</table>

Exceptions include some of the comparisons involving Marine Corps females, where the power is generally at least 80%. Table 3.2 gives the expected power for detecting differences of 10% between some example domains under our proposed design.

3.3 PROPOSED DESIGN

The sampling frame will be constructed in two stages. The first-stage frame will be comprised of sampling units that are geographically proximal organizational units defined within each Service; the second-stage frame will be comprised of eligible active-duty military personnel attached to selected first-stage sampling units (FSUs).

3.3.1 First-Stage Sampling Frame Construction and Stratification

We will construct FSUs to be of a minimum size determined by the rates at which 1992 Worldwide Survey sample persons were available for group session questionnaire administrations. To ensure that the group-administered questionnaire is administered in a cost-effective fashion, we will require each FSU to contain at least one organizational unit with 300 available persons.
As the basis for the first-stage frame, we will use the first-stage frame that has already been constructed for the Navy and Marine Corps for the 1995 DoD Survey of Health Behaviors Among Military Personnel. The frame for that study was constructed from data from the September 1994 Active Duty Military Personnel File maintained by the Defense Manpower Data Center (DMDC). The file used to construct the first-stage frame consists of a record for each distinct value of the ZIP/FPO code and unit identification code (UIC). Each record contains the unit’s branch of Service, major command, duty location, and number of personnel in each paygrade. Our experience with the use of the DMDC personnel file as a first-stage sampling frame for the 1988 and 1992 surveys generally has been positive. The file offers the distinct advantages of a single data source (avoiding many Service-specific idiosyncrasies) and the use of ZIP codes and Army post office/fleet post office (APO/FPO) numbers for geographic detail. Perhaps its only drawback is the necessity of using ZIP/FPO numbers to identify and locate afloat units. Although this method was relatively successful for ZIP/FPOs that identified a single large ship, it was problematic for ZIP/FPOs that identified several smaller ships, which often were geographically dispersed. The selection of these multiship FSUs required an inordinate amount of coordination and preparation for the Navy HLOs and MLOs and for the RTI data collection team.

To avoid this problem for the 1995 DOD survey currently being conducted, we used Navy geocodes to identify the home ports of all afloat units. The use of geocodes enabled us to form clusters of afloat units with the same or geographically proximal home ports.

### Table 3.2 Power for Detecting Differences of 0.10 for Some Example Domains and Proportions (Level of Significance=0.05)

<table>
<thead>
<tr>
<th>Domains</th>
<th>p1=0.30, p2=0.20</th>
<th>p1=0.15, p2=0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navy vs. Marine Corps</td>
<td>0.98</td>
<td>0.99</td>
</tr>
<tr>
<td>Navy Females vs. Marine Corps Females</td>
<td>0.98</td>
<td>0.99</td>
</tr>
<tr>
<td>Marine E1-E6 Females vs. Marine Officer Females</td>
<td>0.50</td>
<td>0.80</td>
</tr>
<tr>
<td>Navy E1-E6 Females vs. Navy Officer Females</td>
<td>0.90</td>
<td>0.99</td>
</tr>
<tr>
<td>Navy E1-E6 Females vs. Marine E1-E6 Females</td>
<td>0.80</td>
<td>0.96</td>
</tr>
<tr>
<td>Marine White Females vs. Marine Black Females</td>
<td>0.50</td>
<td>0.82</td>
</tr>
<tr>
<td>Marine E1-E6 Females vs. Marine E1-E6 Males</td>
<td>0.70</td>
<td>0.95</td>
</tr>
<tr>
<td>Navy E1-E6 Females vs. Navy E1-E6 Males</td>
<td>0.90</td>
<td>0.99</td>
</tr>
</tbody>
</table>
3. SAMPLING DESIGN

For the current survey, NHRC will supply us with a file using the most current personnel data they are able to obtain, containing the counts of personnel in each gender-race-paygrade group for each ZIP/FPO code/UIC combination. The counts should contain no recruits and should be based on persons with at least one year of active duty. We will match this file to the Navy and Marine Corps first-stage frame used for the 1995 DoD Survey by ZIP/FPO code in order to update the frame for use by the current study. The frame will then be stratified geographically by CONUS/OCONUS and by an afloat status indicator for Navy units in CONUS. Table 3.3 presents the number of first-stage units and the number of personnel on the frame used for the 1995 Survey for the Navy and Marine Corps.

Table 3.3 1995 DoD Survey First-Stage Stratum and Population Sizes

<table>
<thead>
<tr>
<th>First-Stage Stratum</th>
<th>1995 First-Stage Units</th>
<th>Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cost Region</td>
<td>Service</td>
</tr>
<tr>
<td></td>
<td>CONUS</td>
<td>Navy, Afloat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Navy, Ashore</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marine Corps</td>
</tr>
<tr>
<td></td>
<td>OCONUS</td>
<td>Navy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marine Corps</td>
</tr>
</tbody>
</table>

*Active-duty personnel with 12 or more months of service as shown by DMDC personnel data, September 1994.

3.3.2 Second-Stage Sampling Frame Construction and Stratification

Second-stage sampling units (SSUs) are, ideally, the individual active-duty personnel within each of the first-stage units. At the time the sample is selected, we will know the numbers of individuals in each of the paygrade groups by gender by race in each of the FSUs. Each name can be uniquely associated with a line on the roster (the order used to list the names is of no consequence). Then an equal probability, without replacement sample of individuals, can be selected by choosing either names or alternatively lines on the roster.

By defining SSUs to be lines on the roster, we provide a mechanism to fully account for any personnel changes taking place between the times of sample selection and data collection at a sample FSU. At the time the sample is selected, we will number positions on a conceptual roster and select a random sample of line numbers. During
data collection, we will identify the individuals named on the sample line numbers as applied to the actual roster. If a decrease in the personnel complement has occurred since the sample was selected, some of the sample line numbers may be empty. An increase in personnel is accommodated by considering the roster to be circular, thereby allowing more than one individual to correspond to the same sample line number. We used these procedures successfully in the 1982, 1985, 1988, and 1992 surveys, clearly demonstrating their operational practicality.

We will stratify the second-stage frame by paygrade group (E1-E6, E7-E9, Officer), gender (male, female), and race (white, other). The second-stage stratification is needed to control the distribution of the sample by paygrade, gender, and race to meet the precision requirements specified in Table 3.1.

### 3.3.3 Nonresponse Follow-Up

Missing data biases can compromise the validity of inferences drawn from sample data. Nonresponse occurs whenever the information needed to compute an estimate is not obtained for a unit of observation that has been selected into the sample. Conversely, the response rate is defined as the proportion of sample individuals supplying the information needed to compute the parameter estimate. Note that, by definition, individuals for whom eligibility status is not determined are nonrespondents. Other sample performance rates that have operational significance can be cited for most surveys. Bray et al. (1992, p. 2-7, Table 2.1) defined several operationally important performance rates and provided the values experienced in the 1992 survey.

Using the above definition of the response rate, the nonresponse bias associated with \( P \), the parameter, for a reporting domain, \( d \), is the quantity,

\[
P(d) = \left[ 1 - \frac{N_r}{N} \right] [P(d)_R - P(d)_N],
\]

where

- \( \frac{N_r}{N} = \) response rate,
- \( P(d)_R = \) value of the proportion in the population of respondents (i.e., as though a census of active-duty personnel were undertaken), and
- \( P(d)_N = \) value of the proportion in the nonresponding population.

Equation (3-1) clearly demonstrates that the magnitude of the bias depends on both the response rate and the differences between the responding and nonresponding populations.

For the 1992 Worldwide Survey, we conducted the Phase 2 data collection with a mailing of the questionnaire to all eligible nonrespondents of the Phase 1 data collection (i.e., the group sessions). The objective of the nonresponse follow-up (i.e., the Phase 2 data collection) is to provide estimates of the parameter, \( P(d)_N \), such that the biases can be removed from the estimates, \( \hat{P}(d) \). This strategy provides individuals who are either
3. SAMPLING DESIGN

ageographically isolated or temporarily away from their duty station with an opportunity to participate in the survey.

3.3.4 Sample Size and Allocation

A variety of population parameters are to be estimated from this study, and a variety of uses to be made from the data. Our sample design is designed to estimate the population prevalences of 0.10 for domains given in Table 3.1 with RSEs less than or equal to those indicated.

The relative sizes of the domains of interest implied in Table 3.2 are defined by the following quantities:

\[
P(y,d) = \frac{\sum_{g=1}^{N} \delta(g)_y \delta(g)_d}{\sum_{g=1}^{N} \delta(g)_d},
\]

where

\[g = 1, 2, ..., N,\] denotes individuals in the population, and

\[\delta(g)_y = 1,\] if the g-th individual belongs to the y-th response variable category,

\[= 0,\] otherwise,

\[\delta(g)_d = 1,\] if the g-th individual belongs to the d-th reporting domain,

\[= 0,\] otherwise.

Let a single subscript denote the combination of a response variable category with a reporting domain. In what follows, the subscript \(d\) \(1, 2, ..., 56\), is used to denote the domains in the order listed in Table 3.2, and the parameters used as the basis for the sampling design are denoted by the binomial proportions, \(P(d)\). Our proposed design is such that

\[
\frac{\sqrt{\text{Var}[\hat{P}(d)]}}{0.10} \leq \text{RSE}^*[\hat{P}(d)],
\]

where \(\text{Var}[\hat{P}(d)]\) is the sampling variance of the estimate \(\hat{P}(d)\) to be obtained from the survey, and \(\text{RSE}^*[\hat{P}(d)]\) is the design specification variance from Table 3.2.

The allocation problem can be stated in terms of determining the
3. SAMPLING DESIGN

- number of SSUs to be selected per FSU,
- number of FSUs to be selected,
- allocation of each to the first- and second-stage design strata, such that,
- precision requirements set for the survey are met,
- for the least cost.

Equations are developed that describe the variable survey cost and sampling variances in terms of the various features of the design, the first- and second-stage sample sizes, and the nonresponse follow-up. Then the minimum cost allocations are obtained by solving the equations simultaneously subject to the precision constraints.

The preliminary proposed allocation solutions obtained are presented in Tables 3.4 and 3.5. A first-stage sample of 45 units is proposed, allocated to the Services within geographic cost strata. A total sample size of 18,500 personnel is suggested to yield an expected 12,000 respondents (based on eligibility and response rates obtained in the 1992 Worldwide Survey). The number of sample individuals per FSU is 411. Paygrade groups are disproportionately sampled; officer grades are generally oversampled relative to the enlisted grades. Females are also oversampled. The solutions obtained following the procedures described in this section are real numbers. Because decimal fractions of sampling units cannot be selected, the solutions in Tables 3.4 and 3.5 have been rounded to whole numbers.

Upon receipt of the current personnel information from NHRC, we will recalculate the allocations in Tables 3.4 and 3.5. Any sizable shifts in personnel deployment will be reflected in the sample allocation actually used. Some modification of the allocation may also be required by NHRC. However, the total number of sample FSUs and sample persons cannot be increased because of cost implications.

Table 3.4 Proposed First-Stage Sample Size

<table>
<thead>
<tr>
<th>First-Stage Strata</th>
<th>Sampled First-Stage Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONUS</td>
<td></td>
</tr>
<tr>
<td>Navy Ashore</td>
<td>18</td>
</tr>
<tr>
<td>Navy Afloat</td>
<td>6</td>
</tr>
<tr>
<td>Marine Corps</td>
<td>14</td>
</tr>
<tr>
<td>OCONUS</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>3</td>
</tr>
<tr>
<td>Marine Corps</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
</tr>
</tbody>
</table>
3. SAMPLING DESIGN

Table 3.5 Expected Respondent Sample Size, by Service, Gender, Paygrade, and Race

<table>
<thead>
<tr>
<th>Paygrade/Gender</th>
<th>Service and Gender</th>
<th>Navy, Male</th>
<th>Navy, Female</th>
<th>Marine Corps, Male</th>
<th>Marine Corps, Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paygrade, Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E1 - E6</td>
<td>White</td>
<td>2,015</td>
<td>1,945</td>
<td>150</td>
<td>195</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>945</td>
<td>1,330</td>
<td>165</td>
<td>155</td>
</tr>
<tr>
<td>E7-E9</td>
<td>White</td>
<td>745</td>
<td>260</td>
<td>135</td>
<td>185</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>255</td>
<td>70</td>
<td>130</td>
<td>135</td>
</tr>
<tr>
<td>Officer</td>
<td>White</td>
<td>815</td>
<td>1,170</td>
<td>185</td>
<td>170</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>225</td>
<td>225</td>
<td>135</td>
<td>135</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>5,000</td>
<td>5,000</td>
<td>900</td>
<td>900</td>
</tr>
</tbody>
</table>

3.4 RANDOMIZATION PROCEDURE

Using the allocation developed in Section 3.3.4, we will select FSUs with probability proportional to size. For this purpose, we will compute composite size measures for the set of FSUs in a given first-stage stratum such that, by selecting an equal-sized second-stage sample from each FSU, the differential sampling rates applied to the gender-paygrade groups are (on the average) obtained.

Because FSU vary considerably with respect to numbers of personnel, we will select the first-stage sample with minimum replacement:

$$\pi(a,i) = n_1(a) \frac{S(a,i)}{S(a)}$$

where the expected frequency with which an FSU of composite size, S(a,i), is to appear in samples of n_1(a) units selected from the a-th stratum. The denominator quantity in the above equation is the stratum-level sum of the composite size measures, S(a,i). The minimum replacement procedure is equivalent to without-replacement selection if none of the \(\pi(a,i)\) values exceeds unity. Otherwise, the procedure achieves the expected frequencies over repeated samples and, at any specific drawing of the sample, comes within one selection of the units' expected allocation. This minimum replacement method is superior to alternative with- or without-replacement schemes in that it controls the number of selections assigned to a sampling unit so that the actual allocation and the proportional-to-size allocation differ by less than one.
We will control the distribution of sample FSUs across major commands by using a sequential selection algorithm from a controlled ordering of the sampling frame. The selection procedure will be applied within each stratum and will begin by picking an FSU at random with probability \( \pi(a,i) \). Given the random starting point, selections will proceed sequentially in a circular fashion through the frame until the starting point is again reached. This sequential selection from a controlled circular ordering has the effect of implicit stratification in the same way that a systematic selection imposes stratification on an ordered list. The random starting point for the sequential selection gives the procedure the added feature that every pair of FSUs on the frame has a chance of appearing together in the sample.

Sequential selection from an ordered frame will allow us to control the distribution of sample members by major command. To implement this procedure, we have assigned FSUs to a major command on the basis of the organizational unit's affiliation. FSUs that contain units from multiple major commands have been assigned to the major command that accounts for the most personnel.

At the second stage, we will select sample individuals with equal probability and without replacement from among the total personnel in the gender-paygrade group at the time of data collection. Sample persons not attending the group administrations will be candidates for the nonresponse follow-up. The proposed randomization procedure will produce a self-weighting sample of individuals within paygrade/gender/race groups and first-stage strata. We present details of the calculation of sampling weights in the next section.

### 3.5 SAMPLE WEIGHTING AND NONRESPONSE COMPENSATION PROCEDURES

Sampling weights enable unbiased estimation of population parameters by scaling the disproportionalities between a sample and the population from which it was drawn. As such, they may be viewed as inflation factors to account for the number of members in a survey population that a given sample member represents. Sampling weights are assigned to each sample member and consist of two components: an initial sampling weight and a factor to adjust for nonresponse. The initial sampling weight is simply the inverse of a sample member's selection probability and reflects the different selection rates that were used to select the sample. The adjustment factor is applied to the initial sampling weight to compensate for the potential biasing effects of systematic nonsampling errors caused by differential nonresponse.

Most adjustments for survey nonresponse are made by adjusting the sampling weights of respondents in a way that compensates for the nonrespondents. For the 1995 Survey on Health Status of Women in the Navy and Marine Corps, we plan to use weighting class adjustments for this purpose. Similar to what we did in previous Worldwide Surveys for the DoD, we will assign sample members in the same FSU and paygrade/gender/race group to the same weighting class.
3. SAMPLING DESIGN

Weighting class adjustments are based on the assumption that sample members can be partitioned into cells, or weighting classes, within which the responses of nonrespondents, had they been obtained, would be similar to those of respondents. Within each weighting class, the inverse of the weighted response rate is applied to the sampling weights of respondents so that the adjusted weights summed over respondents reproduce the unadjusted weight sums over respondents and nonrespondents.

If the nonrespondents and respondents in the same weighting class in fact have the same average value of a given observation variable, the adjustment procedure will provide unbiased parameter estimates. In this case, the corresponding standard errors estimate the uncertainty associated with the parameter estimates. However, if nonrespondents and respondents in the same weighting class behave differently, then biases of unknown magnitude and sign introduce additional uncertainty that is not included in the standard errors. This additional uncertainty is attributable to nonresponse bias.

If NHRC is able to supply us with up-to-date counts of personnel by paygrade, gender, race, and Service, we will additionally poststratify the weights so that they sum to those totals.
1995 POWR Assessment: Perceptions of Wellness and Readiness

DEPARTMENT OF THE NAVY
NAVAL HEALTH RESEARCH CENTER
SAN DIEGO, CA
PRIVACY ACT STATEMENT

1. Authority. 5 USC 301, 10 USC 1071. OPNAV 6000-15a-c, 11/30/95. 2. Purpose. Medical research information will be collected to enhance basic medical knowledge concerning medical care and health promotion. 3. Routine use. Medical research information will be used in statistical analyses by the Department of the Navy, Defense, and other U.S. Government agencies, provided this is compatible with the purpose for which information was collected. Use of the information may be granted to non-Government agencies by the Chief, Bureau of Medicine and Surgery, in accordance with the provisions of the Freedom of Information Act. 4. Voluntary disclosure. I understand that all information derived from the study will be retained at the Naval Health Research Center, San Diego, and that my anonymity will be maintained. I voluntarily agree to its disclosure to agencies or individuals identified in the preceding section, and I have been informed that failure to agree to such disclosure may negate the purposes of the study. I understand that my provision of information is voluntary, and that I am free to discontinue filling out the questionnaire and withdraw from the study at any time without prejudice or loss of medical treatment or privileges to which I would otherwise be entitled.
WHY ME?
You have been selected at random to be a part of the group of people who represent all active duty Navy and Marine Corps personnel. Enough people were selected to participate in this survey so that valid conclusions can be made about the health status of military personnel and the appropriateness of military health services.

WHY SHOULD I BOTHER? DO SURVEYS CHANGE ANYTHING?
In general, statistics from surveys provide valuable information to policymakers and planners about your health and health care services. Survey data help to identify parts of our health care system that work well and the parts that need to be improved. Changes to the system may take time, but filling out this survey will help ensure that we make changes as quickly as possible. Your response counts!

WILL MY SURVEY RESULTS BE KEPT PRIVATE?
Yes. Under no circumstances will any information about individuals be released to anyone. Any identifiable information will be used only by persons engaged in, and for the purposes of, the survey. A number will be given to each questionnaire and only that number will be used in analyses. Moreover, the results will be derived from pooled data and no individual's responses will be identifiable.

AREN'T SOME OF THE QUESTIONS VERY PERSONAL?
Yes. Although people will have different views on what is or is not personal, most people will consider at least some of the questions to be very personal. We are asking questions to evaluate the health of military members and the health care they receive. Good estimates can be made only if most people answer all the questions in the survey. However, you can choose not to answer particular items.

MARKING INSTRUCTIONS

- USE A NO. 2 PENCIL.
- MAKE HEAVY MARKS THAT FILL THE CIRCLE FOR YOUR ANSWER.
- ERASE CLEANLY ANY MARKS YOU WISH TO CHANGE.
- PLEASE DO NOT MAKE STRAY MARKS OF ANY KIND.

CORRECT MARK

INCORRECT MARKS
### Demographic Data

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>LAST NAME</td>
</tr>
<tr>
<td>2.</td>
<td>SOCIAL SECURITY NUMBER</td>
</tr>
<tr>
<td>3.</td>
<td>TODAY'S DATE</td>
</tr>
<tr>
<td>4.</td>
<td>HEIGHT (FT IN)</td>
</tr>
<tr>
<td>5.</td>
<td>WEIGHT (POUNDS)</td>
</tr>
<tr>
<td>6.</td>
<td>What age were you on your last birthday?</td>
</tr>
<tr>
<td>7.</td>
<td>BIRTHDAY (MDY)</td>
</tr>
<tr>
<td>8.</td>
<td>MARITAL STATUS</td>
</tr>
<tr>
<td>9.</td>
<td>TOTAL TIME IN SERVICE (YRS MOS)</td>
</tr>
<tr>
<td>10.</td>
<td>SEX</td>
</tr>
<tr>
<td>11.</td>
<td>HIGHEST LEVEL OF EDUCATION</td>
</tr>
<tr>
<td>12.</td>
<td>RACE/ETHNIC GROUP</td>
</tr>
<tr>
<td>13.</td>
<td>Is your spouse currently living with you at your present duty location?</td>
</tr>
</tbody>
</table>

#### Marital Status
- Married
- Living as married
- Separated and not living as married
- Divorced and not living as married
- Widowed and not living as married
- Single, never married and not living as married

#### Race/Ethnic Group
- White - not Hispanic
- Black - not Hispanic
- Hispanic
- American Indian or Alaskan Native
- Asian
- Pacific Islander
- Filipino
- Other

#### Education
- 11 years or less
- GED or ABE certificate
- High school graduate
- Trade or technical school
- Some college
- 4-year college degree
- Graduate or professional degree
- Graduate or professional degree without degree

#### Other
- Yes
- No
### DEMOGRAPHIC DATA (CONTINUED)

14. **PAY GRADE/RANK**

<p>| | | |</p>
<table>
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<th></th>
<th></th>
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</thead>
<tbody>
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If your rating abbreviation has twg letters instead of three, use the first two columns, starting with the first box on the left.

15. **ENLISTED RATING**

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**Not rated or designated striker**

16. **NOBC or NEC if enlisted**

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17. **OFFICER DESIGNATOR CODE**

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18. **OFFICER PRIMARY SUBSPECIALTY CODE**

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19. **MARINE CORPS MOS**

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</table>

20. **Member of which branch of service?**

- [ ] Navy
- [ ] Marine Corps

21. **To what type of command are you currently assigned?**

- [ ] CONUS Shore
- [ ] OCONUS Submarine
- [ ] CONUS Submarine
- [ ] Overseas FMF
- [ ] CONUS Ship
- [ ] Overseas Non-FMF
- [ ] OCONUS Shore
- [ ] CONUS FMF
- [ ] OCONUS Ship
- [ ] CONUS Non-FMF

22. **What is the approximate total time you have served aboard ship counting all time on all ships on which you have served?**

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</tbody>
</table>

23. **What is the approximate total time you have been deployed counting all time on all ships on which you have served?**

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</tbody>
</table>

24. **Did you serve with the military in any of the following areas?**

- [ ] No
- [ ] Yes, Aboard ship
- [ ] Yes, Ashore

**Mark all that apply**

- [ ] a. Persian Gulf -- Operation Desert Shield
- [ ] b. Persian Gulf -- Operation Desert Storm
- [ ] c. Somalia -- Operation Restore Hope
- [ ] d. Bangladesh
- [ ] e. Haiti
- [ ] f. Other foreign areas
25. Has a health care provider ever told you that you had any of the following? *(If yes, please answer question 26.)*

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<th>Yes, Recovered</th>
<th>Yes, Still have</th>
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<tr>
<td>b. Chronic bronchitis</td>
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<tr>
<td>c. Emphysema</td>
<td></td>
<td>○</td>
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<tr>
<td>d. Chronic rhinitis or hay fever</td>
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<tr>
<td>e. Other allergies</td>
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<tr>
<td>f. Positive skin test for tuberculosis</td>
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<td>g. Skin cancer</td>
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<td>h. Breast cancer</td>
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<td>i. Cervical cancer</td>
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<tr>
<td>j. Other cancer</td>
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<tr>
<td>k. Heart disease</td>
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<tr>
<td>l. Hypertension (high blood pressure)</td>
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<td>m. High cholesterol</td>
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<tr>
<td>n. Heart murmur</td>
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<tr>
<td>o. Other heart problems</td>
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<tr>
<td>p. Anemia</td>
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<td>q. Varicose veins</td>
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<td>r. Scrotal varices (varicose vein in scrotum)</td>
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<td>s. Hernia or rupture</td>
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<td>v. Ulcer</td>
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<td>w. Bowel or intestinal trouble (e.g. colitis)</td>
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<td>cc. Urinary tract infection</td>
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<td>dd. Repeated kidney infections</td>
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<td>ee. Kidney stones</td>
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<td>ll. Sterility/infertility</td>
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26. If yes, what was your age at first diagnosis?

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<td>○</td>
</tr>
<tr>
<td>q. Varicose veins</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>r. Scrotal varices (varicose vein in scrotum)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>s. Hernia or rupture</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>t. Hemorrhoids</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>u. Other blood circulation problems</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>v. Ulcer</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>w. Bowel or intestinal trouble (e.g. colitis)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>x. Gallstones</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>y. Thyroid disease</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>z. Diabetes</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>aa. Hepatitis (Jaundice)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>bb. Other liver problem</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>cc. Urinary tract infection</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>dd. Repeated kidney infections</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>ee. Kidney stones</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>ff. Other bladder trouble</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>gg. Pelvic inflammatory disease (PID)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>hh. Gonorrhea (&quot;clap&quot;)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>ii. Syphilis</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>jj. Chlamydia</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>kk. Herpes or genital warts</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>ll. Sterility/infertility</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>mm. Arthritis</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>nn. Neuralgia</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>oo. Anorexia or bulimia (eating disorder)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>pp. Migraines</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>qq. Head injury (involving stitches or unconsciousness)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>rr. Depression</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>ss. Other psychological condition</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>tt. Speech problems</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>uu. Hearing loss/problems</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>vv. Vision impairment/problems</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>ww. Peridental disease (gum disease)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>xx. Other (please specify)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
### CURRENT MEDICAL CONDITIONS

27. Have you experienced any of the conditions listed below any time in the past 30 days regardless of whether or not they resulted in a visit to sick call or a health care provider? (Please check NO or YES for every condition) (If yes, please answer question 28.)

<table>
<thead>
<tr>
<th>Condition</th>
<th>No</th>
<th>Yes</th>
<th>Nothing</th>
<th>Self Care</th>
<th>Seek Medical Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Common cold symptoms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Dizziness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Chills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Cough</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Sore throat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Fever</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Flu</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>h. Diarrhea lasting at least 3 days</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Stomach problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. Constipation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>k. Indigestion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>l. Nausea/vomiting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>m. Sinus trouble</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n. Hay fever</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o. Shortness of breath</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p. Hoarseness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>q. Sleeping problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>r. Headaches</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>s. Skin problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>t. Muscle sprain or strain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>u. Back problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v. Ringing in the ears</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>w. Irritated eyes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>x. Trouble seeing with one or both eyes even if wearing glasses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>y. Teeth/gum/dental problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>z. Broken bones</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>aa. Other (please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

28. If yes, what did you do?

### HEALTH PERCEPTIONS

30. In general, would you say your health is:

- [ ] Excellent
- [ ] Very good
- [ ] Good
- [ ] Fair
- [ ] Poor

31. During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of your **physical health**?

<table>
<thead>
<tr>
<th>Problem</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Cut down the amount of time you spent on work or other activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Accomplished less than you would have liked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Were limited in the kind of work or other activities you could do</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Had difficulty performing the work or other activities (took extra effort)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
32. During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Cut down the amount of time you spent on work or other activities</td>
<td>O  O</td>
</tr>
<tr>
<td>b.</td>
<td>Accomplished less than you would have liked</td>
<td>O  O</td>
</tr>
<tr>
<td>c.</td>
<td>Didn't do work or other activities as carefully as usual</td>
<td>O  O</td>
</tr>
</tbody>
</table>

33. During the past 4 weeks, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups?

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Slightly</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

34. How much bodily pain have you had during the past 4 weeks?

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>Very mild</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
<th>Very Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

35. During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)?

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A little bit</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

36. How much of the time during the past 4 weeks:

<table>
<thead>
<tr>
<th></th>
<th>None of the time</th>
<th>A little of the time</th>
<th>Some of the time</th>
<th>A good bit of the time</th>
<th>Most of the time</th>
<th>All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Did you feel full of pep?</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
</tr>
<tr>
<td>b.</td>
<td>Did you have a lot of energy?</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
</tr>
<tr>
<td>c.</td>
<td>Did you feel worn out?</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
</tr>
<tr>
<td>d.</td>
<td>Did you feel tired?</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
</tr>
</tbody>
</table>

37. During the past 4 weeks, how much of the time have your physical or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.)?

<table>
<thead>
<tr>
<th></th>
<th>All of the time</th>
<th>Most of the time</th>
<th>Some of the time</th>
<th>A little of the time</th>
<th>None of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

38. How true or false is each of the following statements for you?

<table>
<thead>
<tr>
<th></th>
<th>Definitely false</th>
<th>Mostly false</th>
<th>Don't know</th>
<th>Mostly true</th>
<th>Definitely true</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>I seem to get sick a little easier than other people I know.</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
</tr>
<tr>
<td>b.</td>
<td>I am as healthy as anybody I know.</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
</tr>
<tr>
<td>c.</td>
<td>I expect my health to get worse.</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
</tr>
<tr>
<td>d.</td>
<td>My health is excellent.</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
</tr>
<tr>
<td>e.</td>
<td>I don't have the time to be ill.</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
</tr>
<tr>
<td>f.</td>
<td>I sometimes allow myself to be ill.</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
</tr>
<tr>
<td>g.</td>
<td>I don't have a choice about being ill.</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
</tr>
<tr>
<td>h.</td>
<td>I can will myself not to become ill.</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
</tr>
<tr>
<td>i.</td>
<td>I wait until the last minute to seek medical care.</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
<td>O O O O O</td>
</tr>
</tbody>
</table>
39. Below is a list of ways you might have felt or behaved. Please indicate how often you have felt this way during the past 7 days.

<table>
<thead>
<tr>
<th>Feeling</th>
<th>Rarely or none of the time</th>
<th>Some or a little of the time</th>
<th>Occasionally or a moderate amount of time</th>
<th>Most or all of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. I was bothered by things that usually don’t bother me.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>b. I did not feel like eating; my appetite was poor.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>c. I felt I could not shake off the blues even with help from my family or friends.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>d. I felt that I was just as good as other people.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>e. I had trouble keeping my mind on what I was doing.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>f. I felt depressed.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>g. I felt that everything I did was an effort.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>h. I felt hopeful about the future.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>i. I thought my life had been a failure.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>j. I felt fearful.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>k. My sleep was restless.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>l. I was happy.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>m. I talked less than usual.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>n. I felt lonely.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>o. People were unfriendly.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>p. I enjoyed life.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>q. I had crying spells.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>r. I felt sad.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>s. I felt that people liked me.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>t. I could not get &quot;going&quot;.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

40. How have you felt during the past 7 days including today? Use the following scale to describe how distressing you have found the following things over this time.

<table>
<thead>
<tr>
<th>Feeling</th>
<th>Not at all</th>
<th>A little</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Difficulty in speaking when you are excited</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>b. Trouble remembering things</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>c. Worried about sloppiness or carelessness</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>d. Blaming yourself for things</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>e. Pains in the lower part of your back</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>f. Feeling lonely</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>g. Feeling blue</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>h. Your feelings being easily hurt</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>i. Feeling others do not understand you or are unsympathetic</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>j. Feeling that people are unfriendly or dislike you</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>k. Having to do things very slowly in order to be sure you are doing them right</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>l. Feeling inferior to others</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>m. Soreness in your muscles</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>n. Having to check and double check what you do</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>o. Hot or cold spells</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>p. Your mind going blank</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>q. Numbness or tingling in parts of your body</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>r. A lump in your throat</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>s. Trouble concentrating</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>t. Weakness in parts of your body</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>u. Heavy feeling in your arms and legs</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
QUALITY OF LIFE

Pleased/ Delighted
Mostly satisfied
Mixed
Mostly dissatisfied
Terrible/ Unhappy

41. How do you feel about your job? 

42. How do you feel about yourself? 

43. How do you feel about your own personal life? 

44. How do you feel about your life as a whole? 

STRESS

45. Think about your life over the past 7 days. On the whole, how much stress do you think is in your life right now? 

\( \begin{array}{c} \square \text{None at all} \\ \square \text{A little bit} \\ \square \text{Moderate amount} \\ \square \text{Quite a bit} \\ \square \text{Extreme amount} \end{array} \)

46. Over the past 7 days, stress has affected my personal life: 

\( \begin{array}{c} \square \text{Not at all} \\ \square \text{A little bit} \\ \square \text{Moderate amount} \\ \square \text{Quite a bit} \\ \square \text{Extreme amount} \end{array} \)

47. Over the past 7 days, stress has affected my performance on the job: 

\( \begin{array}{c} \square \text{Not at all} \\ \square \text{A little bit} \\ \square \text{Moderate amount} \\ \square \text{Quite a bit} \\ \square \text{Extreme amount} \end{array} \)

48. Over the past 7 days, how well have you coped with stress? 

\( \begin{array}{c} \square \text{Very poorly} \\ \square \text{Somewhat poorly} \\ \square \text{In-between (neutral)} \\ \square \text{Somewhat well} \\ \square \text{Very well} \end{array} \)

HEALTH CARE

49. Please indicate how many times you went to a military medical facility for your own health care during the past 12 months. (Mark one response in each row)

<table>
<thead>
<tr>
<th>Number of times</th>
<th>11 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Illness or injury</td>
<td>( \square ) 1 2 3 4 5 6 7 8 9 10 (11)</td>
</tr>
<tr>
<td>b. Follow-up for illness or injury</td>
<td>( \square ) 1 2 3 4 5 6 7 8 9 10 (11)</td>
</tr>
<tr>
<td>c. General physical exam</td>
<td>( \square ) 1 2 3 4 5 6 7 8 9 10 (11)</td>
</tr>
<tr>
<td>d. Prescription refill only</td>
<td>( \square ) 1 2 3 4 5 6 7 8 9 10 (11)</td>
</tr>
<tr>
<td>e. Eye exam only</td>
<td>( \square ) 1 2 3 4 5 6 7 8 9 10 (11)</td>
</tr>
<tr>
<td>f. Prenatal care</td>
<td>( \square ) 1 2 3 4 5 6 7 8 9 10 (11)</td>
</tr>
<tr>
<td>g. Same day surgery</td>
<td>( \square ) 1 2 3 4 5 6 7 8 9 10 (11)</td>
</tr>
<tr>
<td>h. Mental health</td>
<td>( \square ) 1 2 3 4 5 6 7 8 9 10 (11)</td>
</tr>
<tr>
<td>i. Emergency care</td>
<td>( \square ) 1 2 3 4 5 6 7 8 9 10 (11)</td>
</tr>
<tr>
<td>j. Other type of care (please specify type of care)</td>
<td>( \square ) 1 2 3 4 5 6 7 8 9 10 (11)</td>
</tr>
</tbody>
</table>

50. Please indicate how many times you went to a civilian doctor's office or outpatient clinic for your own health care during the past 12 months. (Mark one response in each row)

<table>
<thead>
<tr>
<th>Number of times</th>
<th>11 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Illness or injury</td>
<td>( \square ) 1 2 3 4 5 6 7 8 9 10 (11)</td>
</tr>
<tr>
<td>b. Follow-up for illness or injury</td>
<td>( \square ) 1 2 3 4 5 6 7 8 9 10 (11)</td>
</tr>
<tr>
<td>c. General physical exam</td>
<td>( \square ) 1 2 3 4 5 6 7 8 9 10 (11)</td>
</tr>
<tr>
<td>d. Prescription refill only</td>
<td>( \square ) 1 2 3 4 5 6 7 8 9 10 (11)</td>
</tr>
<tr>
<td>e. Eye exam only</td>
<td>( \square ) 1 2 3 4 5 6 7 8 9 10 (11)</td>
</tr>
<tr>
<td>f. Prenatal care</td>
<td>( \square ) 1 2 3 4 5 6 7 8 9 10 (11)</td>
</tr>
<tr>
<td>g. Same day surgery</td>
<td>( \square ) 1 2 3 4 5 6 7 8 9 10 (11)</td>
</tr>
<tr>
<td>h. Mental health</td>
<td>( \square ) 1 2 3 4 5 6 7 8 9 10 (11)</td>
</tr>
<tr>
<td>i. Emergency care</td>
<td>( \square ) 1 2 3 4 5 6 7 8 9 10 (11)</td>
</tr>
<tr>
<td>j. Other type of care (please specify type of care)</td>
<td>( \square ) 1 2 3 4 5 6 7 8 9 10 (11)</td>
</tr>
</tbody>
</table>
51. Please take a moment to recall your visit(s) to a military medical facility. Then mark one response that describes the strength of your agreement or disagreement with the following statements.

Not applicable  
Strongly disagree  
Disagree  
Neither agree nor disagree  
Agree  
Strongly agree

a. The doctor (or Corpsman, etc.) seemed warm and friendly to me.

b. The doctor (or Corpsman, etc.) seemed interested in me as a person.

c. I felt the doctor (or Corpsman, etc.) did not treat me with appropriate respect.

d. The doctor (or Corpsman, etc.) seemed to take my problem seriously.

52. On your last non-OB/GYN visit to a military medical facility, how satisfied were you with each of the following?

Not applicable  
Very dissatisfied  
Dissatisfied  
Neither satisfied nor dissatisfied  
Satisfied  
Very satisfied

a. The quality of medical services provided.

b. The amount of time it took you to get to the medical facility.

c. The amount of time you waited at the facility to see a health care provider.

d. The priority you were shown as an active-duty member.

e. The priority you were shown when you had orders to deploy.

f. The variety of medical services available to you.

g. The type of medical professionals that you saw.

h. The amount of privacy you had during the visit.

i. The consideration and respect shown to you.

j. The timeliness of the follow-up care.

53. When you go to a military medical facility, who is the primary person who treats you?

- Doctor  
- Physician's assistant  
- Corpsman  
- Nurse  
- Other

54. After you arrive at a military medical facility, how long do you typically have to wait to see a doctor or other health care professional?

- Less than 5 minutes  
- At least 5 minutes, but less than 15 minutes  
- At least 15 minutes, but less than half an hour  
- At least half an hour, but less than an hour  
- At least one hour  
- Two or more hours

55. Can you ask someone in the military medical system questions about a health concern on the telephone?

- Yes  
- No  
- Don't know

56. How often do you do a testicular self exam?

- Monthly  
- Once every few months  
- Rarely/Never  
- Not applicable

57. About how long has it been since you had a rectal exam?

- Less than 1 year  
- 1 year  
- 2 years  
- 3 or more years  
- Never had exam

58. How often do you examine your breasts for lumps?

- Monthly  
- Once every few months  
- Rarely or never  
- Not applicable

59. Do you consider yourself now to be:

- Overweight  
- Underweight  
- About the right weight

60. Would you like to weigh:

- Less  
- More  
- Stay about the same

61. During the past 12 months, have you tried to lose weight?

- Yes  
- No

62. During the past 12 months, have you changed what you eat because of any medical condition?

- Yes  
- No
63. Are you satisfied with your eating patterns?
  - Yes
  - No

64. Do you ever eat in secret?
  - Yes
  - No

65. During the past 7 days, approximately how many days did you:

<table>
<thead>
<tr>
<th></th>
<th>DAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Eat breakfast</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>b. Eat snacks between meals</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>c. Overeat</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>d. Not eat enough</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>e. Take vitamin pills</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>f. Take anti-oxidants</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
</tbody>
</table>

66. During the past 7 days, approximately how many times did you:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 7 times per week</td>
<td></td>
</tr>
<tr>
<td>4 - 6 times per week</td>
<td></td>
</tr>
<tr>
<td>1 - 3 times per week</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td></td>
</tr>
</tbody>
</table>

67. Are you interested in hearing/reading about nutrition?
  - Yes, very much
  - Yes, sometimes
  - Don't really care
  - No, not usually
  - No, not at all

68. How important do you feel that diet is in terms of your health?
  - Probably the most important factor
  - Very important, but not the primary factor
  - Important
  - Not very important
  - Of little or no consequence

69. How important to you are the following considerations when you purchase foods?

<table>
<thead>
<tr>
<th></th>
<th>Extremely important</th>
<th>Very important</th>
<th>Moderately important</th>
<th>Somewhat important</th>
<th>Not at all important</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Health benefits, nutritional value</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>b. Price, cost</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>c. Likes or dislikes, eating enjoyment</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>d. Convenience, easy to prepare</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>e. Calories</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
</tr>
</tbody>
</table>

70. During the past 30 days, on the average, how many hours of sleep did you get per night?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td></td>
</tr>
<tr>
<td>1 or 2 times per week</td>
<td></td>
</tr>
<tr>
<td>At least 3 times per week</td>
<td></td>
</tr>
</tbody>
</table>

71. How would you describe your cigarette smoking habits?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td></td>
</tr>
<tr>
<td>Fair</td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>Very good</td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td></td>
</tr>
</tbody>
</table>

72. Have you smoked at least 100 cigarettes in your entire life? (That would be 5 or more packs in your entire life.)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

73. How long have you been on the exercise or work schedule in question 71?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 month</td>
<td></td>
</tr>
<tr>
<td>1 - 3 months</td>
<td></td>
</tr>
<tr>
<td>4 - 11 months</td>
<td></td>
</tr>
<tr>
<td>1 - 2 years</td>
<td></td>
</tr>
<tr>
<td>3 - 4 years</td>
<td></td>
</tr>
<tr>
<td>5+ years</td>
<td></td>
</tr>
</tbody>
</table>

74. How would you rate your current physical fitness?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td></td>
</tr>
<tr>
<td>Fair</td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>Very good</td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td></td>
</tr>
</tbody>
</table>

75. How would you describe your cigarette smoking habits?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Never smoked</td>
<td></td>
</tr>
<tr>
<td>Current smoker</td>
<td></td>
</tr>
<tr>
<td>Former smoker</td>
<td></td>
</tr>
</tbody>
</table>
76. During the past 30 days, how many cigarettes did you usually smoke on a typical day?

   - Did not smoke cigarettes in the last 30 days

77. How many times have you tried to quit smoking?

   - Did not ever smoke

78. If you quit, was it because you had a health problem that was caused or made worse by smoking?

   - Quit due to health problem
   - Quit due to other reason
   - Never quit
   - Never smoked

79. If you quit, on average, how many cigarettes did you smoke a day when you last smoked every day?

   - Did not smoke cigarettes in the last 30 days

80. How many years have you used (or did you use) any form of tobacco on a regular basis? Do not count any time when you quit using tobacco.

   - Never used tobacco
   - Less than one year
   - 1 years
   - 2 years
   - 3 years
   - 4 years
   - 5 years
   - 6 years
   - 7 years
   - 8 years
   - 9 years
   - 10 years
   - 11 years
   - 12 years
   - 13 years
   - 14 years
   - 15+ years

81. How many cigars and/or pipes do you usually smoke per day?

   - NUMBER

82. How many times per day do you usually use smokeless tobacco? (Chewing tobacco, snuff, pouches, etc.)

   - NUMBER

83. During the past 7 days, on the average, how many caffeinated beverages did you have per day? (cola, coffee, tea)

   - NUMBER

84. During the past 30 days, how much alcohol did you drink on a typical day? (Consider a single shot, single mixed drink, glass of wine, or can of beer as one drink.)

   - 18 or more drinks
   - 15 - 17 drinks
   - 12 - 14 drinks
   - 9 - 11 drinks
   - 8 drinks
   - 7 drinks
   - 6 drinks
   - 5 drinks
   - 4 drinks
   - 3 drinks
   - 2 drinks
   - 1 drink
   - Didn't drink any alcohol in the past 30 days
85. During the past 30 days, on how many days did you drink alcoholic beverages?
- 0 28 - 30 days (about every day)
- 1 20 - 27 days (5 - 6 days a week, average)
- 2 11 - 19 days (3 - 4 days a week, average)
- 3 4 - 10 days (1 - 2 days a week, average)
- 4 2 - 3 days in the past 30 days
- 5 Once in the past 30 days
- 6 Didn’t drink any alcohol in the past 30 days

86. How many sexual partners have you had in the last six months?
- 0 10 or more

87. What birth control method(s) do you currently use? (Mark all that apply)
- a. Tubal ligation
- b. Vasectomy
- c. Norplant
- d. Depo-Provera
- e. Birth control pills
- f. IUD
- g. Diaphragm
- h. Condom
- i. Spermicide (foam, jelly, cream, suppositories)
- j. Sponge
- k. Douche
- l. Withdrawal
- m. Rhythm
- n. Abstinence
- o. Other (please specify)
- p. None

88. If you do not use birth control, please indicate reason: (Mark all that apply)
- a. Religious/moral beliefs
- b. My partner’s preference
- c. Inconvenient/interferes with spontaneity
- d. Want to get pregnant
- e. Other (please specify)
- f. Use birth control/abstinence

89. During the past 12 months, if I had needed it, counseling was readily available to me on:
- Do not know
- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

- a. Quitting smoking
- b. Alcohol abuse
- c. Drug abuse
- d. Birth control/family planning
- e. Weight control
- f. Stress management

90. How many close friends do you have (people that you feel at ease with, can talk to about private matters, and can call for help)?
- 0 10 or more

91. How many relatives do you have that you feel close to?
- 0 10 or more

92. How many of these friends or relatives do you see at least once a month?
- 0 10 or more

93. Are you a member of any social clubs or groups?
- 0 Yes
- 0 No

94. Are you an active member of a church, temple, or other religious organization?
- 0 Yes
- 0 No

95. How often have you asked the advice of relatives or friends about your marriage?
- 0 Never
- 0 Seldom
- 0 Several times
- 0 Often
- 0 Very often
- 0 Not married
96. How often have you gone to a doctor, counselor or clergyman for marriage problems?
- Never
- Seldom
- Several times
- Often
- Very often
- Not married

97. How much time do you spend thinking about marriage problems?

<table>
<thead>
<tr>
<th>None</th>
<th>Some</th>
<th>A lot</th>
<th>Married</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**FRIENDS AND FAMILY (CONTINUED)**

98. I am definitely satisfied with my marriage
- Strongly agree
- Agree
- Neutral (undecided)
- Disagree
- Strongly disagree
- Not married

99. How many children (natural, adopted, stepchildren, or grandchildren) under the age of 21 live in your household? *(Mark all that apply)*

<table>
<thead>
<tr>
<th>Children's age</th>
<th>None</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5+</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Less than 6 weeks old</td>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. 6 weeks to under 1 year</td>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. 12 to 23 months</td>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>d. 24 to 35 months</td>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>e. 3 to 5 months</td>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>f. 6 to 9 years</td>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>g. 10 to 12 years</td>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>h. 13 to 15 years</td>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>i. 16 to 20 years</td>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

100. How old were you when your first child was born?
- No children

<table>
<thead>
<tr>
<th>AGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
</tbody>
</table>

**PSYCHOSOCIAL**

101. In the last year, how many serious personal losses or difficult problems have you had to handle (e.g., promotion, passover, divorce/separation, legal or disciplinary action, bankruptcy, death of someone close, serious illness/injury of a loved one, etc.)?
- Several
- Some
- Few
- None

102. Have you seriously considered suicide within the last 2 years?
- Yes
- Yes, within the last year
- Yes, within the last 2 months
- No

103. How often do you have any serious problems dealing with your husband or wife, parents, friends, or with your children?
- Often
- Sometimes
- Seldom
- Never

104. How often did you experience a major pleasant change in the last year (for example, promotion, marriage, birth, award, etc.)?
- Often
- Sometimes
- Seldom
- Never

105. What causes the biggest problem in your life? *(Darken only one circle)*
- Money
- Social life
- Family
- Supervisor
- Job
- Health
- No problem
PSYCHOSOCIAL (CONTINUED)

106. Were you abused prior to entering the military?
(Mark all that apply)
   a. ☐ Yes, emotionally abused
   b. ☐ Yes, sexually abused
   c. ☐ Yes, physically abused
   d. ☐ No, not abused

107. Since entering the military, have you been abused?
(Mark all that apply)
   a. ☐ Yes, emotionally abused
   b. ☐ Yes, sexually abused
   c. ☐ Yes, physically abused
   d. ☐ No, not abused

108. If abused either prior to entering the military or after entering the military, have you ever received treatment?
   ☐ Yes
   ☐ No
   ☐ Not applicable

   Strongly disagree
   Disagree
   Agree
   Strongly agree

109. I feel that I'm a person of worth at least on an equal basis with others. ..................
110. I feel that I have a number of good qualities. ..................................................
111. All in all, I'm inclined to feel that I am a failure. ..........................................
112. I am able to do things as well as others. .......................................................!
113. I feel I do not have much to be proud of. .......................................................!
114. I take a positive attitude towards myself. .......................................................!
115. On the whole I am satisfied with myself. .........................................................!
116. I wish I could have more respect for myself. ...................................................
117. I certainly feel useless at times. .................................................................
118. At times I think I'm no good at all. ...............................................................!

   Strongly disagree
   Disagree
   Agree
   Strongly agree

   Almost always
   Often
   Sometimes
   Almost never

119. I am quick-tempered. ..................
120. I have a fiery temper. ..................
121. I am a hotheaded person. ............
122. I get angry when I am slowed down by others' mistakes. ...............................
123. I feel annoyed when I am not given recognition for doing good work. ............
124. I fly off the handle. ..................
125. When I get mad, I say nasty things. .................................................................!
126. It makes me furious when I am criticized in front of others. ..........................
127. When I get frustrated, I feel like hitting someone. ........................................
128. I feel infuriated when I do a good job and get a poor evaluation. ....................
129. I feel irritated. ........................
130. I feel angry. ...........................
131. People who think they are always right irritate me. .........................................
132. I get annoyed when I am singled out for correction. ......................................
133. My blood boils when I am pressured. ..............................................................
134. I feel pleasant. ........................
135. I feel nervous and restless. ...............................................................
136. I feel satisfied with myself. ..............................................................
137. I wish I could be as happy as others seem to be. ...........................................
138. I feel like a failure. ..................
139. I feel rested. ...........................
140. I feel "calm, cool, and collected". .................................................................
141. I feel that difficulties are piling up so much that I cannot overcome them. ....
142. I worry too much over something that really doesn't matter. ...........................
143. I am happy. ...........................
144. I have disturbing thoughts. ..........
145. I lack self-confidence. .............
146. I feel secure. ........................
147. I make decisions easily. .............
148. I feel inadequate. ...................
149. I am content. ........................
150. Some unimportant thought runs through my mind and bothers me. ..................
151. I take disappointments so keenly that I can't put them out of my mind. ...........
152. I am a steady person. .............
153. I get in a state of tension or turmoil as I think over my recent concerns and interests.

154. How often are you bothered by each of the following in your work?

- Not having enough help and equipment to get the job done well
- Feeling you have too much responsibility for the work of others
- Thinking that you'll not be able to meet the conflicting demands of various people you work with
- Having to do or decide things where mistakes could be quite costly
- Not knowing just what the people you work with expect from you
- Thinking that the amount of work you have to do may interfere with how well it gets done
- Feeling that you have to do things on the job that are against your better judgement
- Feeling that your job tends to interfere with your family life
- Feeling unable to influence your immediate supervisor's decisions and his/her actions that affect you
- Having to deal with or satisfy too many different people
- Being asked to work overtime when you don't want to
- Feeling trapped in a job you don't like but can't change or get out of

155. Overall, how satisfied would you say you are with your present job?
- Not at all satisfied
- Not too satisfied
- Somewhat satisfied
- Very satisfied

156. Knowing what you know now, if you had to decide all over again whether to join the military, what would you decide?
- Decide definitely not to join
- Have some second thoughts
- Decide without hesitation to join

157. In general, how well would you say that your regular military job measures up to the sort of job you wanted when you took it?
- Very much like
- Somewhat like
- Not very much like

158. If a good friend told you he/she was interested in working in a job like your regular military job, what would you tell him/her?
- Advise him/her against it
- Have doubts about recommending it
- Strongly recommend it

159. How sad/happy do you feel about your job?
- Happy
- Somewhat happy
- Neither happy nor sad
- Somewhat sad
- Sad

CASUALTY EVENTS

Exposure to a disaster or violence can sometimes have long-term effects. The following questions will help to provide a baseline history of exposure to disasters or violence that may help in studying these effects.

160. Have you ever been exposed to a natural disaster involving injuries or fatalities? (e.g., earthquakes, fire, flood, etc.)
(Mark all that apply)
- Yes, witnessed
- Yes, survivor/victim
- Yes, participated in aid, clean-up, rescue, or investigation
- No

161. Have you ever been exposed to combat or violence involving injuries or fatalities? (Mark all that apply)
- Yes, witnessed
- Yes, survivor/victim
- Yes, used deadly force as a part of my military job
- Yes, participated in aid, clean-up, rescue, or investigation
- No

162. Have you ever witnessed or been involved in a major accident involving injuries or fatalities?
(Mark all that apply)
- Yes, witnessed
- Yes, survivor/victim
- Yes, participated in aid, clean-up, rescue, or investigation
- No
163. Is protective gear available for your use in your current job? Examples of protective gear are gloves, respirator, filter, mask, boots, ear plugs, film badge, hazardous materials suit and fire fighting suit.

- Yes
- No
- Sometimes
- Not applicable

164. When you have contact with substances that might be harmful, how often do you use protective gear?

- Never
- Some of the time
- Most of the time
- Always
- Not applicable

165. Which reasons for not wearing protective gear are the most true for you? (Mark all that apply)

- a. It doesn't work properly
- b. It interferes with job performance
- c. It is uncomfortable
- d. I don't know how to use it
- e. It is not needed
- f. None, always wear protective gear
- g. Not applicable

166. During the past 30 days, have you been exposed to tobacco smoke for an hour or more a day in your immediate work or living area?

- Not exposed
- Work area only
- Living area only
- Both work and living area

167. Are you currently in one or more of the following medical surveillance programs? (Mark all that apply)

- a. Asbestos
- b. Noise
- c. Lead
- d. Chromium
- e. Cadmium
- f. Non-ionizing radiation
- g. Ionizing radiation
- h. Other
- i. None

168. For all jobs or hobbies you have had, indicate the known health hazards that are/were present and the number of years you have been/were exposed.

<table>
<thead>
<tr>
<th>Exposure</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 years or more</td>
</tr>
<tr>
<td></td>
<td>3 - 4 years</td>
</tr>
<tr>
<td></td>
<td>1 - 2 years</td>
</tr>
<tr>
<td></td>
<td>Less than 1 year</td>
</tr>
<tr>
<td></td>
<td>Not exposed</td>
</tr>
</tbody>
</table>

- a. Fibrous glass (fiberglass)
- b. Asbestos
- c. Coal dust or rock dust
- d. Silica powder or sandblasting dust
- e. Other specific dusts (woods, talc, lime)
- f. Respiratory or skin irritants
- g. Chemicals (acids, alkalis, solvents)
- h. Metal fumes (from molten metal)
- i. Welding fumes
- j. Coal tar, pitch, asphalt's
- k. Engine exhaust, grease, oils, fuel
- l. Heat (severe)
- m. Cold (severe)
- n. Noise (loud)
- o. Non-ionizing radiation
- p. Ionizing radiation (X-rays, etc.)
- q. Vibration (vibrating tools, motors)
- r. General shop dust
- s. Pesticides, herbicides
- t. Acids
- u. Alcohol's (industrial)
- v. Other (please specify)

ENVIRONMENTAL/OCCUPATIONAL HEALTH continued →
169. Have you been exposed to any of the following in the past 12 months:

(If you answer "yes" to any question, please complete all items on that line.)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Adhesives or gluing compounds</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Asbestos (loose)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>c. Carbon monoxide</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Diesel exhaust (within 50 ft)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>e. Diesel fuel (within 50 ft)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>f. Dry cleaning solvent</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>g. Exhaust from gasoline engine</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>h. Gasoline (liquid or vapor)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>i. Guided missile fuel</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>j. High temperature (above 95°F)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>k. Hypodermic needles (used)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>l. Insecticides</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>m. Jet exhaust (within 50 ft)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>n. Jet fuel (within 50 ft)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>o. Loud noise (jets, etc)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>p. Lifting 25 - 49 pounds</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>q. Lifting 50 or more pounds</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>r. Low temperature (below 32°F)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>s. Metal scrapings or filings</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>t. Microwave oven (within 3 ft)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>u. Paint, (oil based), or thinner</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>v. Paint, unknown type</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>w. Paint scrapings or paint sanding</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>x. Radar antenna or array (within 50 ft)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>y. Solvent or degreaser</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>z. Torpedo fuel</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>aa. Transmitting antennas (within 50 ft)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>bb. Nuclear reactor (within 50 ft)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>cc. Nuclear fuel</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>dd. Nuclear ordnance</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>ee. Nuclear medicines (radioisotopes)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>ff. Video display terminal</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>gg. Welding fumes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>hh. Dust particles</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>ii. Explosives (non-nuclear)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>jj. Nitrous oxide</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>kk. Ethylene dibromide (EDB)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>ll. Perchloroethylene (PERC)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

If you are MALE: Please stop here. Please complete the special handout page. Place the handout and Questionnaire in the box as you leave the room. Thank you for your time and cooperation.

If you are FEMALE: We would appreciate it if you would take a few extra minutes to answer some additional questions about health issues for women.
SUPPLEMENT FOR WOMEN

This section is to report female-specific conditions that you had during the past 3 months, whether or not they resulted in a visit to sick call or a health care provider.

170. Did you have any of these conditions?

<table>
<thead>
<tr>
<th>Condition</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Bleeding between periods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Cramps or pain during menstrual period requiring medication or time off of work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Excessive frequency of periods (time between periods too short)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Heavy periods (excessive menstrual flow)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Period lasting longer than a week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Missed period</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. No menstrual periods for 2 or more months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Scanty menstrual flow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Abdominal pain (from known cysts)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. Abdominal pain (from other unknown cause)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>k. Endometriosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>l. Discharge from breast</td>
<td></td>
<td></td>
</tr>
<tr>
<td>m. Breast lump</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n. Premenstrual symptoms or pain (PMS, premenstrual cramps)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o. Vaginal rash, discharge, or other disorder except yeast infection or sexually transmitted diseases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p. Yeast or vaginal infection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>q. Problem with uterus (womb)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

171. If you missed a period in the last 30 days, have you had a pregnancy test?

- Yes
- No, not yet
- No, hysterectomy
- No, menopausal
- No, other
- Not applicable/Did not miss a period

172. At what age did your menstrual cycles begin?

- Younger than 10 years old
- 10 - 12 years old
- 13 - 15 years old
- 16+ years old
- Don't know

173. What is the total number of years you have taken birth control pills in your lifetime?

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20 or more

174. During the past 30 days, have you taken replacement estrogens?

- Yes, hormone pills
- Yes, hormone creams or other hormone preparation such as the skin patch

175. Have you had a mammogram in the past 5 years?

- Yes
- No

176. How long has it been since you had a Pap smear?

- Less than 1 year
- 1 year
- 2 years
- 3 years or more
- Never had a Pap smear

177. Have you ever had a Pap smear where the result was NOT normal?

- Yes
- No
- Don't know

178. About how long has it been since you had your breasts examined by a physician or nurse?

- Less than 1 year
- 1 year
- 2 years
- 3 years or more
- Never had breasts examined

179. Have you received training from a medical provider on breast self-exam (BSE)?

- Yes
- No

180. Have you ever had an operation to remove a lump from your breast that was found to be noncancerous?

- Yes
- No
181. For your last OB/GYN visit in a military medical facility, how satisfied were you with each of the following?

- The quality of medical services provided
- The amount of time it took you to get to the medical facility
- The amount of time you waited at the facility to see a health care provider
- The priority you were shown as an active-duty member
- The priority you were shown when you had orders to deploy
- The variety of medical services available to you
- The type of medical services available to you
- The amount of privacy you had during the visit
- The consideration and respect shown to you
- The timeliness of follow-up care

- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied
- Dissatisfied
- Very dissatisfied
- Not applicable

182. Do you know where to get information about pregnancy and possible risks from your job and job environment?
- Yes
- No
- Not applicable

183. When you are pregnant, do you feel there are enough OB/GYN trained personnel available to see you when necessary?
- Yes
- No
- Not applicable

184. When you are pregnant, do you feel you are given enough time off from your job to be seen in OB/GYN when necessary?
- Yes
- No
- Not applicable

185. While on OCONUS orders, has it been difficult to receive the kind of OB/GYN care you would like?
- Yes
- No
- Not applicable

186. How many times have you been pregnant?
- 0 Never
- 1 time
- 2 times
- 3 times
- 4 times
- 5 times
- 6 times
- 7 times
- 8 times
- 9 or more times

187. Have you been pregnant in the past 12 months?
- Yes
- No

188. Have you become pregnant since coming on active duty?
- Yes
- No

189. Are you pregnant now?
- Yes
- No
- Not sure

190. If yes, was this a planned pregnancy?
- Yes
- No
- Not applicable

191. In the past 12 months, have you had:

- Problems becoming pregnant?
- Pregnancy complications?
- A miscarriage/spontaneous abortion?
- An elected abortion?
- A stillbirth?
- Childbirth problems? (e.g. hemorrhaging, Cesarean section, induced labor)
- Post-partum complications

192. How happy or unhappy would you be if you were to become pregnant in the next year?
- Extremely happy
- Moderately happy
- Neither happy nor unhappy
- Moderately unhappy
- Extremely unhappy
193. How convenient or inconvenient would it be for you to get pregnant in the next year?
   - Extremely convenient
   - Moderately convenient
   - Neither convenient nor inconvenient
   - Moderately inconvenient
   - Extremely inconvenient

194. How many live births have you had?
   - 0
   - 1
   - 2
   - 3
   - 4
   - 5
   - 6
   - 7
   - 8
   - 9 or more

195. Were any of the babies born prematurely or under 5 pounds?
   - Yes
   - No
   - Not applicable

196. Did any of the babies stay in the hospital after you came home?
   - Yes
   - No
   - Not applicable

197. Did you breast feed at least one of your children?
   - Yes
   - No
   - Not applicable

198. How healthy would you say your children are relative to other children their age?
   - Less healthy
   - Same
   - More healthy
   - Not applicable

Thank you for the extra effort to complete these questions. Please take a moment to complete the special handout page. Place the handout and questionnaire in the box as you leave the room. Thank you for your time and cooperation.
YOUR COMMENTS ON THIS SURVEY ARE WELCOME

We have attempted to be thorough in examining issues that are related to your health and the health care you receive. If you have comments that may help us to better understand your experience with the military health system, please write them in the space below.

If your comments concern a particular question, be sure to write the question and page number before your comment.
Nucleus Installation:

Survey Phase

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FSU

THIS BLOCK
FOR OFFICE USE ONLY

Survey Phase

FSU
Appendix C - Consent Form

Voluntary Consent to Participate in The 1995 POWR Assessment: Perceptions Of Wellness and Readiness

1. I am being asked to volunteer to participate in a research study titled "The 1995 POWR Assessment: PERCEPTIONS OF WELLNESS AND READINESS." The purpose of this study is to obtain baseline information on a variety of health conditions in active-duty Navy and Marine Corps personnel. Survey items will cover the following general areas: reproduction, medical/physiologic, psychosocial, life-style, occupational, and health care. Approximately 18,000 volunteers will participate in this study. During my participation in this study, I will be involved in the following procedures or tests: completing a written questionnaire taking approximately one half to one hour on one day only, and, at selected sites, having physical measurements taken (blood pressure, heart rate, height, weight, head, neck and waist circumferences) requiring approximately ten minutes, and, if selected, being interviewed by telephone for approximately 15 minutes by a trained staff member. Some automated medical record data may also be extracted and combined with these questionnaire data for research purposes. All of these procedures are considered routine, and none is considered an experimental procedure.

2. The investigators believe that there are no direct physical or psychological risks to me as a participant in this research study. A possible exception is the risk of stress or embarrassment some people may experience related to revealing personal information.

3. The results from this project may help the Navy and Marine Corps better understand and care for the medical needs of active duty personnel. However, I may expect no direct benefit from my participation in this research.

4. There are no alternative procedures for gathering this information.

5. Confidentiality during the study will be ensured by allowing access to data only to authorized study personnel. The confidentiality of the information related to my participation in this research will be ensured by (a) having all raw data maintained in strict confidentiality and stored in locked file cabinets at the Naval Health Research Center, (b) removing individual identifiers (names and social security numbers) from the computerized data files prior to analyses and maintaining automatic data processing (ADP) security, and (c) releasing data only in aggregated (group) form.

6. If I have questions about this study I should contact the following individuals: for questions about research (science) aspects I should contact Dr. Laurel Hourani at (619)553-8460; for questions about medical aspects, injury, or any health or safety questions for myself or any other volunteer's participation, contact Dr. Lisa Meyer at (619)553-8376; and for questions about the ethical aspects of this study, my rights as a volunteer, or any problem related to protection of research volunteers, I should contact Mr. Ralph Burr at (619)553-7760.

7. My participation in this study is completely voluntary. If I do not want to participate, there will be no penalty, and I will not lose any benefit to which I am otherwise entitled. Refusal to participate will not have any negative impact on my military status. I may discontinue my participation in this study at any time I choose. If I do choose to discontinue my participation, there will be no penalty and I will not lose any benefit to which I am otherwise entitled.

8. I have received a statement informing me about the provisions of the Privacy Act.

9. I have been informed that Dr. Laurel Hourani is responsible for storage of my consent form and the research records related to my participation in this study. These records are stored at the Naval Health Research Center, San Diego, CA.

10. I have been given an opportunity to ask questions about this study and its related procedures and risks, as well as any of the other information contained in this consent form. All my questions have been answered to my satisfaction. By my signature below, I give my voluntary informed consent to participate in the research as it has been explained to me, and I acknowledge receipt of a copy of this form for my own personal records.

Volunteer ________________________ Date (DD/MM/YY)

Witness ________________________ Date (DD/MM/YY)

Investigator ________________________ 20/08/95 Date (DD/MM/YY)

Naval Health Research Center Copy

C-1
MEMORANDUM

From: Chair, Committee for the Protection of Human Subjects
To: Dr. Laurel Hourani

Subj: PROTOCOL CHANGES

1. We have reviewed your protocol entitled "The Health Status of Women in the Military: An Epidemiological Study of Active-Duty Navy and Marine Corps Personnel" (DoD #30257) and have found the required changes to have been made. By this memorandum, the Committee for the Protection of Human Subjects approves your protocol as changed. With the concurrence of convening and/or approving authority, permission to use human subjects in your modified protocol is granted.

T. L. Kelly

June 7, 1995
Appendix E

FIELD TEAM MANUAL

1995 POWR Assessment:
Perceptions of Wellness and Readiness

Prepared by
Research Triangle Institute
Research Triangle Park, North Carolina

under contract to

the Naval Health Research Center

July 1995
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1.0 INTRODUCTION

This manual is designed to assist you in the critical role you will play in the success of the 1995 POWR Assessment: Perceptions of Wellness and Readiness Survey for the Naval Health Research Center (NHRC). In addition to the personalized training you will be given, the information provided in this manual will facilitate your preparation efforts before and during field data collection, and more specifically, it will enable you to be fully prepared to perform your critical assignment.

1.1 The 1995 POWR Assessment: Perceptions of Wellness and Readiness

The Naval Health Research Center has contracted with Research Triangle Institute, a not-for-profit research organization associated with the University of North Carolina, North Carolina State University, and Duke University, to collect data for their 1995 Perception of Wellness and Readiness survey. The purpose of the research is to conduct a worldwide survey of the health of active-duty Navy and Marine Corps women and men, with a special focus on women’s health care needs. The general objectives of this study are to:

- estimate the prevalence of a broad range of health variables overall and for demographic subgroups such as those defined by sex, race/ethnicity, age, and pay grade;
- assess the prevalence of selected diseases and disease risk factors in Navy and Marine Corps women;
- provide comparisons between differing populations of interest in the Navy and Marine Corps (e.g., women versus men, sea versus shore, junior enlisted versus senior enlisted, enlisted versus officers, surface versus aviation, CONUS versus OCONUS);
- compare prevalence findings on women’s health from the Navy and Marine Corps with civilian female populations;
- develop baseline information for the future status and trends of Navy and Marine Corps women’s risk factor and health information;
- identify appropriate female Navy and Marine Corps populations for specialized studies; and
- contribute to the understanding of disease etiology in female populations by collecting and analyzing risk factor information.
Introduction

1.2 Research Triangle Institute

Research Triangle Institute (RTI) is a not-for-profit contract research organization centrally located on a 180-acre campus in Research Triangle Park (between Raleigh, Durham, and Chapel Hill), North Carolina. The Institute was incorporated as a separate entity in 1958 by the University of North Carolina at Chapel Hill, Duke University at Durham, and North Carolina State University at Raleigh. Institute research is performed both in the United States and abroad under contract with Federal, State, and local governments, public service agencies, and industry clients ranging from small companies to national corporations. RTI occupies 18 well-equipped office and laboratory buildings and employs a permanent, full-time staff of approximately 1,500 individuals. NHRC has contracted with RTI to plan and conduct the data collection for the POWR95 Survey.

1.3 Information Services Group (ISG)

Information Services Group (ISG), based in Morrisville, NC, has a key project support role. Its principal business is that of data processing services, centering around an extensive optical scanning capability that is directed toward the research and test scoring markets. ISG’s responsibilities as an RTI subcontractor for the POWR95 Survey are the printing, shipping, and scoring of the survey questionnaires.

1.4 The Manual

This manual has been prepared as a procedural guide for the fieldwork associated with the POWR95 Survey. It should be carefully studied and reviewed before beginning your assignment as it contains detailed instructions pertaining to your assigned tasks. It is recognized, however, that it may not answer all questions or cover all situations encountered in the field. When in doubt about any field situation, you should contact Mr. Randy Keesling, the RTI Data Collection Task Leader, or Mr. Matt Rueckert, the RTI Assistant Data Collection Task Leader, according to the following instructions:
<table>
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<tr>
<th>Day/Time</th>
<th>From</th>
<th>Telephone #</th>
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<tbody>
<tr>
<td>1. Monday through Friday (8:00 a.m. to 5:00 p.m., Eastern Time)</td>
<td>A. Coterminous United States (Except North Carolina)</td>
<td>800-334-8571*</td>
</tr>
<tr>
<td></td>
<td>B. All Other Sites</td>
<td>919-541-6665* (Randy)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>919-541-7364* (Matt)</td>
</tr>
<tr>
<td>2. All Other Days/Times</td>
<td>Anywhere</td>
<td>919-362-0538 (Randy)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>919-942-7868 (Matt)</td>
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* If Mr. Keesling or Mr. Rueckert are unavailable, leave your name and phone number and one will return your call.
2.0 OUTLINE OF FIELD TEAM TASKS

Data Collection activities will be conducted by six two-person teams. The leader of each team will be an individual who is fully qualified and experienced in field data collection activities. The field team leaders are listed in Appendix A. Each field team is responsible for fulfilling the survey requirements at a number of first-stage units (FSUs). For this survey, an FSU is defined as a military unit or cluster of units for which unique personnel are assigned and which can be associated with an identifiable geographic location. For most FSUs, there exists a nucleus installation. Within each FSU, individuals from pay grade, race, and gender groups will be selected to participate in the survey. Survey administration at each FSU will require two or more days for completion.

The data collection task consists of two broad areas: (1) Tasks to be completed by the field team leader for each assigned FSU before the team arrives at the nucleus installation and (2) activities to be completed by the team during the site visit. These areas are summarized below and described in detail in later chapters.

2.1 Activities to be Completed Before Site Visit

There are five main activities that field team leaders need to complete prior to visiting their designated installations:

1. Telephone Military Liaison Officers (MLOs) at assigned nucleus installations to confirm receipt of survey materials and to discuss all aspects of the survey.

2. Conduct additional telephone and mail contacts with MLOs as necessary to insure that all arrangements are completed on schedule and according to prescribed procedures.

3. Develop cost-effective travel arrangements to assure coverage of all assigned FSUs.

4. Complete necessary travel arrangements and submit itinerary to the Data Collection Task Leader. For foreign assignments, obtain required travel documents (passport, visa, etc.).

5. Pack necessary supplies, forms, etc. in sufficient quantities.
Outline of Field Team Tasks

2.2 Activities to be Completed During Site Visit

There are ten key activities that field teams need to conduct during the site visit at each installation:

1. Arrive at the nucleus installation area no later than the afternoon preceding the scheduled site visit.

2. Meet with the MLO as early as feasible (not later than 0830 hours) the first morning of the installation visit. During this meeting:
   - Establish a rapport and amicable working relationship with the MLO.
   - Review the survey administration schedule.
   - Review the separate team member itineraries if indicated by the administration schedule.
   - Re-emphasize necessity for high attendance (no personnel substitutions are ever permitted).
   - Enlist MLO’s help in notifying absentees to appear at another scheduled session.

3. Conduct survey sessions according to prescribed instructions. Document attendance of each participant on a Sample Personnel List.

4. Notify the MLO of persons who failed to attend sessions and ask his/her assistance in notifying them to attend an alternate session.

5. Conduct additional sessions as necessary. Document attendance of each participant.

6. Ask for the MLO’s assistance in documenting the official reason for absence of all individuals.

7. Document all attendance and absence codes on the hard copy roster and in the laptop PC.

8. Prepare and mail the Phase II packages.

9. Ship completed survey questionnaires to ISG.

10. Mail to RTI a Sample Personnel List that documents all Phase I attendees and absences.
3.0 PREPARATORY SURVEY ACTIVITIES

3.1 Field Team and MLO Guidelines

This manual and the MLO guidelines have been prepared to assist you in all field operations for the POWR95 survey. To thoroughly understand your responsibilities, it is imperative that you read and review this manual and the MLO guidelines. When you have a firm grasp of the procedures outlined in both, you will be fully prepared to begin your assignment.

3.2 Telephone Contact with MLOs

Prior to the first training session at RTI, telephone each of your MLO’s and introduce yourself. The purpose of this first call is primarily for you to establish a rapport and amicable working relationship with the MLO. Please note that unlike the DoD survey where everyone from the MLOs’ to the respondents were essentially under orders to support and attend the survey, this is not the case with the POWR95 survey. You must work with the MLO’s as if everything they do, and that you ask them to do, is being done as a personal favor to you.

Additional objectives of these phone calls are to:

1. Introduce yourself and your team assistant
2. Reconfirm the survey dates for the nucleus installation
3. Confirm the receipt of the MLO guidelines
4. Reconfirm the MLO’s shipping and mailing addresses; telephone numbers (both commercial and DSN); fax number; and internet and E-Mail addresses (if available)
5. Review what Phase I assistance the MLO could render
6. Discuss the RTI team’s survey responsibilities
7. Discuss the possible need to designate additional points of contact to assist with surveying remote units
8. Discuss the possibility of mixed Service survey sessions and coordinating
Preparatory Survey Activities

survey activities with MLOs at other FSUs

9. Discuss shipment of the survey questionnaires to the MLO

10. Discuss unique or special circumstances (troop movements, deployments, unit rotations, maneuvers) affecting data collection

11. Inform the MLO that you will carry invitational travel orders (RTI will send copies to the MLOs)

12. Discuss your team’s itinerary (most relevant for overseas teams)

13. Note any problems or concerns the MLO may express regarding their tasks or the schedule.

Bring your notes regarding these initial calls to the training session. We will ask you to report on each contact during the meeting.

3.3 Additional Communications with MLOs

Additional correspondence and telephone communications with MLOs must be conducted as necessary. During these communications, verify that all preparatory activities are being successfully implemented by the MLO. The crucial tasks which must be completed by the MLO before your arrival include:

1. Receipt of the shipment of questionnaires from ISG and their secure storage

2. Reservation of the survey administration facility(ies). (Ask the MLO to personally visit the facility(ies) and view the furniture, writing surfaces, lighting, etc. prior to your arrival.)

3. Reminder calls to UIC CO’s one week before the scheduled sessions

4. Develop plan for notifying no-shows to attend an alternate session

If you have any reservations that an assignment is not being properly performed by the MLO, you must immediately inform the Data Collection Task Leader or Assistant.
3.4 Make Final Travel Arrangements

As soon as your data collection schedule is complete, you should complete all necessary travel arrangements for your team. You are responsible for securing your own lodging at all sites during this survey. MLO’s are not responsible for securing your lodging. Please do not impose on them by making such requests. You may, however, ask an MLO if they know of any available lodging on base (reminding them you will have Invitational Travel Orders authorizing billeting and messing on base) and the name and number of who you would contact to make the necessary arrangements. Some MLO’s may offer to make the on-base arrangements for you and that is perfectly alright. Just never ask them to do so directly or in any way imply that is part of their responsibilities on this project.

If there is no billeting on base, you may ask the MLO to recommend the nearest commercial lodging to the base, but do not ask the MLO to make commercial reservations for you.

As you make your travel and lodging arrangements, complete the Field Team Itinerary Report (See Figure 3-1). Your travel itinerary must identify the telephone numbers (installation and lodging) where you can be reached day or night. Foreign numbers must include the country code. It is imperative that RTI be able to make contact with you within a few hours. A copy of the travel itinerary should be forwarded to the Data Collection Task Leader. Additional travel details regarding lodging, passports, etc., are included in Chapter 5.
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4.0 FIELD TEAM INSTALLATION VISIT TASKS

Chapter 2 outlined the tasks that must be completed at each assigned FSU. This chapter details the procedures that are to be followed to accomplish each of those tasks. While some flexibility will undoubtedly be required during your field work, it is imperative that each team member make every effort to conduct the installation visit process within the constraints discussed below.

4.1 Coordination With MLO

During the first morning of the installation visit, work closely with the MLO to finalize all arrangements for the remainder of the visit. Your communications with the MLO before your arrival (see Chapter 3) will ensure that the following items have been addressed. However, it is mandatory to review each of these during your first meeting with the MLO, and to verify that they have been completed correctly.

4.1.1 Review the Survey Administration Schedule

It is crucial that you review the schedule that the MLO has prepared to ensure that sufficient time is allocated for completion of all assignments.

- Have 90 minutes been allowed for each survey administration session?
- Will the MLO have sufficient time to notify nonrespondents to appear for another scheduled session?
- Are multiple administration facilities to be used? If so, is there sufficient time for the team to get from one site to the next?

4.1.2 Inquire about the Survey Facility

The rooms where the group administrations will be conducted must be large enough to accommodate the maximum number of personnel assigned to a session. Suitable writing surfaces will be needed with sufficient space between individuals so that responses remain private.
Field Team Installation Visit Tasks

4.1.3 Re-Emphasize the Necessity of High Participation Rates

It is essential that the POWR95 Survey achieve high response rates. You should re-emphasize this fact to the MLO so that a concerted effort will be made to get all selected personnel to an administration site. Again, how much assistance an MLO provides in this effort will be due in part to the degree that you are able to establish an amicable and supportive working relationship with the MLO.

The only reasons which may prevent attendance are:

- TDY/TAD
- PCS
- On Official Leave
- Ill in quarters or hospital
- Separated from Service
- Incarcerated
- AWOL/Desertion
- Inaccessible (at sea or deployed)
- Geographically separated (isolated) unit.

All selected personnel who otherwise do not fall into one of the above categories are expected to appear for a survey session. **NOTE:** Individuals aboard ships that are in port and personnel who are in units "in the field" (but still near the installation area) are considered accessible and are expected to participate in the survey. If personnel are accessible, you should arrange to conduct group sessions on ships and in the field. In these cases, ask the MLO's assistance in arranging transportation if not accessible by private vehicle.

4.1.4 Briefing Base Commanders

On occasion, a base commander or other high ranking officer in the command structure, may invite you to meet with him/her before and/or after your data collection activities. Often this is just a courtesy call to brief the officer(s) on the study background and procedures. The officer(s) also often take a personal interest in seeing that their base is well represented in the survey and, therefore, ask that you report back to them on participation rates at the conclusion of your visit. If so, be sure to make time for this visit.
Field Team Installation Visit Tasks

It is essential that you are prepared to attend these meetings at any and all bases you visit. Hence, be familiar with the study background and take copies of the questionnaire with you to give to the officer(s). As a representative from RTI, always conduct yourself in a professional and respectful manner during these visits. Remember that most installations will treat you as a guest. As such, be courteous and appreciative of the hospitality and cooperation shown.

NOTE: Often, the base commander may ask for the survey results for his/her base or command (i.e., figures on the behaviors and activities being measured by the survey). Be very clear that data at the FSU level is not calculated or studied for this project. If they would like copies of the results from the POWR95 study, refer them to:

Dr. Lauren Hourani
Naval Health Research Center
P.O. Box 85122
San Diego, CA 92186-5122
DSN: 553-8460
E-Mail: HOURANI@VAX309.NHRC.NAVY.MIL

4.2 Phase I Survey Administration Procedures

4.2.1 Before the Participants Arrive

The importance of being organized and fully prepared for each group administration cannot be overemphasized. You must be ready to make effective use of each minute of each group session. Not being properly prepared can result in serious logistics problems. For example, if you delay too long in getting started, the participants may not finish before the time set aside for the beginning of the next group session, or for travel to another survey site. Have the following materials available before the arrival of the selected personnel:

- Survey questionnaires in sufficient quantity
- Consent forms in sufficient quantity
- "Special Handout" forms in sufficient quantity
- No. 2 pencils (sharpened) in sufficient quantity
- Your copy of the Sample Personnel List
- Your manual
Field Team Installation Visit Tasks

4.2.2 When the Participants Arrive

As personnel arrive, check them in to ensure that only sample personnel are seated for a session. Find the participant’s name on the session UIC roster and put a check by it. Also find the name on your "Alpha" Sample Personnel List and place a check by it. This is also an opportunity to ensure that attendance of personnel from more than one Service or FSU has been properly documented. It is imperative that you have obtained the individual’s name and placed a check next to it on the "Alpha" Sample Personnel List.

As you check them in, give respondents a pencil and a multipart consent form and ask them to take a seat. DO NOT give them questionnaires at this time.

As soon as the no-shows for the session are known, inform the MLO of their identities so s/he can arrange for them to attend another scheduled session. It is preferred that the MLO not be present in the administration room during the session.

4.2.3 After the Participants are Seated

After all selected personnel are seated, give each person a questionnaire booklet and a blue special handout form, then make the announcement printed below.

"Good Morning/Afternoon. My name is (NAME) and this is (NAME). We are representatives of the Research Triangle Institute of North Carolina. The institute is a non-profit civilian research organization that conducts surveys for government, industry, and public service agencies. We are currently conducting a survey for the Department of the Navy through the Naval Health Research Center to provide a comprehensive world-wide assessment of health-related issues for both the Navy and Marine Corps.

All of the installations being surveyed worldwide were randomly selected. Similarly, your name was chosen at random from a computer-generated list of officers and enlisted personnel to participate in this survey. In a survey such as this, it is not possible to survey everyone on active duty in each service. Therefore, each of you who has been randomly chosen and participates represents thousands of other service personnel. In order for us to have useful results, it is important that you provide complete and accurate responses to the questions asked. Your participation, however, is voluntary and you have the right to leave if you do not want to participate. You also have the right to refuse to answer any question to which you object."
Because of the importance of the survey and to encourage your frank and honest responses, the questionnaires will be kept secured by RTI staff during our visit here and will be shipped to a civilian scoring contractor when we’ve finished. No one at (FSU NAME) will have access to any of the completed questionnaires.

When you checked in at the door you should have received a consent form. Most of you have probably read it by now and, therefore, know something about the purpose of the study, the confidentiality associated with the data, and who you can contact for additional information.

If you're willing to participate in completing the questionnaire, please sign the form and have the person sitting next to you sign as a witness. Tear off the back copies and keep them for your personal records and, if you like, your medical file. Please turn in the white copy when you’ve finished the questionnaire.

Looking at the questionnaire booklet, please read the instructions inside the cover carefully. Directions for marking your answer choices are provided there. Be sure to blacken in the circles completely so the scoring machine will read them correctly. Also be careful not to make any stray marks in the booklet.

To illustrate this, and to take care of an administrative task at the same time, please turn your booklet over to the very back page. Note the "Office Use Only" block (hold up example and point to block). On the line below "Nucleus Installation" please write in (FSU NAME). Then, on the grid under "FSU" write in the number (4-DIGIT FSU #), one digit per box. Then in the column below each digit, darken in the corresponding number. This number merely identifies the nucleus installation. Finally, under "Survey Phase" darken the circle next to the "1". Has everyone completed this task?

Inside the back of the questionnaire you will find a loose blue sheet. Does everyone have a blue form with their questionnaire? This special handout is self-explanatory. If you complete it, please return it to us when you’ve completed the questionnaire.

Please do not attempt to resolve any questions with your neighbor. As you progress through the questionnaire, if you have questions or need another pencil, just raise your hand. Are there any questions?

You will have approximately 60 minutes to complete the questionnaire. When you have finished, please place the questionnaire, the signed consent form, and the pencil in the boxes here. Those turning in the blue handout may place them here (POINT TO BOX).

I want to thank you for your participation in this important survey."

NOTE: Practice and familiarize yourself with the announcement prior to arriving at the installation. You may read the announcement verbatim, or, if you prefer, summarize the statement in your own words when speaking to the participants. If
Field Team Installation Visit Tasks

you summarize, it is important that the participants understand the various points of the introduction, particularly that participation in the study is voluntary.

4.2.4 When the Participants Finish

A team member should be stationed at the door to ensure that each participant deposits his/her questionnaire and related items in the appropriate locations. As questionnaires are placed in the box, or during the next session, check to see that the "Office Use" block was properly completed. Prior to shipping the questionnaires, make any needed corrections. Again, be sure the MLO is not located anywhere near the box of completed questionnaires.

4.2.5 Handling Intra- and Inter-Service Sessions

Often referred to as "split lists," intra-Service sessions occur when sample personnel from the same Service, but from different FSUs, attend the same survey session. Inter-Service sessions may also occur when sample personnel from the other Service attend the same survey session. You, of course, should already be aware of these possibilities because of your previous discussions with MLOs responsible for FSUs assigned to you, and possibly because of discussions with members of other Field Teams. All split lists should be coordinated through RTI project staff. Mailing out Phase II packets will usually be handled by the original FSU team since they will have the mailing labels. The team surveying the split list personnel however, must credit the attendance of personnel regardless of Service or FSU.

4.2.6 Possible Return Visits

Periodically, it may be necessary for a team to return to an already surveyed installation in an attempt to maximize Phase I attendance. This return site visit would be geared toward unacceptably large numbers of nonrespondents who were either on temporary duty assignments (TDY/TAD), separated from their unit, inaccessible, sick, or some other documented reason for not attending the session. Often times, the return visit is needed when entire selected units are "in the field" or on maneuvers during the original site visit, but, will return in a matter of days. Return visits will ultimately depend on the following:

- Team member’s travel itinerary.
Field Team Installation Visit Tasks

- Returning site location must be in close proximity or enroute to the next identified installation on the team member's itinerary.

- Total number of identified nonrespondents is significant enough to authorize a return.

- Scheduled return visit must be within the original data collection window.

- A large percentage of the nonrespondents will be at the installation the day of the scheduled return visit.

- Willingness of the MLO to secure additional administration rooms and notify nonrespondents of the time and place of their scheduled session(s).

- Prior approval from the Data Collection Leader or Assistant.

NOTE: It is important to note that the team leader must get prior approval from Randy Keesling or Matt Rueckert before a return visit to an installation is scheduled with the MLO, although you should at least discuss the possible need with the MLO to get a reading of his/her willingness to work a re-visit before contacting RTI.

4.3 Coding Questionnaires

Figure 4-1 shows the "Office Use" block that appears on the back cover of the survey booklet. The four-digit FSU number must be written on the grid, then the corresponding numbers below the FSU number "bubbled" in, and the Phase I data collection status must be "bubbled" in for each Phase I participant before the completed questionnaires are shipped to ISG. For recipients of the Phase II mailing, the items must also be entered and "bubbled" in by the team members before the questionnaire packet is mailed to an eligible nonrespondent. Without this number, the questionnaire will not be of any use to the survey. On the line provided for nucleus installation, write in the nucleus installation name shown at the top of the Sample Personnel List.

Checking the completed Phase I "Office Use" blocks as well as coding a supply of Phase II questionnaires are tasks that can be done efficiently during sessions as you sit and monitor the group. It makes good use of otherwise non-productive time and can save you a lot of work later during the "crunch" time at the end of your site visit.
Field Team Installation Visit Tasks

Figure 4-1
Example of Block for Office Use

```
<table>
<thead>
<tr>
<th>THIS BLOCK</th>
<th>2</th>
<th>5</th>
<th>3</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR OFFICE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USE ONLY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

FSU

Nucleus Installation:

Kings Bay, GA

Survey Phase

I  II

-  -

4-8
Field Team Installation Visit Tasks

4.4 Phase II Data Collection Procedures

4.4.1 Identifying the Phase II Sample

Selected nonrespondents to Phase I data collection will be identified after all efforts are expended to maximize Phase I session attendance at a particular duty location or within a particular unit of assignment. Questionnaires will be mailed to eligible Phase II personnel.

The timing of this selection will vary by FSU. Ideally, all sample personnel would be located at the nucleus installation or would be in close enough proximity to the nucleus so that Phase I data collection could be completed in a two-day period. In that case, the Phase II sampling could be completed with the intact Sample Personnel List in a single operation. In many instances, however, attempts to survey all personnel within an FSU may not be completed during the site visit to the nucleus installation or during the same week. In other instances, completion of all Phase I efforts for an FSU may be linked with a team member’s or another team’s efforts to survey personnel in an FSU. Fragmented efforts, in a calendar sense, will dictate a different approach to when and how the selection may proceed.

The key to when to perform the Phase II selection is when all efforts to survey sample personnel at a particular location, or within a particular unit assignment, for example on board a ship at sea or with a deployed unit, have been completed.

The selection may be done with an intact Sample Personnel List at one time, or with segments of a list over a period of time. In the latter case, you would probably want to use segments of the Sample Personnel sorted by unit of assignment. You must decide which list to use based on the logistics of and the expected completion time of Phase I data collection in an FSU.

4.4.2 Documenting Official Reasons for Personnel Absences

You are responsible for identifying the official reason why each nonrespondent was not present for a Phase I session. You may ask for the MLO’s assistance in this task. If necessary, you should ask others who attend from the same UIC if they know the status of a non-attendee. You may have to place a call to the UIC CO yourself in cases where the MLO is not willing or able to be of assistance.
Field Team Installation Visit Tasks

Documenting absences can be done in phases as the sessions are being conducted, but needs to be completed, preferably before you leave the installation or area. Official reasons and codes for Phase I nonattendance are given in Figure 4-2. These codes should be used to document nonattendance on the master personnel roster.

NOTE: "No-shows" (NS) should be regarded by the team and the MLO as generally being unacceptable and, therefore, used only as a last resort. Use this code only if 1) another code cannot be legitimately assigned AND 2) all attempts to notify, reschedule, and get the respondent to a Phase I session have failed.

4.4.3 Mailing Questionnaires to Eligible Nonrespondents

You are responsible for mailing questionnaires to eligible persons in the Phase II sample. Persons who are ineligible and who must not receive a questionnaire in the mail include:

- PCS (permanent change of station)—persons no longer with the unit specified on the Sample Personnel List;
- Separated (discharged) from the Service;
- AWOL (absent without leave);
- Person unknown; and
- Deceased.

All other Phase I nonattendees are eligible and must be sent a Phase II packet either through the U.S. mail or, preferably, hand delivered through the units. The packet must consist of the following items:

- an outer envelope with the respondent's address label affixed containing;
- a questionnaire with the FSU number and Phase II indicator entered and "bubbled" in on the reverse side;
- a business reply envelope for the respondent to use in mailing the completed questionnaire directly to ISG;
- an RTI cover letter to the recipient that explains the survey (see Figure 4-3);
- a consent form; and
- a blue "Special Handout" form.
### Field Team Installation Visit Tasks

#### Figure 4-2

**1995 POWR Assessment**

**INSTALLATION REPORT**

**I. IDENTIFYING INFORMATION**

<table>
<thead>
<tr>
<th>FTL Name:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSU Number:</td>
<td>Nucleus Installation:</td>
</tr>
</tbody>
</table>

**II. SAMPLE PARTICIPATION INFORMATION**

<table>
<thead>
<tr>
<th>Pay Grade Grouping</th>
<th>MALE</th>
<th>FEMALE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>E1-E6</td>
<td>E7-E9</td>
</tr>
<tr>
<td>A. FSU Population</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Total Personnel Selected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Phase I Participants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Nonattendees (D = B-C)</td>
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<td></td>
</tr>
</tbody>
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**III. OFFICIAL REASONS FOR PHASE I NONATTENDANCE**

<table>
<thead>
<tr>
<th>Phase II Ineligibles</th>
<th>PCS</th>
<th>AWOL</th>
<th>Person unknown (UNK)</th>
<th>Deceased (DEC)</th>
<th>Separated from service (SEP)</th>
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<thead>
<tr>
<th>Phase II Eligibles</th>
<th>TDY/TAD</th>
<th>On Leave (LV)</th>
<th>Geographically separated unit (GSU)</th>
<th>At sea/Deployed (SEP)</th>
<th>Ill/Hospitalized (HOSP)</th>
<th>Incarcerated (JAIL)</th>
<th>No show (NS)</th>
<th>Other</th>
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**IV. QUESTIONNAIRE SHIPPING INFORMATION**

<table>
<thead>
<tr>
<th>Quantity Shipped</th>
<th>Date</th>
<th>Shipped from</th>
<th>Carrier</th>
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**V. COMMENTS**

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4-11
Dear Member of the Navy and Marine Corps:

Research Triangle Institute (RTI) of North Carolina, a nonprofit research organization, is currently conducting a survey for the Department of the Navy through the Naval Health Research Center to provide a comprehensive worldwide assessment of health-related issues for the Navy and Marine Corps. Your name was chosen at random from a list of officers and enlisted personnel to participate in this survey.

Thousands of Navy Department personnel are completing questionnaires at military installations around the world. Representatives of RTI recently conducted survey sessions at the installation where your name was selected. Since you were not able to attend a session, we are asking you to complete the questionnaire now. No substitutions can be made for selected personnel. That is why you are so important to us.

Because of the sensitive nature of the information in this survey, the importance of the survey, and to encourage your frank and honest responses, you will mail your completed questionnaire directly to a civilian scoring contractor using the enclosed business reply envelope.

In a survey such as this, each person who participates represents thousands of other service personnel. In order for us to have useful results, it is very important that you provide complete and accurate responses to the questions asked. Please complete the questionnaire in private and do not show it to anyone.

Directions for marking your answer choices are given inside the cover page. Please read the instructions carefully. **USE ONLY A SOFT LEAD (NO. 2) PENCIL**; do not use a colored pencil or pen of any kind.

When you have finished, seal the questionnaire in the enclosed envelope and mail it to our printing and scoring contractor, Information Services Group (ISG), Morrisville, N.C. **NOTE**: As this is a Business Reply envelope, be sure to place it in a U.S. Postal system box. On behalf of RTI, I want to sincerely thank you for your participation in this important survey.

Sincerely,

Randall Keeling
Data Collection Task Leader

Enclosure
Field Team Installation Visit Tasks

How quickly the Phase II tasks are executed depends first on how quickly Phase I efforts are completed. Phase I efforts must be completed expeditiously, efficiently, and thoroughly, as must Phase II tasks.

4.5 Final Field Team Installation Visit Tasks

4.5.1 Documentation of Sample Personnel Lists

Insure that a check mark has been placed beside the name of every Phase I participant and that all persons chosen for the Phase II sample have been clearly identified (preferably with a highlighter). Credit for attendance must be recorded at the time each Phase I session is conducted. Identification of Phase II individuals may be done over a period of time if the unit of assignment listing is being used, or it may be accomplished at one time if the alphabetical listing is used.

4.5.2 Keying the Data and Completion of the Installation Report

For the 1995 POWR survey, a software program was developed which will allow teams to load the names of all selected respondents for an FSU onto a laptop PC. Using the software, team members can pull up individual names and enter the attendance/absence code and, with the push of a button, have the computer fill in the Installation Report. It will also identify and display a list of all eligible Phase II respondents.

Training in the software will be provided to the teams at RTI during the August session. Relevant documentation and instructions will be provided at that time. Training on the completion of hard-copy forms, in the event of PC failure in the field, will also be provided.

You will complete an Installation Report, either electronically or in hard-copy, for each FSU (and split list) you are assigned.

Figure 4-2 shows a properly completed hard-copy Installation Report. Complete Part I in full for each FSU. Information in Part II should be taken directly from the FSU Sample Summary and from the counts obtained from a fully documented Sample Personnel List. ALL COUNTS MUST BE ACCURATE. Reports of these counts are basic inputs to the statistical estimates that will be produced for the POWR95 Survey. Complete this report
Field Team Installation Visit Tasks

when all Phase I and Phase II activities have been completed by your team.

In Part III of the report, record the official reasons for all Phase I nonattendees by separating the Phase II ineligibles and Phase II eligibles according to the specified categories listed below. When reviewing the completed installation report, note that in Figure 4-2, the total for nonattendees in Part II and total nonattendees in Part III are identical. These two numbers should always be the same. Part III of the form must be completed for the entire group of no-shows based on the following categories for Phase I nonattendance:

- **PCS**—persons who have permanently changed station or duty location. They are no longer assigned to the unit that they are identified with on the Sample Personnel Listing.
- **TDY/TAD**—persons who are on temporary duty assignments which prevent them from attending a Phase I session.
- **Official Leave (LV)**—persons who are on official leave from duty.
- **Geographically Separated Unit (GSU)**—persons who are in this category will primarily be embassy personnel in countries where team members will not be travelling, or recruiters who are in cities or towns that will not be visited during the course of the fieldwork. Other personnel who may be included in this category are those whose duty location is so remote that they are not surveyed in Phase I.
- **Inaccessible/At Sea/Deployed (DEP)**—personnel in this category have duty locations at the time of Phase I activities which prevent their attendance at a Phase I session, or their locations are too inaccessible for a team member to visit.
- **Ill/Hospitalized (HOSP)**—includes persons who cannot attend due to illness or hospitalization, and who a team member does not have access to for administration of a questionnaire.
- **Separated from Service (SEP)**—includes persons who have retired or been discharged and are no longer on active duty.
- **Incarcerated (JAIL)**—this category includes persons in jail or the brig who do not attend a Phase I session, and who are inaccessible to a team member.
- **AWOL**—persons who are absent without leave from duty.
Field Team Installation Visit Tasks

- **Unknown (UNK)**—some personnel may be completely unknown to the unit of assignment specified on the Sample Personnel List. In effect, no record of these persons exists.

- **Deceased (DEC)**—persons who have died since the time the sample was selected.

- **No-shows (NS)**—persons in this category include those who cannot be categorized in one of the above categories. These persons simply did not attend any Phase I session.

4.5.3 **Shipping Completed Questionnaires**

EACH AND EVERY SHIPMENT MUST BE PROPERLY LABELLED WITH THE FSU NUMBER. This must be done by enclosing a transmittal form (see Figure 4-4) within each carton. Record on the form the Service, FSU number, nucleus installation name, and a count of the questionnaires. If questionnaires from more than one Service or FSU are enclosed in the same container, those for each Service or FSU must be separately bound (with rubber bands) and all FSU and Services recorded on the transmittal form.

For most FSUs, questionnaires were shipped to the MLO via 1st class mail. Completed questionnaires must be returned to ISG using the business reply labels. When using these labels overseas, however, be certain that you place the shipment in the U.S. mail on base. Return business reply labels will be enclosed in the containers in which the questionnaires were originally shipped, and you will be given an extra supply to carry with you. Affix the return labels over the outbound label that was addressed to the MLO. Since there is a possibility that original shipping containers were structurally weakened during the shipment to the MLO, be sure to reinforce the boxes for the return shipment using the fiberglass reinforcing tape provided in your supplies.

4.5.4 **Thanking the MLO**

MLO efforts are considerable and essential to the success of the POWR95 Survey. Before departing, express our appreciation for the job they have performed.
### Field Team Installation Visit Tasks

**Figure 4-4**

### COMPLETED QUESTIONNAIRE TRANSMITTAL FORM

<table>
<thead>
<tr>
<th># Boxes Shipped</th>
<th>2</th>
<th>Date Shipped</th>
<th>9-13-95</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>FSU '#'</th>
<th>Service</th>
<th>Nucleus Installation</th>
<th>Questionnaire Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2545</td>
<td>NAVY</td>
<td>NAS</td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td>Key West</td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL IN SHIPMENT** 288
5.0 ADMINISTRATIVE PROCEDURES

This chapter describes the administrative procedures that must be followed when traveling for RTI on project business either domestically or internationally. If there are questions for which an answer cannot be found in this manual or in the referenced materials, contact Randy Keesling at RTI.

5.1 General International Travel Information

The Team Leader will be responsible for making all international travel arrangements for him/herself and assistant. Upon request, each team will receive a travel advance at least three weeks before departure.

At this time, RTI is negotiating arrangements for issuance of Invitational Travel Authorizations which will entitle teams to housing (billeting), meals (messing), and military transportation, when available. Emergency medical care will be provided if needed. All team members are covered by Worker's Compensation through their employer, Select Staffing Services, Inc. When needed, local transportation (car rental) should also be arranged on the local economy when not furnished by the installation.

5.2 Personal Preparations

5.2.1 Passports and Visas

Each team member traveling internationally must have a valid passport and, in some cases, visas for travel into and out of countries in their assignments. Your passport must be annotated with the visa. RTI will assist you, as needed, in securing these documents.

5.2.2 International Driver's License

Each team member traveling internationally should secure an International Driver's License from a local American Automobile Association (AAA) office. One does not need to be an AAA member to secure this license. Requirements call for two passport-type photographs, a current U.S. driver's license, and a minimal fee. These should be secured no later than two weeks before departure.
Administrative Procedures

5.2.3 Immunization

Immunization may be required for certain international sites. You should check with your local Public Health Service immediately concerning immunization requirements for the countries in your assignment. Be aware that some series of shots require up to three weeks to complete.

5.2.4 Customs

Should you plan to carry with you any foreign-made items (cameras, watches, tape recorders, etc.), you should contact your local customs office for specific registration regulations.

5.2.5 Prescription Drugs and Medications

If you are taking prescribed medication or otherwise need to carry such drugs with you, keep them in the original labelled container. By no means should you carry unauthorized drugs or medications into foreign countries.

5.2.6 Credit Cards and Money Matters

Since all team members will be issued travel advances upon request, the use of credit cards is discretionary. If you feel it is easier to deposit the advance (or a portion of it) and primarily use credit cards while traveling, you are free to do so.

You may find it advantageous and convenient to purchase travelers checks before your departure. Some credit unions, banks, and AAA offices offer travel check purchases at no charge for members. Inquire into the possibility of purchasing these checks in the dominant currency for the area in which you will be traveling; the rate of exchange may be more favorable. Travelers checks are readily cashed at Officer’s Clubs or local banks.

5.2.7 Clothing

Be sure to carry with you clothing appropriate to the climate in the area you will be visiting. As a representative of RTI and NHRC, a neat and respectable business appearance is always required. Jacket and tie for men will be appropriate at most locations.
5.3  Time and Expense Reporting

Each team member is responsible for maintaining accurate records of daily time and expenses while working on the project. This section provides the information you need to know in order to complete the report forms on which your expense reimbursement and earnings will be based. It is important for you to follow the procedures outlined precisely, because failure to complete your time and expense reports correctly may result in a delay in processing for payment. Time reporting during the period when you are on assignment in the field must be done weekly. Expense reporting must be documented each day reimbursable expenses are incurred, and the report submitted each week during the data collection period.

5.3.1  Reporting Time - Team Leader Survey Preparatory Activities

Team leaders are compensated on an hourly rate basis for all time spent in training and in conducting MLO coordination activities from home. Team assistants will be compensated on an hourly basis only for the time spent at the August training session (including travel and home study time). Time and any expenses incurred are to be reported on a Production, Time, and Expense (PT&E) report form (See Figure 5-1).

To complete the report weekly, fill in the following:

1. Sunday beginning week date
2. Project #6330-003
3. Column C-1 = total hours worked each day
4. Split up Column C-1 total into Columns C2 through 8
   - Column C-2 = all time spent at both training sessions and reading this and the MLO manual
   - Column C-3 = all time spent travelling from your home to training and back
   - Column C-4 = all time spent working with the MLO's
   - Column C-5 = NOT USED
   - Column C-6 = NOT USED
## Figure 5-1

### Production, Time, and Expense Report (PT &E)

**Week beginning Sunday 9 13 25**

**Month Day Year**

<table>
<thead>
<tr>
<th>Day</th>
<th>Production</th>
<th>Time</th>
<th>Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sun</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mon</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Tue</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Wed</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Thu</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Fri</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sat</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>7</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

**FOOTNOTE**

1. Total hours worked each day to the nearest 1/4 hour, then allocate time as appropriate in columns C-2 through C-8.
2. Meal hours must be expressed in decimal form rather than as fractions.
3. Specify activity in the Notes section below.
4. Report actual meal expenses within established daily limits (see project or general manual).
5. If more than one item in the Notes section below, receipts must be attached for items exceeding $100.
6. Incentive receipts must be attached.

**ADVANCE REPAYMENT**

If you have an outstanding travel or meal advance, indicate the amount you would like deducted from this PT&E. Client reserves the right to reduce any amount deemed appropriate.

### Administrative Procedures

- **For Office Use Only**
  - **Summary**
    - Total Hours (Col. C-11) = 8
    - Overtime = 0
    - Total Meals (Col. D-9) = 0
    - Total Expense (Col. D-10) = 0
    - Advance Repayment = 0
  - **Total Amount Due** = 0

- **Approved by**
  - Supervisor
  - Date

- **Notes**
  - Received $100 for Meals During the Week
  - Other notes as necessary.
Administrative Procedures

- Column C-7 = time spent reporting to RTI staff either by phone or E-Mail
- Column C-8 = any other time spent working on the project, such as going to the Post Office

5. Column D-9 = total miles driven (i.e. to P.O., to and from airport, or to training, etc.)

6. Column D-10 = total out of pocket expenses (i.e., postage, photocopies, training travel expenses, etc.)

7. Split up Column D-10 totals into respective Columns D11 through 16

8. Name, address, and signature block

Complete the PT&E in pen. Keep the last copy for your own records. Mail the first three copies to RTI weekly using the business reply envelopes provided. PT&Es will be used to report time spent on project activities only until the team departs for their first FSU.

5.3.2 Reporting Time - All Field Team Members

The Field Team Member's Weekly Time Report (Figure 5-2) requires that you report the total number of days during the week that you work all or part of a day (include travel as working). Saturdays and Sundays are to be included in the count if you work or travel on those days.

Begin keeping this report the day that you depart for your first FSU scheduled for data collection. Submit the report at the end of each week to Randy Keesling at RTI.

5.3.3 Reporting Expenses

The Field Team Member Expense Report (Figure 5-3) requires that you document reimbursable expense incurred each day. For each of the following items (except mileage, of course) obtain and submit receipts whenever possible.

- Mileage—Enter the miles driven in your personal automobile. You will be reimbursed at .30 cents for each mile driven on RTI business.

- Bus, subway, or other mass transit fares when such transportation is required to complete assigned work.
Administrative Procedures

Figure 5-2

1995 POWR ASSESSMENT

[Signature]
(PRINT NAME)

During the week of 9-17-95, I worked on Project 6330-003 a total of 7 days.

Team Member’s Signature [Signature]

ID Number 476321

Approved By

Date Approved
## SELECT Staffing Services
### FIELD TEAM MEMBER EXPENSE REPORT

**Project #6330-003**

**FOR WEEK BEGINNING SUNDAY 9/17/95**

<table>
<thead>
<tr>
<th>Date</th>
<th>From</th>
<th>To</th>
<th>Via</th>
<th>Mileage</th>
<th>Lodging</th>
<th>Meals</th>
<th>Telephone/Telegraph</th>
<th>Auto Rental</th>
<th>Misc.</th>
<th>Total Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>Nashville</td>
<td>Mobile</td>
<td>Kansas City</td>
<td>1500</td>
<td>15 00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15 00</td>
</tr>
<tr>
<td>M</td>
<td>18</td>
<td></td>
<td></td>
<td>22 00</td>
<td>22 00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 00</td>
</tr>
<tr>
<td>T</td>
<td>19</td>
<td></td>
<td></td>
<td>24 50</td>
<td>24 50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24 50</td>
</tr>
<tr>
<td>W</td>
<td>20</td>
<td>Mobile</td>
<td>Pensacola</td>
<td>Rental Car</td>
<td>103 00</td>
<td>24 00</td>
<td></td>
<td></td>
<td></td>
<td>127 00</td>
</tr>
<tr>
<td>T</td>
<td>21</td>
<td></td>
<td></td>
<td>18 00</td>
<td>18 00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18 00</td>
</tr>
<tr>
<td>F</td>
<td>22</td>
<td></td>
<td></td>
<td>20 77</td>
<td>20 77</td>
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<td></td>
<td></td>
<td></td>
<td>20 77</td>
</tr>
<tr>
<td>S</td>
<td>23</td>
<td>Pensacola</td>
<td>Nashville</td>
<td>Rental Car</td>
<td>125 00</td>
<td>10 00</td>
<td></td>
<td></td>
<td></td>
<td>135 00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>231 00</td>
<td>136 47</td>
<td></td>
<td></td>
<td></td>
<td>57 98</td>
</tr>
</tbody>
</table>

**TOTAL EXPENSES:**

- **Fares or Mileage:** 5798
- **Lodging:** 425 40

---

### Administrative Procedures

<table>
<thead>
<tr>
<th>Date</th>
<th>Charge</th>
<th>Explanation of Telephone/Telegraph and Miscellaneous Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/17</td>
<td>14 50</td>
<td>Gas for rental car</td>
</tr>
<tr>
<td>9/22</td>
<td>43 43</td>
<td>Postage for Phase 2 mailings</td>
</tr>
</tbody>
</table>

**Employee's Signature:** Richard Lowe  
**Date:** 9/17/95  
**Approved by:**  
**Date Approved:** 1/1
Administrative Procedures

- Parking fees, only if free parking is not available in the general area you are visiting on business.

- Bridge, tunnel, and road tolls incurred if their use resulted in a savings in time and/or mileage over alternate routes involving no tolls.

- Postage paid by you for shipment of Phase II questionnaires or materials sent to RTI.

- Supplies purchased locally.

- Lodging, travel, and reasonable meal costs when you are required to be away from home overnight.

- Telephone charges for calls made in order to complete your work. All telephone charges must be supported by a copy of your telephone bill showing tax computations and indicating RTI call charges. Estimated telephone charges will not be reimbursed. When your monthly telephone bill is received, make a copy, highlight the project related calls and charges, total the charges and show the total in the telephone expense column of the Expense Report you will be submitting that week. Attach the highlighted copy of the telephone bill as a receipt.

- After you are in the field, calls should be recorded as a telephone expense when cash is paid or when charged to your hotel room.

5.3.4 Other Time and Expense Considerations

Although the policies detailed in the preceding sections should provide answers to most questions about allowable charges, occasionally unusual situations arise. This section should provide guidance for most such situations. However, if you have concerns about charges or your payment, contact Randy Keesling.

If a nonallowable charge seems necessary in order to complete your work, obtain approval from Randy Keesling. If you cannot reach him and the charge is not large, attach an explanation to your expense report. RTI does, however, reserve the right to deny reimbursement for any expenses that are not authorized.

Other charges that are not allowable expenses include:

- Traffic or parking tickets; and

- Your personal auto insurance, upkeeping, towing, repairs.
Administrative Procedures

5.3.5 Procedures for Paying Interviewers

A supply of time and expense report forms for the project will be furnished in an initial supply shipment. Full instructions for completing the time and expense report forms will be provided to you at the training session. The following rules apply:

- Be sure to enter the project number 6330-003 in the space provided on the form. On the weekly time report, the project number 6330-003 has already been inserted.

- **Print** your name and **enter your FI number** in the spaces provided.

- When all daily entries have been made, compute and enter totals in the appropriate spaces.

- Sign and date the report in the designated spaces, and enter your mailing address. **Unsigned reports will be returned.**

- Be sure to attach receipts for miscellaneous expenses. **Receipts must be attached for each such expenditure (except food) over $5.00** (Disregard the $1.00 requirement appearing on the form).

Be sure that your reports are complete and correct. **Errors will cause delays in processing, and your check will not arrive as expected.**

The PT&E form is printed on NCR paper so that an original and two copies of your entries are produced. Send the white and yellow copies to RTI (in business reply envelopes) **no later than Monday morning** following the end of the weekly reporting period. Keep the pink copy for your record. The other two forms used during data collection are originals only. So either make a photocopy or keep a separate ledger for your records. Mail these forms weekly to RTI using the business reply envelopes.

Checks will be mailed directly to your home address from Select Staffing Services, Inc. Generally, it will take **three weeks from the time the reports are mailed to RTI** for a check to reach you. **Do not contact RTI about missing checks until at least three weeks have passed.** After the first check is received, if you mail your forms weekly, your checks should be received on a weekly basis.
Appendix A

Field Team Leaders
<table>
<thead>
<tr>
<th>Field Team Leaders</th>
<th>Telephone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ALLRED, R. Douglas</strong></td>
<td>(360)426-2400</td>
</tr>
<tr>
<td><strong>HIGHSMITH, Reginald B.</strong></td>
<td>(404)972-2657</td>
</tr>
<tr>
<td><strong>KEESLING, S. Randall</strong></td>
<td>(919)362-0538</td>
</tr>
<tr>
<td><strong>KEHRES, Robert F.</strong></td>
<td>(910)347-7271</td>
</tr>
<tr>
<td><strong>LAVELLE, Lois J.</strong></td>
<td>(412)421-8877</td>
</tr>
<tr>
<td><strong>SCALF, Evelyn N.</strong></td>
<td>(919)923-5651</td>
</tr>
</tbody>
</table>
Appendix B

Ranks and Paygrades of the Armed Forces
<table>
<thead>
<tr>
<th>NAVY</th>
<th>MARINE CORPS</th>
<th>ARMY</th>
<th>AIR FORCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master CPO</td>
<td>SGT Major</td>
<td>Sergeant</td>
<td>Chief SGT</td>
</tr>
<tr>
<td>Senior CPO</td>
<td>1st SGT</td>
<td>1st Sergeant</td>
<td>Senior M.Sgt</td>
</tr>
<tr>
<td>CPO</td>
<td>Gunnery SGT</td>
<td>SGT</td>
<td>M.Sgt</td>
</tr>
<tr>
<td>1st Class</td>
<td>Staff SGT</td>
<td>Staff SGT</td>
<td>SPC 4</td>
</tr>
<tr>
<td>2nd Class</td>
<td>SGT</td>
<td>SGT</td>
<td>SPC 3</td>
</tr>
<tr>
<td>3rd Class</td>
<td>Corporal</td>
<td>Corporal</td>
<td>SPC 2</td>
</tr>
<tr>
<td>Seaman</td>
<td>Lance Corporal</td>
<td>Private 1st Class</td>
<td>Airman 1st Class</td>
</tr>
<tr>
<td>Seaman Apprentice</td>
<td>Private 1st Class</td>
<td>Private</td>
<td>Basic Airman</td>
</tr>
<tr>
<td>Seaman Recruit</td>
<td>Private</td>
<td>Private</td>
<td>Basic Airman</td>
</tr>
<tr>
<td>NAVY</td>
<td>MARINE CORPS</td>
<td>COAST GUARD</td>
<td>ARMY</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------------</td>
<td>---------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>W-1 Chief Warrant Officer</td>
<td>W-1 Chief Warrant Officer</td>
<td>W-1 Chief Warrant Officer</td>
<td>W-1 Chief Warrant Officer</td>
</tr>
<tr>
<td>W-2 Chief Warrant Officer</td>
<td>W-2 Chief Warrant Officer</td>
<td>W-2 Chief Warrant Officer</td>
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<tr>
<td>W-3 Chief Warrant Officer</td>
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<td>W-3 Chief Warrant Officer</td>
<td>W-3 Chief Warrant Officer</td>
</tr>
<tr>
<td>W-4 Chief Warrant Officer</td>
<td>W-4 Chief Warrant Officer</td>
<td>W-4 Chief Warrant Officer</td>
<td>W-4 Chief Warrant Officer</td>
</tr>
<tr>
<td>ENSIGN</td>
<td>(GOLD) SECOND LIEUTENANT</td>
<td>ENSIGN</td>
<td>(GOLD) SECOND LIEUTENANT</td>
</tr>
<tr>
<td>LIEUTENANT JUNIOR GRADE</td>
<td>(SILVER) FIRST LIEUTENANT</td>
<td>LIEUTENANT JUNIOR GRADE</td>
<td>(SILVER) FIRST LIEUTENANT</td>
</tr>
<tr>
<td>LIEUTENANT</td>
<td>(SILVER) CAPTAIN</td>
<td>LIEUTENANT</td>
<td>(SILVER) CAPTAIN</td>
</tr>
<tr>
<td>LIEUTENANT COMMANDER</td>
<td>(GOLD) MAJOR</td>
<td>LIEUTENANT COMMANDER</td>
<td>(GOLD) MAJOR</td>
</tr>
<tr>
<td>COMMANDER</td>
<td>(SILVER) LIEUTENANT COLONEL</td>
<td>COMMANDER</td>
<td>(SILVER) LIEUTENANT COLONEL</td>
</tr>
<tr>
<td>NAVY</td>
<td>MARINE CORPS</td>
<td>COAST GUARD</td>
<td>ARMY</td>
</tr>
<tr>
<td>------</td>
<td>--------------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>CAPTAIN</td>
<td>COLONEL</td>
<td>CAPTAIN</td>
<td>COLONEL</td>
</tr>
<tr>
<td>REAR ADMiral (Lower Half)</td>
<td>BRIGADIER GENERAL</td>
<td>REAR ADMiral (Lower Half)</td>
<td>BRIGADIER GENERAL</td>
</tr>
<tr>
<td>REAR ADMiral (Upper Half)</td>
<td>MAJOR GENERAL</td>
<td>REAR ADMiral (Upper Half)</td>
<td>MAJOR GENERAL</td>
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<td>LIEUTENANT GENERAL</td>
<td>VICE ADMiral</td>
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<tr>
<td>ADMiral</td>
<td>GENERAL</td>
<td>ADMiral</td>
<td>GENERAL</td>
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<tr>
<td>PLEET ADMiral</td>
<td>NONE</td>
<td>NONE</td>
<td>GENERAL OF THE ARMY</td>
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Appendix C

Phonetic Alphabet and Military Time
### U.S. Military Phonetic Alphabet

<table>
<thead>
<tr>
<th>Letter</th>
<th>Phonetic</th>
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<tbody>
<tr>
<td>A</td>
<td>ALPHA</td>
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<tr>
<td>B</td>
<td>BRAVO</td>
</tr>
<tr>
<td>C</td>
<td>CHARLIE</td>
</tr>
<tr>
<td>D</td>
<td>DELTA</td>
</tr>
<tr>
<td>E</td>
<td>ECHO</td>
</tr>
<tr>
<td>F</td>
<td>FOXTROT</td>
</tr>
<tr>
<td>G</td>
<td>GOLF</td>
</tr>
<tr>
<td>H</td>
<td>HOTEL</td>
</tr>
<tr>
<td>I</td>
<td>INDIA</td>
</tr>
<tr>
<td>J</td>
<td>JULIET</td>
</tr>
<tr>
<td>K</td>
<td>KILO</td>
</tr>
<tr>
<td>L</td>
<td>LIMA</td>
</tr>
<tr>
<td>M</td>
<td>MIKE</td>
</tr>
<tr>
<td>N</td>
<td>NOVEMBER</td>
</tr>
<tr>
<td>O</td>
<td>OSCAR</td>
</tr>
<tr>
<td>P</td>
<td>PAPA</td>
</tr>
<tr>
<td>Q</td>
<td>QUEBEC</td>
</tr>
<tr>
<td>R</td>
<td>ROMEO</td>
</tr>
<tr>
<td>S</td>
<td>SIERRA</td>
</tr>
<tr>
<td>T</td>
<td>TANGO</td>
</tr>
<tr>
<td>U</td>
<td>UNIFORM</td>
</tr>
<tr>
<td>V</td>
<td>VICTOR</td>
</tr>
<tr>
<td>W</td>
<td>WHISKEY</td>
</tr>
<tr>
<td>X</td>
<td>XRAY</td>
</tr>
<tr>
<td>Y</td>
<td>YANKEE</td>
</tr>
<tr>
<td>Z</td>
<td>ZULU</td>
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</tbody>
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When pronouncing numbers, the only exception is number 9, which is "niner."

### Military Time (24 Hour Clock)

<table>
<thead>
<tr>
<th>Civilian</th>
<th>Military</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 AM</td>
<td>0100 (Oh One Hundred Hours)</td>
</tr>
<tr>
<td>2 AM</td>
<td>0200</td>
</tr>
<tr>
<td>3 AM</td>
<td>0300</td>
</tr>
<tr>
<td>4 AM</td>
<td>0400</td>
</tr>
<tr>
<td>5 AM</td>
<td>0500</td>
</tr>
<tr>
<td>6 AM</td>
<td>0600</td>
</tr>
<tr>
<td>7 AM</td>
<td>0700</td>
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<td>8 AM</td>
<td>0800</td>
</tr>
<tr>
<td>9 AM</td>
<td>0900</td>
</tr>
<tr>
<td>10 AM</td>
<td>1000 (Ten Hundred Hours)</td>
</tr>
<tr>
<td>11 AM</td>
<td>1100</td>
</tr>
<tr>
<td>12 NOON</td>
<td>1200</td>
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<tr>
<td>1 PM</td>
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<tr>
<td>2 PM</td>
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<td>3 PM</td>
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<tr>
<td>6 PM</td>
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<td>7 PM</td>
<td>1900</td>
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<tr>
<td>8 PM</td>
<td>2000 (Twenty Hundred Hours)</td>
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<tr>
<td>9 PM</td>
<td>2100</td>
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<tr>
<td>10 PM</td>
<td>2200</td>
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<tr>
<td>11 PM</td>
<td>2300</td>
</tr>
<tr>
<td>12 MIDNIGHT</td>
<td>2400</td>
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Between hours, minutes 1 through 59 are stated in the last two digits of the 4-digit time. Therefore, 6:15 PM is 1815; 2:30 AM is 0230. The minutes between midnight (2400) and 1 AM (0100) are preceded by double zeros. For example, 12:30 AM is 0030; 18 minutes past midnight is 0018.
Appendix D

Zip Codes for Military Installations and Ships
MILITARY POST OFFICE LOCATIONS AS OF JANUARY 1, 1994

This list of APOs-FPOs is provided for information only. Do not use the foreign locality in the address if mail is sent at domestic rates of postage.

A higher rate of postage may be charged if the foreign country is used in conjunction with the MPO address. See 125.2 of the Domestic Mail Manual for special instructions on addressing overseas military mail, or Address Formats for Overseas Military Mail in this section.

For the status of all APO/FPO ZIP Codes and the conditions of marking that apply, refer to the monthly issuance of the APO/FPO table entitled, Conditions Applied to Mail Addressed to Military Post Offices Overseas published in the Postal Bulletin.

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<td>GEOL, ITALY</td>
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,_IUTARY POST OFFICE LOCATIONS AS OF JANUARY 1, 1H4 Continued

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09ot99 LONDON. UNITED KINGDOM
09508 GUAHTANAMO BAY. CUBA
09593 GUAHTANAMO SAY. CUBA
0!1596 GUAHTAHAMO BAY. CUBA
119609 GAETA. ITALY
09612 LA MADDALENA SARDINIA. ITALY
0!1619 MAA.S
.E .ITALY
111620 MAA...ES ITALY

0962 1 MAA.,.ES ITALY

09622 MAA.S
.E CAPOOICHINO. ITALY
09625 ROUE. ITALY

0!1626 NAPLES. ITALY
09627 SIOCWEUA. ITALY
Dllli" ROTA. SPAIN
096t5 ROTA. SPAIN

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C19728
C19729
C19730
09731
09733

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K EFLAVIK. ICELAND
HOFN. ICELAHD
ARGENTIA NEWFOUNDlAND. CANADA
SHELBURNE NOVA SCOTIA. CANADA
HALifAX t«:NA SCOTIA. CANADA
087:W GANOER NEWFOUNDlAND. CANADA

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09865

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CAIRO, EGYPT

NICOSIA. CYPRUS

SOUDA BAY CRETE. GREECE

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� QUA.RRY I:IEIGHTS. PANAMA
3400C FOAT CLAYTOH. PANAMA
:WOOS FORT W11..UAM DAVIS. PANAMA

:woo& FOAT K088E. PANAMA
3t007 FORT AMADOR. PANAMA
3oi009 AUIAOOK AFS. PANAMA
:W01 1 AUIR()OI( AFS. PANAMA

34020 SAN JOSE. COSTA RICA
3oC021 MANAGUA. NICARAGUA
34022 TEGUCIGAl.PA. HOHDUAAS
3otQ23 SAN SALVADOR, El SALYADOR
34024 GUATEMALA CITY. GUATEMALA
34025 BEliZE CITY. BEliZE
)1.030 RIO DE JANERIO. BRAZI:

:M031 LIMA. PERU
LA PAZ. 80I.MA

:w032
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3403S
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ASUNCION. PARAGUAY
:M037 CARACAS. VENEZUElA

34038

BOGOTA. COLUMBIA

3ot039 OUITO. ECUADOR
� SAN JU4N. PUERTO RICO
�I SANTO DOMINGO. DC:M.-cAH REPUBUC
� COMAYAGUA. HONDI.IRAS
34059 FORT AMADOR. PANAMA
3oW60 GALETA ISI.ANO. PANAMA

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lliS205 YONGSAH. KOREA
96206 YONGSAH. KOREA
9&207 YONGSAH. KOREA
96208 CHUNCHON. KOREA
96212 TAEGU. KOREA
96214 KIMHAE., KOREA
96218 TAEGU. KOREA
96220 CHEJU.OO. KOREA
911242 TCINGOUCHON-NI. KOREA
86251 yON().:rE-Al. KOREA
98257 UIJONGBU. KOREA
116251 UI.I()HGBU , KOREA ·
96259 PUSAN. KOREA
96260 WAEIGWAN. KOREA
91264 KUNSAH. KOREA
91266 OSAN. KOREA
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96271 PYONGTEAK. KOREA
96276 SEOUl. KOREA
96278 SONG TANSI. KOREA
9G2a3 BUPVEONG. KOREA
!IS28.t BUP'YEOHG. KOREA
96297 W0HGJU KANGW(lN-.80, KOREA
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96323 YOKOTA. JAPAN
96325 YOKOTA. JAPAN
96326 YOKOTA. JAPAN
96328 YOKOTA. JAPAN
96330 YOKOTA. JAPAN
96336 TOKYO. JAPAN
96337 TOKYO. JAPAN
96338 TOKYO. JAPAN
96343 TOKYO. JAPAN
96364 KA0ENA. OKJIAWA
96365 NAHA. OKINAWA
96367 KA0ENA. OKINAWA
96368 KADENA. OKINAWA
96374 MAKIMINA TO. OKINAWA
18376 YOUITAN. OKINAWA
96378 MAKIMIHATO. OKINAWA
96440 MANILA. PtiUPPINES
96508 BIG DEU'A. �
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This list of APOs-FPOs is provided for information only. Do not use the foreign locality in the address if mail is sent at domestic rates of postage.

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<th>GEOGRAPHIC LOCATION</th>
<th>ZIP CODE</th>
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Appendix F

PHYSICAL MEASUREMENTS MANUAL

1995 POWR Assessment:
Perceptions Of Wellness and Readiness

DEPARTMENT OF THE NAVY
NAVAL HEALTH RESEARCH CENTER
SAN DIEGO, CA

F-1
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INTRODUCTION

The manual is designed to assist you in the critical role you will play in the success of the 1995 POWR Assessment: Perceptions of Wellness and Readiness Survey for the Naval Health Research Center (NHRC). In addition to the personalized training you will be given, the information provided in this manual will facilitate your preparation efforts before and during field data collection, and more specifically, it will enable you to be fully prepared to perform your critical assignment.

THE 1995 POWR Assessment: Perceptions of Wellness and Readiness

The Naval Health Research Center has contracted with Research Triangle Institute, a not-for-profit research organization associated with the University of North Carolina, North Carolina State University, and Duke University, to collect data for our 1995 Perception of Wellness and Readiness survey. The purpose of the research is to conduct a worldwide survey of the health of active-duty Navy and Marine Corps women and men, with special focus on women’s health care needs. The general objectives of this study are to:

- estimate the prevalence of a broad range of health variables overall and for demographic subgroups such as those defined by sex, race/ethnicity, age, and pay grade;

- assess the prevalence of selected diseases and disease risk factors in Navy and Marine Corps women;

- provide comparisons between differing populations of interest in the Navy and Marine Corps (e.g., women versus men, sea versus shore, junior enlisted versus OCONUS);

- compare prevalence findings on women’s health from the Navy and Marine with civilian female populations;

- develop baseline information for the future status and trends of Navy and Marine Corps women’s risk factor and health information;

- identify appropriate female Navy and Marine Corps populations for specialized studies; and

- contribute to the understanding of disease etiology in female populations by collecting and analyzing risk factor information.
TRAINING AND RESPONSIBILITIES OF PHYSICAL MEASUREMENT SURVEYOR

This manual has been prepared as a guide for the field work associated with taking physical measurements on military personnel in conjunction with the 1995 POWR survey. It should be carefully read and reviewed before beginning your assigned tasks. It may not answer all questions to cover all situations encountered in the field. If you have questions, contact LCDR Shaw, Diane Sorenson, or Dr. Laurel Hourani.

Measurements will be conducted by two three-person teams. The leader of each team will be an individual who is fully qualified and experienced in collecting this data. Each team will be responsible for taking height, weight, handgrip, heart rate, blood pressure, and head, neck, abdomen or waist and hip (women) circumference on each selected military participant.

TRAINING

Training will take place at Naval Training Center, NTC, Bld. 246, on October 27, 1995 at 2:00 PM. Ms. Marcie Beckett will be the training instructor.

The training session will last approximately hours. The remainder of the session will be spent practicing taking measurements on each other. It is very important that team members are able to take measurements that are consistent with each other.

Team members must demonstrate proficiency in taking each measurement prior to field collection. The standard of proficiency will be explained by Ms. Beckett during the training session.

Prior to the site visit, team members must be proficient in taking the prescribed measurements, be familiar with the purpose of the study, and be familiar with the manual, equipment, and training materials.

ON SITE

Military members will be expected to work in the uniform of the day.

Team members are expected to be courteous and conduct themselves in a professional manner at all times.

Upon arrival at a site, team members are expected to inspect the room assigned for appropriateness (does the room provide a divider for males and females). Any questions, contact LCDR Shaw, the military liaison officer.

Team members will be responsible for unpacking the equipment and supplies prior to the scheduled arrival of the people to be measured. Check that equipment is functioning and calibrated.

Record measurements on the form following the protocol outlined in the manual for each measurement.
At the end of the day, equipment is to be packed up and secured.

CHECK LIST FOR EQUIPMENT EACH DAY:

1. Check scales with each other by weighing the same clipboard on each one, note any difference between scale 1 and scale 2. Indicate the date, session, and the difference.
2. If there is more than a .5 kg difference in the scales, change the batteries.
3. Check that calipers and dynamometers are set on 0.
4. Check tabs on tape measures and replace if needed.
5. Check low battery indicator on automatic blood pressure cuff before using. Replace as needed.
6. Do not use alcohol to clean automatic blood pressure cuffs.
7. At the end of each session, clean calipers, and dynamometers with alcohol. Tape measures and rubber scale pads can be wiped with a little soap and water.
PHYSICAL MEASUREMENTS
(quick reference sheet)

**Blood Pressure (automatic cuff)**
Take shoes off. Ask if there is any reason why blood pressure should not be taken, or that the right arm should not be used for a read. (See reverse side of data sheet to record the answers to these questions).
- Check to see that feet are flat on the floor and the arm is resting on the table.
- If you get an E (error) message, set the inflation level higher.
- Push START button. Record when beeping stops.
- Turn instrument OFF before doing the next reading but do not remove cuff.

**WEIGHT**
Turn ON scale by pressing foot bar.
Wait for the “0” to appear.
Ask participant to empty pockets. Toes should be at edge of black area of foot pad. Have participant look straight ahead. Record scale number. Measure to the nearest .1 kg.

**HEIGHT**
Heels against baseboard.
Have subject take a deep breath, hold and stretch tall.
Clipboard at highest part of head parallel to the floor.
Ask person to step away and record height to nearest .1 cm.

**HANDGRIP**
Ask if participant which hand is dominant.
Dial faces away from subject.
Adjust handgrip to fit persons hand. First and second knuckles should wrap around tension bar.
Check that dial is at zero.
Inform participant not to press against leg.
Take 3 readings.
HANDGRIP (Protocol)

Purpose: Measure isometric strength of the hand and forearm
Equipment: Handgrip dynamometer
        Data sheet
        Test operator

Procedure:
1. Test operator will explain and demonstrate procedure.
2. Test operator will adjust handgrip dynamometer to fit subject’s hand:
   a) Subject’s palm should be open and flat
   b) Holding dynamometer perpendicular to palm, place stationary arm of
ten dynamometer directly onto the web of skin between thumb and index finger
   c) Without sliding it, rotate the dynamometer so that it lies flat against the
fingers
   d) Have subject gently grip the dynamometer and note where the adjustable
                 grip bar crosses the middle finger. Ideally it should bisect the middle
phalange, that is, lie directly between the two distal joints of the finger
   e) If necessary, adjust the grip bar and repeat steps a through e until the
correct fit is obtained
3. Tell the subject that the hand position used during the fitting of the device does
not have to be maintained during the test. Instruct subject to use the hand position that
feels the strongest.
4. Reset the dynamometer pointer (red needle) to zero.
5. Instruct the subject to stand with arms at the sides and the dynamometer
       gripped in the dominant hand. The elbows may be slightly bent. During the test, neither
the hand nor dynamometer may press against the thigh. Squeeze the dynamometer as hard
as possible and then release. Lift the dynamometer so that test operator can read dial.
6. Read the force indicated by the pointer (kg, on outside scale), record on data
       sheet, and reset pointer to zero.
7. The subject will perform three trials given 15 seconds of rest between each
       trial.
8. Circle the highest score on the data sheet.
MEASUREMENT OF BODY CIRCUMFERENCES
M. B. Beckett and J. A. Hodgdon

Equipment and Procedure

A body circumference (girth) is defined as the length of a continuous line enclosing a certain area of the body. In common terms, it is the distance around the body or limb at a specified position. Circumferences are easy to measure, all that is required is a tape measure, paper, and pen to record your measurements.

Tape Measure The tape measure should be made of a non-stretching material (fiberglass or steel, not cloth) and should be calibrated against a known length. Measurements are more easily made if there is a loop or tab on the end of the measuring tape. If your tape measure does not have a loop or tab on the end make one by wrapping several thicknesses of transparent tape on the low-numbered end of the tape so that the tab extends down about 3/4 inch below the edge of the tape (Figure 1). Cut the transparent tape flush with the end of the tape measure.

Technique All circumferences are taken with the subject standing relaxed and facing the measurer (Figure 2), unless otherwise specified. Before reading the tape, it is important that the measurer observe both front and rear placements of the tape (a side view is good) to make sure that the tape is level. During measurement, you should apply sufficient pull on each end of the tape so that the tape conforms to the contours of the skin, but not so much tension so that the skin is indented. This is very important if you are to obtain a valid, reproducible measurement.

The most accurate and easiest way (once you get the hang of it) to handle the tape is depicted in a stepwise fashion in Figure 3. The description of this technique is easier to follow if you actually perform each step as you read it.

1) Face the subject and locate the site to be measured (in this example it is the sternal angle, see shoulder circumference site description) (Figure 3a). 2) Hold the tab end of the tape around behind the site you are going to measure. 3) Hold the tape with your left hand 15 to 30 inches from the tab end. The exact distance will vary with the site to be measured. Hold the tape level and position it exactly behind the site to be measured (Figure 3b). 4) When you are sure that the tape is positioned properly bring both hands forward and then cross them in front of you. You will then need to change hand positions on the tape. 5) To do this, use your right hand to press the tape against the body with just enough pressure to hold it in place (Figure 3c). 6) With your left hand lay the tape under your right thumb, and grasp the tape between the right thumb and forefinger. 7) Release the tape with your left hand. You will now be holding the tape in position in your right hand (Figure 3d). 8) Take hold of the tab with your left hand and control the other end of the tape with your right hand. Both hands are now out of the way for reading the measurement (Figure 3e). 9) Observe both front and rear placement of the tape to make sure it is properly located (with respect to landmarks) and level all the way around. 10) Adjust the tension on the tape and read it to the nearest 0.1 cm (or 1/8 inch if the application calls for inches; 1 inch = 2.54 cm.)
Figure 1. MEASURING TAPE (with tab end)

Figure 2. CIRCUMFERENCE SITES

(Modified from W.D. Ross & N.C. Wilson, Simon Frazer Univ., B.C., Canada, 1973)
Figure 3. CIRCUMFERENCE TECHNIQUE
(Shoulder circumference)

(a) Finding the sternal angle

(b) Positioning the tape directly behind the sternal angle and level with the floor
Figure 3. CIRCUMFERENCE TECHNIQUE (continued)

(c) Holding the tab end in place with right hand while preparing to switch hand positions

(d) Ready to take tab end with left hand

(e) Reading the tape
Measurement Recording  Care should be taken that the tape measure is read correctly. You must take at least two measurements at each site. Measure each site once in sequence (going from site to site), then repeat the whole series in order. Under ideal conditions the measurer will have an aide who will record measurements as well as observe tape for accuracy and level orientation. If measurements of the same site differ by 1 cm (or 3/8 inch) or more repeat that measure once more. The final measurement for a site is an average of all recordings for that site.

In order to obtain unbiased results, it is important for the measurer to be unaware of his/her previous measurement at each particular site. To accomplish this, the recorder should report only whether or not a third measurement is needed, not the actual previous values. If no recorder is available, the measurer should use a piece of paper to mask previous recordings while taking the second and, if necessary, third sets of measurements. Appendix A contains a sample measurement recording form.
Circumference Site Description

**Trunk Circumference**  The subject should be standing relaxed, facing the measurer (figure 4). All of the trunk circumferences (except the neck) are taken with the measuring tape perpendicular (at 90 degrees) to the long axis of the body (Figure 2). Before reading the tape, be sure to observe the front, side and rear aspects of tape placement to ensure that it is level.

1. **Neck**: Ask the subject to look “straight ahead”, so that the head is in a neutral position. Place the tape around the neck at a level just below the larynx (Adam’s apple). Because of the shape of the neck, the tape will usually be inclined down toward the front (Figure 5).

2. **Abdomen I**: Visual inspection will usually guide the measurer to the correct placement of the tape at the natural waist. The natural waist is identified as the level of minimal abdominal circumference and is usually located about halfway between the navel and the zyphoid process (lower end of the sternum; that narrow bone in the center of the chest) (Figure 8). When the natural waist is not easily observed, measurements must be taken at several probable sites until the minimal circumference is found. At each measurement check to be sure that the tape is level all the way around. Record the measurement at the end of a normal expiration, this will be the smallest measurement observed during normal breathing.

3. **Abdomen II**: Place the tape around the abdomen so that it passes over the navel (Figure 9). Check the placement of the tape to make sure that it is level all the way around. Record the measurement at the end of a normal expiration, this will be the smallest measurement observed during normal breathing.

7. **Hip**: The subject should stand with the heels of the feet together. While facing the subject’s right side, place the tape around the hips so that it passes over the greatest protrusion of the gluteal muscles (buttocks) and is level with the floor (Figure 10). Because the tape passes over clothing in this measurement, extra tension should be applied so that the tape conforms closely to body contours despite the presence of the clothing.
Figure 4. SUBJECT STANDING RELAXED

Figure 5. NECK CIRCUMFERENCE
Figure 8. ABDOMEN I CIRCUMFERENCE

Best Available Quality Photographs

(minimal abdominal circumference)

Figure 9. ABDOMEN II CIRCUMFERENCE
Figure 10. HIP CIRCUMFERENCE

(a) Location of hip circumference site

(b) Measuring the hip circumference

(maximum protrusion of gluteal muscles)
MEASUREMENTS OF SKINFOLDS

Equipment and Procedure

Skinfold measurements assess the thickness of skin and fat tissue at various sites on the body. The objective of measuring skinfold thicknesses is to assess the amount of fat deposited under the skin.

Calipers Skinfold thicknesses are measured using calipers designed for this purpose (Figure 17). The calipers have a set of jaws (or branches) which are opened and then allowed to close so as to surround the skinfold. They are closed by spring pressure. Small metal plates called branch plates are attached to the ends of the jaws. It is the branch plates which actually contact the skin. Some calipers (e.g., Harpenden) can and should be calibrated regularly. To do so, loosen the dial set screw and rotate the dial until it reads zero when the caliper branches are in their resting position, then retighten the set screw. Occasionally, calipers will need to be sent to authorized service facilities to adjust spring tension and maintain overall accuracy.

Technique All skinfolds are taken on the right side of the body, with the subject standing relaxed. To obtain a skinfold measurement, a fold of skin and subcutaneous fat is picked up firmly between the thumb and forefinger of the left hand and pulled away from the underlying muscle (Figure 18). The fold should be large enough so as to include all tissue overlying the muscle, but not so large that the sides of the fold do not become parallel under firm pressure. The skinfold caliper is held in the right hand and applied so that the edges of the branch plates are located about 1 cm (3/8 inch) below the fingers holding the fold. The depth of the caliper application should be such that the branch plates are centered on an imaginary line running parallel to the long axis of the fold and through the center of the finger pads holding the fold. The caliper is released gently, but fully, so that the jaws exert their maximum pressure. The fold is held firmly with the thumb and forefinger of the left hand throughout caliper application. Once maximum pressure is applied, the caliper reading will decline gradually as the tissue becomes compressed. The rate of this decline depends on the size and compliance of the skinfold tissue. The caliper reading is taken between 2 and 3 seconds after full pressure is applied (even though the needle may still be moving). In order to assure measurement reproducibility, it is important that the caliper be read at the proper time.

In most people, the tissue of the skinfold is highly compressible. Erroneously small readings may occur when a measurement is taken after repeated manipulation of the skinfold (e.g., repeated, consecutive attempts to pick up a fold at the same site), or when insufficient time is allowed between measurements at the same site. In order to obtain reproducible results, at least two minutes should be allowed between skinfold measurements at the same site, or when insufficient time is allowed between
measurements at the same site. In order to obtain reproducible results, at least two minutes should be allowed between skinfold measurements at the same site.

To ensure accuracy of site location it is necessary to find landmarks described, and to actually touch them as you visually locate the fold site.

**Measurement Recording.** Depending on the caliper being used, measurements are recorded to the nearest 0.1 mm or 0.5 mm. Instrument dials for Harpenden and Lange calipers are illustrated in Figures 19 and 20. Hash marks are located every 0.2 mm on the Harpenden dial and measurements can be recorded to the nearest 0.1 mm by reading the space between the marks. One full revolution of the large needle corresponds to 20 mm, while two revolutions corresponds to 40 mm. Note that during the first revolution the small needle is between 0 and 2, while during the second revolution the small needle is between 2 and 4. The Harpenden caliper is accurate for skinfolds up to 50 mm. The Lange caliper is accurate for skinfolds up to 70 mm (Figure 20). Hash marks are located every 1 mm on its dial and measurements can be read to the nearest 0.5 mm (half way between hash marks). Use Figures 19 and 20 to test your ability to read the dials correctly. Accurate and reliable measurements can only be obtained if you are able to read the caliper dial quickly and correctly.

Take each measurement in sequence, then repeat the whole series in order. In this way you will usually avoid errors due to frequent, repeated measurements. Under ideal conditions the measurer will have an aide who will record measurements as well as observe for good technique and accurate location. If the second measurement at a site differs from the first by more than 5%, a third measurement should be taken.

**Example:**

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<td>Triceps skinfold</td>
<td>14.0</td>
<td>14.7</td>
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The biceps skinfold was measured a third time because the difference between the first and second trials (0.4 mm) was greater than 5% of the first trial (6.4 mm x 0.05 = 0.32 mm). The triceps skinfold was not measured a third time because the difference between the first two measurement (.07 mm) was not greater than 5% of the first measurement (14.0 mm x 0.05 = 0.7 mm). The final measurement for a site is an average of all recordings for that site.

A common error is misreading the caliper dial by reading the scale in the wrong direction or by reading the wrong tens unit (e.g., reading Figure 19c as 11.7 instead of 31.7 mm). Often, these errors are caught when comparison of first and second measurements reveals a very large discrepancy (e.g., more than 10 mm difference). In this case, additional measurement(s) should be taken and the misread value should be excluded from final averaging.

In order to obtain unbiased results, it is important for the measurer to be unaware of his/her previous measurements at each particular sit. To accomplish this, the recorder should report only whether or not a third measurement is needed, not the actual previous
Figure 17. HARPENDEN SKINFOLD CALIPER

(dial set screw)

(branch plates)

(measurement reading dial)

(jaws or branches)

Figure 18. SKINFOLD CALIPER APPLICATION

(parallel sides of fold)

(1 cm or 3/8 inch space between fingers and branch plates)

(lever fully released to allow caliper jaws to exert their maximum pressure)

(caliper branch plates perpendicular to long axis of skinfold)

(depth of branch plate application is equal to depth of fingerpad application on fold)
Figure 19. Harpenden caliper dial readings. Hash marks show 0.2 mm increments. Smaller needle shows whether large needle is in its first or second revolution. a) 0 mm, resting position; b) 7.2 mm; c) 31.7 mm, large needle is in its second revolution so 20 mm must be added to the actual dial reading (11.7) to obtain true measurement (31.7 mm).

Figure 20. Lange caliper dial readings. Hash marks show 1.0 mm increments. a) 0 mm, resting position; b) 23.0 mm; c) 54.5 mm (needle is halfway between 54.0 and 55.0 mm).
values. If no recorder is available, the measurer should use a piece of paper to mask previous recordings while taking the second and third (if necessary) sets of measurements.

**Skinfold Site Description**

All of these measurements are taken on the right side of the body (Figure 21). The fold is picked up at the site described and the calipers are placed about 1 cm (or 3/8 inch) below the fingers holding the fold.

1. **Triceps**: The subject's arm should be hanging relaxed at the side. While touching the tip of the acromion (see biceps-arm relaxed description) with your left hand and the line of the elbow joint with the tip of the caliper jaws (Figure 23a), visualize a point on the midline of the back of the arm, halfway between the tip of the acromion and the elbow (Figure 23b). Pick up the triceps skinfold at this point with the fold running parallel to the long axis of the arm.

2. **Subscapular**: The fold is taken just below the inferior angle (lower tip) of the scapula (shoulder blade). With your left thumb, locate the inferior angle of the scapula (Figure 24a). Ask the subject to relax the shoulders if you have difficulty finding this landmark. Starting with your thumb on the inferior angle, slide your thumb down 1 cm (or 3/8 inch). Rotate your hand clockwise so that you can pick up a fold that is directed downwards and outwards at a 45 degree angle (Figure 24b).
Figure 23. TRICEPS SKINFOLD

(a) Locating landmarks and visualizing the midpoint of the line

(b) Location of triceps skinfold site

(c) Measuring the triceps skinfold
Figure 24. SUBSCAPULAR SKINFOLD

(a) Finding the inferior angle of the scapula

(b) Measuring the subscapular skinfold

Best Available Quality Photographs
POWR 1995 MEASUREMENT FORM

ID: ___________ SEX: M F BIRTHDAY: ___ ___ Date: ___ ___

BLOOD PRESSURE:

SYSTOLIC   DIASTOLIC (Machine # __________)

1. ______/_______ mmHG 2. ______/_______ mmHG 3. ______/_______ mmHG

AVERAGE ______/_______ mmHG

HEART RATE:

1. ___ ___ bp 2. ___ ___ bpm 3. ___ ___ bpm

AVERAGE ___ ___ bpm

Blood pressure refused? Yes No Reason right arm not used? ______________________

STATURE:

1. Weight: ___ ___ KG ___ ___ LBS (Scale # _________)

2. Height: ___ ___ CM ___ ___ IN

Is female pregnant? Yes No

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<td>3. Waist (women): Abdomen (men):</td>
<td>___ ___ cm</td>
<td>___ ___ cm</td>
<td>___ ___ cm</td>
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<tr>
<td>4. Hip:</td>
<td>___ ___ cm</td>
<td>___ ___ cm</td>
<td>___ ___ cm</td>
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<tr>
<td>5. Neck:</td>
<td>___ ___ cm</td>
<td>___ ___ cm</td>
<td>___ ___ cm</td>
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DOMINANT HANDGRIP STRENGTH:

6. Righthand: ___ ___ KG ___ ___ KG ___ ___ KG Highest: ___ ___ KG

OR

7. Lefthand: ___ ___ KG ___ ___ KG ___ ___ KG Highest: ___ ___ KG

SKINFOLDS:

8. Triceps: ___ ___ mm ___ ___ mm ___ ___ mm

9. Subscap: ___ ___ mm ___ ___ mm ___ ___ mm
4.3 Anthropometric Measurement screen

This screen displays the body measurement fields for entering the measurement data. It is the first screen for the sequence of measurement data collection screens. Three sets of measurements are taken for items 3 to 7 on the screen.

Naval Health Research Center
San Diego, CA

Name: ____________________________
SSN: __________________________

Enter Body Measurements: 1st

<table>
<thead>
<tr>
<th>Item</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 Weight</td>
<td>0.00 kg</td>
</tr>
<tr>
<td>02 Standing Height</td>
<td>0.0 cm 2nd 0.0 cm 3rd</td>
</tr>
<tr>
<td>03 Waist Circumference</td>
<td>0.0 cm 0.0 cm 0.0 cm</td>
</tr>
<tr>
<td>04 Hip Circumference</td>
<td>0.0 cm 0.0 cm 0.0 cm</td>
</tr>
<tr>
<td>05 Neck Circumference</td>
<td>0.0 cm 0.0 cm 0.0 cm</td>
</tr>
<tr>
<td>06 Left Hand Grip</td>
<td>0.0 kg 0.0 kg 0.0 kg</td>
</tr>
<tr>
<td>07 Right Hand Grip</td>
<td>0.0 kg 0.0 kg 0.0 kg</td>
</tr>
</tbody>
</table>

Stop push button - Saves data and exits the data entry screen and returns to the Main Menu

Next push button - continue to the next screen that starts the blood pressure measurement data collection.
4.4 Blood Pressure Measurement screen 1

This is the first screen in the blood pressure measurement series of screens.

**ZA1.**
Do you know of any medical reason why this procedure should not be done?

**CODE YES ONLY IF THE PROBLEM EXISTS ON BOTH ARMS.**
INF BLOOD PRESSURE PROCEDURE SHOULD NOT BE DONE DUE TO MEDICAL REASONS, DO NOT TAKE THE MEASUREMENT.

1. Y What is the medical reason?
   01. Y RECENT SURGERY
   02. Y UPPER BODY CIRCULATORY PROBLEM
   03. Y PAIN / INJURY
   04. Y OTHER

   7: MEDREAS SPECIFY

2. N Continue

**ZA2.**
IF SP OBSERVED RECORD. OTHERWISE ASK:

Have you consumed any food, alcohol, coffee or smoked any cigarettes within the last 30 minutes?

1. Y Which have you had?
   01. Y Food
   02. Y Alcohol
   03. Y Coffee
   04. Y Cigarettes

   MARK ALL THAT APPLY

2. N

Stop push button - Saves data and exits the data entry screen and returns to the Main Menu

Next push button - continue to the next screen
4.5 Blood Pressure Measurement screen 2

<table>
<thead>
<tr>
<th>Name:</th>
<th>12: first</th>
<th>13:</th>
<th>14: last</th>
<th>Stop</th>
<th>Next</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSN:</td>
<td>first</td>
<td>M</td>
<td>last</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ZA3. ARM SELECTED**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>RIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>LEFT</td>
</tr>
<tr>
<td></td>
<td>01</td>
<td>INJURY, RASH</td>
</tr>
<tr>
<td></td>
<td>02</td>
<td>CAST, DRESSING</td>
</tr>
<tr>
<td></td>
<td>03</td>
<td>PLACEMENT OF EQUIPMENT</td>
</tr>
<tr>
<td></td>
<td>04</td>
<td>OTHER</td>
</tr>
<tr>
<td></td>
<td>7: andere</td>
<td>SPECIFY</td>
</tr>
</tbody>
</table>

**ZA4. SP'S PULSE RATE FOR 30 SECONDS**

<table>
<thead>
<tr>
<th></th>
<th>15: R</th>
<th>PULSE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>00</td>
<td>NEVER FOUND PULSE (GO TO ZA8)</td>
</tr>
</tbody>
</table>

**ZA5. PULSE REGULAR / RHYTHMIC**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>N</td>
</tr>
</tbody>
</table>

Stop push button - Saves data and exits the data entry screen and returns to the Main Menu

Next push button - continue to the next screen
4.6 Blood Pressure Measurement screen 3

26
### 4.7 Blood Pressure Measurement Screen 4

**Naval Health Research Center**  
San Diego, CA

<table>
<thead>
<tr>
<th>Name</th>
<th>SSN</th>
<th>Stop</th>
<th>Next</th>
</tr>
</thead>
<tbody>
<tr>
<td>4: first</td>
<td>5: m</td>
<td>6: last</td>
<td>[Stop]</td>
</tr>
</tbody>
</table>

#### ZA7. Blood Pressure Attempts
**Enter a Reading OR a "NOT DONE/Refused" Reason for Each Attempt Necessary**

<table>
<thead>
<tr>
<th>Attempt</th>
<th>Reading</th>
<th>BP Not Done</th>
<th>SP Refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. <strong>First Attempt</strong></td>
<td>SBP 114</td>
<td>666</td>
<td>997</td>
</tr>
<tr>
<td></td>
<td>DBP 74</td>
<td>667</td>
<td>998</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>999</td>
</tr>
<tr>
<td>b. <strong>Second Attempt</strong></td>
<td>SBP 184</td>
<td>666</td>
<td>997</td>
</tr>
<tr>
<td></td>
<td>DBP 84</td>
<td>667</td>
<td>998</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>999</td>
</tr>
<tr>
<td>c. <strong>Third Attempt</strong></td>
<td>SBP 164</td>
<td>666</td>
<td>997</td>
</tr>
<tr>
<td></td>
<td>DBP 74</td>
<td>667</td>
<td>998</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>999</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>997</td>
</tr>
</tbody>
</table>

---

Stop push button - saves data and exits the data entry screen and returns to the Main Menu

Next push button - continue to the next screen
### 4.8 Blood Pressure Measurement screen S

#### Name:
- First: [ ]
- Middle: [ ]
- Last: [ ]

#### SSN:
- First: [ ]
- Middle: [ ]
- Last: [ ]

#### ZA8. REASON FOR NOT TAKING BLOOD PRESSURE MEASUREMENT:
1. [ ] SP REFUSED (NO TIME, DISINTEREST)
2. [ ] WITHERED ARMS, INJURY, DRESSING, RASH (ON BOTH ARMS)
3. [ ] 2 FAILED MIL
4. [ ] INAPPROPRIATE SETTING
5. [ ] EQUIPMENT FAILURE
6. [ ] COULD NOT LOCATE PULSE IN EITHER ARM
7. [ ] OTHER, SPECIFY:
   - 12: ZA8 REAS

#### ZA9. SYSTOLIC / DIASTOLIC
- 15: za9
- 16: za9
- 17: za9
- 18: za9
- 19: za9
- 20: za9
- 21: za9
- 22: za9

- 24:

#### ZA11. ADDITIONAL COMMENTS / PROBLEMS
- 25: ZA11_TXT

---

**Stop** push button - saves data and exits the data entry screen and returns to the Main Menu

**Next** push button - continue to the next screen
CHECK LIST FOR PULSE AND BLOOD PRESSURE (MANUAL)

1. Position the subject:
   - resting for 5 minutes
   - feet flat, sitting up straight
   - loose sleeve rolled up
2. Locate radial and brachial pulse.
3. Select and place the duff:
   - Check that the index line is within range lines,
   - 1” above elbow crease,
   - over brachial artery and
   - wrap the cuff, two thumbs under the cuff, pull gently.
4. Obtain resting pulse and record for 30 seconds.
5. Obtain MIL by inflating cuff to 80 mm, then continue in increments of 10 mm
   for measurement, then deflate rapidly, disconnect the manometer tubing and record on the
   form.
6. Wait 1 minute.
7. Place stethoscope in ears, ear pieces turned forward, and diaphragm piece over
   brachial pulse point.
8. Inflate rapidly to MIL.
9. Deflate 2 mm per second, eyes level with midpoint of the manometer column.
Read the point on the manometer when the first sound is heard (systolic), and when the
sound disappears (diastolic).
10. Continue deflation to 20 mm below diastolic reading.
11. Deflate rapidly to zero.
12. remove stethoscope form ears.
13. Disconnect manometer tubing.
14. Record systolic and diastolic blood pressure readings on the form.
15. Wait 1 minute.
16. Repeat steps 7-14 for two more readings. Wait 1 minute between
    measurements.
Quick Diagnostic Interview Schedule III-R (DIS) Manual

Introduction

The Quick Diagnostic Interview Schedule was chosen for use in the 1995 POWR Assessment: Perceptions of Wellness and Readiness study. It is a shortened, computerized version of the Diagnostic Interview Schedule used previously in the well known Epidemiologic Catchment Area studies described by Robbins and Regier (1991). The Quick DIS asks the minimum number of questions needed to make a diagnostic decision for selected diagnoses of interest in this study (Major Depression, Generalized Anxiety Disorder, Somatization, and Alcohol Abuse). It is designed to be administered by lay interviewers with little or no previous training. Although the full version of the DIS has been used in at least 100 different studies, the Quick DIS was only first released in 1995.

The impetus for the Diagnostic Interview Schedule’s development in 1978 was based on NIMH Division of Biometry and Epidemiology’s need for a comprehensive diagnostic instrument to support the population studies of its newly-organized Epidemiologic Catchment Area (ECA) program. The ECA studies were designed to ascertain the prevalence and incidence of psychiatric disorders in the US general population. Because many psychiatric disorders are rare, large samples were required to produce accurate estimates. Therefore, it was necessary to design the instrument so that it could be administered by interviewers without clinical training. Furthermore, because the accepted standard for psychiatrists practicing in the United States was the American Psychiatric Association’s Diagnostic and Statistical Manual, Third Edition (DSM-III), the DIS was to be based on these criteria. After a lengthy review of existing instruments, it was decided that a new instrument was required. Because the Renard Diagnostic Interview (RDI) came the closest to meeting the specifications for the new instrument, the RDI’s authors at Washington University were awarded the contract, and were joined by Dr. Robert Spitzer, the chairperson of the task force that wrote the DSM-III.

The DSM-III-R is a diagnostic manual used by psychiatrists, psychologists, medical forensics, and the judiciary in determining eligibility in meeting diagnostic criteria. This 43-year old much revised manual is the parent organizational structure for both versions of the DIS, the screening tool which in turn provides uniformity of data collection and reproducibility of the diagnostic process, far beyond what is possible using clinical interviews and the more cumbersome DSM-III-R manual.

Both the DSM-III-R and the DIS is organized around a biopsychosocial model, utilizing five axes. They are: (1) clinical syndromes, (2) personality disorders and developmental disorders, (3) physical disorders and conditions, (4) severity of psychosocial stressors, and (5) global assessment of functioning. Of the five axes of the DSM-III-R, our present study is concerned with axes 1 and 2 only. The DIS categories of general anxiety, alcohol abuse, and depression are from the axis 1 general clinical group.
The axis 2 personality disorders included within this study's adaptation of the Quick DIS are: obsessive-compulsive personality disorder and anti-social personality disorder.

Survey Methods

Survey Administration

Two approaches to the administration of the Quick DIS are utilized in this study. The protocols for the telephone and face-to-face DIS interviews are described below.

Telephone interviews. On a special handout that accompanies the questionnaire, participants are asked if they would be willing to participate in a telephone interview about their health and mental health, and if so, to provide phone numbers and preferred contact times. Based on criteria met for a high level of psychosocial distress as determined by cutoff scores on self-administered screening instruments included in the written questionnaire (CES-D and Hopkins-21) and scored at NHRC, selected individuals who respond positively about participating in a telephone interview are contacted to schedule their interview. For every four respondents who meet the threshold for psychosocial stress and who also agree to the telephone interview, one respondent who agrees to the interview but who does not meet the threshold condition will be chosen to form the control group. Volunteers are compared to non-volunteers to examine potential for bias and necessity for statistical control, as per the "exhaustive approach" (Rosenthal & Rosnow, 1991). All interviews are conducted in private offices at NHRC. Interviewers enter questionnaire responses directly into personal computers. Completed interviews are scored by computer software thus ensuring the anonymity of results.

Face-to-face interviews. Agreement for the face-to-face Quick DIS to be given on location will be obtained in the same manner as the telephone interview. That is, anyone who completes a special handout form at the group administration of the written questionnaire is eligible for the mental health interview. However, the methodologies diverge here since it is impossible to screen for psychosocial distress during the short period that respondents are convened for the group administration of the written questionnaire and for the subsequent body measurements. Moreover, even if screening procedures could be accomplished quickly, it would be very difficult to hide the fact that respondents were being purposely selected based upon their answers to the questionnaire. Thus, it was decided that as many interviews as possible would be conducted on a first-come, first-serve basis within the 1.5 hour time blocks scheduled for each group administration. Due to the personal nature of the questions contained in the Quick DIS, these interviews were scheduled directly following the physical measurements so as not to artificially raise blood pressure readings.

Since the incidence of psychosocial distress in the general population occurs at the rate of one out of every five persons, we concluded that without any a priori knowledge
of our volunteer subjects, one in five of the respondents who participated in the Quick DIS interviews conducted in Pearl Harbor is likely to meet the threshold established for the CES-D and Hopkins-21. As described earlier, our sampling strategy is to select four subjects who meet criteria for psychosocial distress for every one subject who does not. The face-to-face interviews would thus contribute disproportionately to the total DIS sample. Rather than discard completed interviews, the on-site interviews would be allocated post hoc and any necessary corrections to the sample for the telephone interviews would be made to achieve the desired balance between subjects with and without psychosocial distress. This decision seemed prudent for maximizing our interviewer resources.

Conduct of Survey

Greeting and Gaining Support for Interview. A prepared Greeting introduces the interviewer from the Naval Health Research Center and describes the purpose of the study to the Respondent (see Table 1). This script is identical for the telephone and face-to-face interviews. When the Greeting is not sufficient to address the concerns of the potential respondent or the respondent requires additional information pertaining to, for example, confidentiality, the following prepared responses should address most of the questions an interviewer is likely to receive.

1. Researchers in the field of health will compile and summarize the survey data to determine the health status and health care needs of military personnel. Individual interviews will not be singled out for any purpose.

2. Your social security number is used to bring together the information you provided to us on the questionnaire with your body measurement data and your telephone responses. Your social security number will never be used to look up any of your individual answers.

During the pilot interviews it became apparent that we may need to gain support for the interview from individuals besides the interviewees. In one situation the respondent said that she would need her supervisor’s approval to go ahead with the interview. Although she discussed it herself with her supervisor, there will undoubtedly be the situation that a supervisor wishes to talk with us directly to verify who we are and our authority to conduct the study. Similarly, when calling the home, spouses may be reluctant to ask their wives/husbands to come to the phone until we can persuade them of our official business. If this situation arises, introduce yourself as a research interviewer from the Naval Health Research Center in San Diego. Explain that the person you are trying to reach has already participated in one phase of the research that you are conducting, and at that time, agreed to the telephone interview. The purpose of your call now is to conduct the interview or schedule a more convenient time to callback.
Hello. Is this _______? I’m from the Naval Health Research Center in San Diego. Earlier this year you completed a written health questionnaire for us and indicated at the time that you would be willing to also answer additional questions by phone. It would be of great benefit to the completion of the our study if you could give us a little more of your time to do so. As you may remember, your responses are entirely confidential and you are part of a random sample being surveyed.

Is this a good time to complete the survey now? It will take between 15 and 45 minutes.

(OPTIONAL)

Our overall study is about fitness and wellness. We asked you questions about health habits, health behavior, current and past medical history. Our survey asks questions regarding topics such as eating habits, health habits like tobacco use, and something about your moods, areas that may worry or concern you.

Because this is a scientifically designed questionnaire, I am not allowed to deviate from the questions. They require, for the most part, single word responses. But your answering them carefully will be of great help to us.

(Into interview, perhaps 3/4 completed, say:)

We’re almost done. I really appreciate your time.

END

Thank you for your cooperation.

(If a Respondent appears to be distressed by the questioning, say:)

It sounds like you need to stop the interview now. Is there anyone there you can talk to about how you’re feeling right now? Have you seen a counselor or talked with a chaplin about this? (Suggest they call any of the following using their military base directory: medical officer, family doctor, chaplin, or family service center).
Understanding the Quick DIS. The Quick DIS makes lifetime diagnoses in accordance with DSM-III criteria for positive symptoms. A diagnosis is made in one of two ways. Either the diagnostic criteria (number of symptoms and age of onset) yield a positive result or the criterion is found to be negative (not present/insufficient in strength or explained by use of medication, alcohol, or drugs or by a physical illness/injury). As an example, the Quick DIS asks about 35 somatic symptoms for diagnosing Somatization (refer to Quick DIS manual). For each of the 35 symptoms, the respondent is asked if s/he has experienced them. If the response is "yes" the respondent is also asked when s/he experienced the first and last occasion of the symptom (referenced by age). What is not shown in the manual is the sequence of questions which are defined by the Probe Flow Chart. This is because the questions in the Probe Flow Chart are built into the Quick DIS. Although the program will lead you through these questions, your understanding of the Probe Flow Chart will improve your performance in administering the Quick DIS.

The Quick DIS computer program leads the interviewer through a series of questions or diagnostic criteria. The first question ascertains the incidence of a symptom (e.g., Have you ever had a lot of trouble with abdominal or belly pain?) If the respondent answers "no", then the symptom is coded internally in the computer as a "1" which indicates that the symptom is not present (see Table 2, Probe Flow Chart 10/88). No further probe questions are required. The PRB codes from the Probe Flow Chart can take values of 1 to 5. Their meanings are as follows:

1 = Not present  
2 = Not clinically significant  
3 = Explained by drugs, alcohol, or medicine  
4 = Explained by physical condition  
5 = Probable psychiatric symptom

If the respondent indicates that s/he experienced belly pain, a sequence of probe questions is asked to try to determine the cause of this symptom. The subsequent question asks "Did you tell a doctor about the belly pain?" A "yes" response is followed by a sequence of questions shown in the right-hand box of the Probe Flow Chart. The follow-up question is, "When you told the doctor (about the belly pain), what was the diagnosis?" The diagnosis of either "nerves, stress, anxiety, depression, or mental illness" or "no definite diagnosis" results in a PRB code of "5" (i.e., probable psychiatric symptom). Either of these diagnoses results in a follow-up question which asks "Was the belly pain always the result of medication, drugs, or alcohol?" A "yes" response returns a code of "3". A "no" response (i.e., the belly pain was not always caused by medicine, drugs, or alcohol) is followed up with "When the belly pain was not due to medicine, drugs, or alcohol, was it always the result of a physical illness or injury?" The computer program codes a "4" if the symptom is explained by a physical illness. If the
symptom cannot always be explained by "medicine, drugs, or alcohol" or by a "physical injury or illness," then the computer program records a value of "5" for probable psychiatric symptom.

Returning to the top of the Probe Flow Chart, if the respondent indicates that s/he did not tell a doctor about the symptom, then the respondent is asked a series of probe questions: (1) "Did you tell any other professional about the belly pain?"; (2) "Did you take medication more than once for the belly pain?"; and (3) "Did the belly pain interfere with your life or activities a lot?". A "no" response to all three questions results in a "2" (i.e., not clinically significant). A "yes" response to any of the three questions follows the same logic that applied to a doctor consultation. That is, symptoms that always have either an organic basis (physical illness or injury) or are caused by medicine, drugs, or alcohol rule out a psychiatric diagnosis.

**Question Delivery.** Much has been written on the construction and delivery of survey questions (see, for example, *Asking Questions* by Sudman and Bradburn). It is strongly advised that questions are not altered from their original state. This consistency in question delivery helps to ensure comparability within and between studies. Since we encountered several questions in the Quick DIS which are worded awkwardly, the best advice we can offer for optimum delivery of difficult questions is to practice reading them aloud.

Occasionally respondents will misunderstand a question. Since there are no established probes for use with the Quick DIS, your only option is to reread the question. If after several readings it is apparent that the respondent still does not understand the question and has responded in the affirmative based on that misunderstanding, leave the response as is. If there is no real symptom, subsequent questions will likely route the interviewer out of the section.

A frequent situation arises when questions address lifetime events as the DIS does. That is, the respondent cannot answer a question because she simply does not remember. One suggestion for helping the respondent to remember is to ask her if she recalls something of significance that might have been going on at the same time - a family move, an achievement for the respondent or a close family member, a marriage or divorce, a grade school or high graduation, a death or illness in the family, and so forth. Recalling a milestone in the respondent's life is one aid in assisting memory. If, in the final analysis, the respondent cannot make the necessary recall, code the response "no" unless there is a "DK" (don't know) option. DK is used very sparingly in the Quick DIS.

**How to Work with a Respondent in Distress.** Because the Quick DIS covers topics that may trigger an emotional response in a small number of cases, we need to be prepared to respond to an interviewee who appears distressed. The easiest solution is to suggest a break, returning to the interview at a later time. Another option is to refer
the Respondent to a professional. The Greeting provides an established script for making a referral. "It sounds like you need to stop the interview now. Is there anyone there you can talk to about how you're feeling right now? Have you seen a counselor or talked with a chaplin about this? Would it be a good idea to do so now? Do you know how to reach these people?"

Another strategy for handling a respondent who is uncomfortable with the personal nature of the questioning or who may be experiencing some distress is to ask them if they would like to speak with your supervisor. The supervisor for the DIS is a clinical psychologist. Although there are legal ramifications for her to offer any sort of counseling per se, she can represent an authority figure which itself may serve to reduce the respondent's discomfort or distress. The break in the interview may also reduce the respondent's anxiety. Keep in mind that, as with the other components of the study, the DIS is completely voluntary which entitles the respondent to discontinue the interview at any time.

Procedure and Forms for Tracking the Interview

Special Handout

When Special Handout forms are received from RTI, write the Date Received in the upper-right hand corner of the form. File the Special Handout form in order by date received (oldest first) in the "TO DO" Central Notebook. This gives everyone easy access to respondents. The Special Handout form is included in Appendix A.

The procedure is slightly different in Hawaii. The Special Handout forms will be collected by RTI at the completion of the group-administered questionnaire, with one exception. Respondents who are participating in the body measurement component of the study will retain their Special Handout forms to identify themselves as DIS volunteers. The body measurement team will select two subjects to participate in the DIS every 30 minutes throughout their data collection activities. For those who are not selected, Special Handout forms will be collected from subjects when they complete the body measurements.

Phone Log

After retrieving a new respondent from the "TO DO" Central Notebook, complete a Phone Log form on the Respondent. The Phone Log form is included in Appendix A. WAIT to assign him/her the next sequential ID in your assigned range of IDs. Once you have obtained agreement for the interview, at that time assign the ID number. Phone Log forms should never be destroyed as they provide a final disposition for every returned Special Handout.
While working with a Respondent, keep the Phone Log up-to-date. If any call-backs are scheduled, record this information on your personal Appointment Sheet/Call-Back Log. The Call-Back log is shown in Appendix A. In addition, you will need to transfer this information to the Central Notebook. Under the Call-Back section of the notebook, record the call-back on the form that corresponds to the correct week of the call-back. Be sure to do this after each call-back scheduled. Providing this information in a central area will assist in reassigning the call-back should an interviewer be unavailable for the call-back.

If a call-back comes in for an interviewer who is busy, determine if the interview was begun. If not, take the interview yourself. If the interview was already begun, the original interviewer will need to call back as she/he retains the partially completed interview on her computer. Once you complete the interview, record the interview’s disposition in the Central Call-Back record and retrieve the Phone Log from the original interviewer. Complete the paperwork as normal and BE SURE to record the Respondent ID in the space provided. This ID is within your range of assigned numbers, NOT the original interviewer’s.

Individual Interviewer Notebook

While working with a Respondent, keep all paperwork (Special Handout, Phone Log, and personal Call-Back Log) in your own notebook organized by Respondent ID number. Although you should retain call-back information in its own section in your personal notebook, you may wish to organize the Special Handout and Phone Log in a section called "In Process".

Establish a "Call-Back" section in your personal notebook. The form will look the same as that used in the central notebook. Your call-back schedule will only show your own interviews, whereas the central notebook will show all interviewer call-backs.

Once you have completed an interview, that is, the interview is either completed (IC) or the interview has been refused (REF), retain the Special Handout for your record in a Completed Section of your notebook. Refusals include an outright "No" from the Respondent or 4 attempts to reach the Respondent (count 1 each time you reach someone and attempt to determine a time when Respondent can be reached). Be sure to write the Respondent ID in the upper-right-hand corner of the Special Handout form along with final disposition and file the form chronologically by ID. This is YOUR record of the interview. (You may also wish to keep a copy of the Phone Log for your record but this is not a requirement).

The completed Phone Log should be filed in the Central Notebook. File the form chronologically by ID in the Completed Section of the Central Notebook. This provides a handy reference for the programmers who will periodically retrieve your data. The Phone Log will alert the programmers to partially completed or completed interviews.
These interviews will appear in your QDIS3R.DAT files.

**Individual Listing and Diagnosis Printouts**

The Quick DIS prepares a listing file (xxxx.lst) which contains the responses of the interview. This file is invaluable since it is a record of the interview. Should back-up procedures fail at any time, the interview can be recreated with the responses on the listing file. After each interview, print both the listing and diagnosis files and store them in your file cabinet.

Depending upon the availability of printer resources in Hawaii, we will either follow this procedure or utilize communications software (e.g., kermit) to send data to our VAX account at NHRC. This procedure will be used in conjunction with backing-up data to floppy disks.

**Mechanics of Using the Quick DIS**

**Starting Up the DIS**

To start the program type "Q". You will first be asked to enter a respondent ID number. Since the program accommodates a maximum of only seven digits, we cannot use social security number as the unique identifier. Instead, we will use sequenced ids within pre-assigned ranges for each interviewer. For example, interviewer #1 will use the range of 1 - 100, interviewer #2 101 - 200, and so forth. During data processing, these unique IDs will be matched with social security number to merge the questionnaire data with the DIS data.

After registering respondent ID, the next screen will show a listing of sections of the DIS beginning with Demographics and ending with Transsexualism. Note that each of the sections is followed by a check ( ) mark with the exception of sections which are excluded in this study (i.e., drugs, pathological gambling, schizophrenia, transsexualism). This means that they are unanswered. This is important particularly if a respondent breaks off the interview. In a call back you will be able to return to the section where you ended by noting the first check mark which designates the first unanswered section.

**The Main Keys of the DIS**

Four keys/key stroke combinations are important in using the DIS: use the {arrow keys} to designate or highlight the desired response, press {return} to select the desired response, use the {backspace} key to return to an earlier question in the current set, and use Ctrl-Q (the Ctrl key and the Q key together) to end the interview. Note that if you need to change a response to a question in an earlier section, you will need to end the interview and edit it at a later time. Also note that if you quit before completing a
Returning to a Partially-Completed Interview

To return to a partially completed interview, enter the respondent ID. The computer responds with "this ID number already exists, press {return} to continue. The next screen lists the sections of the Quick DIS. Note that you will begin administering the interview at the section with the first check mark which designates the first unanswered section. Use the arrow keys to highlight the section you wish to go to and press enter.

Ending Your DIS Interview

To end your DIS interview, press Ctrl-Q. This returns you to the initial start-up screen which requests respondent ID. Follow the instruction "enter a blank ID" to end the program. Quitting the program returns you to your c:\qdis3r directory.

Interviewer Training: Practice and Pilot Interviews

The entire field team assigned to conduct the Quick DIS interviews participated in the development of all procedures and forms for gaining consent for the interview, conducting the interview, scheduling call-backs, and tracking all attempts to contact the respondent. The Principal Investigator for the project and a member of the field team had extensive experience with the full version of the DIS, either through a comprehensive training program or prior research. They delivered the training and served as experts when questions arose during the practice and pilot interviews and throughout the fieldwork. In addition, another member of the field team who is a clinical psychologist provided invaluable advice on working with respondents who felt emotional discomfort or even distress as a result of the interview. She agreed to serve in a supervisory capacity when an interview became overly emotional, to provide a break in the interview and to advise the respondent of the availability of professional resources available to him within the military. These resources included the chaplain, medical officer, and the family service center.

Training consisted of lectures, practice and pilot interviews both with and without a supervisor present, and debriefings. Unlike the full version of the DIS, the Quick DIS is a self-contained computer program and is considerably shorter than the parent version. Thus, training was greatly simplified. Each member of the field team conducted a single practice interview with either a friend or a co-worker. A second pilot interview was conducted with active duty military subjects from San Diego, who also
agreed to serve as our test subjects for the body measurement component of POWR 95. This interview was conducted via the telephone in the presence of a supervisor. After everyone had completed one practice and one pilot interview, the group reconvened to discuss any issues which arose during the practice sessions. Issues which were raised included: how to work with a respondent who was experiencing emotional distress, what probes (if any) could be used to clarify a question, how to categorize a qualifying event for PTSD, and how to code a response when it is clear that the respondent does not understand the question. Each of these issues is treated in earlier sections of this manual. A final "live" interview was conducted with active duty personnel from around the country. This interview was followed by a final debriefing to discuss any additional problems which arose and to share selected statistics from the first interviews.

Several summary statistics were calculated on the pilot and first "live" interviews. Among the eight interviews conducted, the shortest interview took 20 minutes and the longest was 45 minutes. Average time to administer the eight interviews was 31 minutes. Only two of the eight interviews yielded a dependence on tobacco. This finding was particularly relevant since we expected most of our respondents to have used tobacco or tobacco products at some time during their lives. Any lifetime use of tobacco would result in asking the respondent to answer nearly 40 questions and would lengthen the interview considerably. Including tobacco, four of the eight interviews yielded no diagnosis, three resulted in one diagnosis, and one interview showed three diagnoses. Tobacco dependence and PTSD were the most common diagnoses encountered in the pilot interviews.
SPECIAL HANDOUT

We are looking for volunteers to participate in an additional confidential telephone survey of physical and mental health, and would greatly appreciate your assistance.

If you would be willing to participate in a confidential telephone interview regarding your physical and mental health and have a study member contact you to schedule a telephone interview appointment, please complete the following information:

Name __________________________ Social Security No. __ __ __ __ __ __ __
Last, First Middle Initial
(Please Print)

If stationed in CONUS:
City and duty station where living __________________________
City Duty Station

Daytime telephone number (___ ___ ) ___ ___ - ___ ___
Evening telephone number (___ ___ ) ___ ___ - ___ ___

If stationed in OCONUS:
Country and duty station where living __________________________
Country Duty Station

Daytime telephone number __________________________
Evening telephone number __________________________

Please indicate preferred hours to be contacted (mark all that apply):
__ Morning
__ Afternoon
__ Evening
__ Anytime

FSU # ___ ___ ___

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<th>DATES OF FOLLOW-UP CALLS</th>
<th>DISPOSITION</th>
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NA: No Answer  REF: Refused to start or continue
CI: Interview Completed  PC: Partially Completed
WN: Wrong Number  DISC: Disconnect  CB: Call back with time
## Initial Contact

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<th>Date &amp; Time</th>
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<th>Interview Started (Y/N)</th>
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Appendix B
User's Guide

I. Copying Files (Backing up)
1. Directions at the DOS prompt
   a. At the "C:\>" prompt, type "CD\QDIS3R". This will bring you to the "C:\QDIS3R" prompt.
   b. At this prompt, type "copy *.lst A:" and then <return> to copy the lst files to the disk in the A drive. (If your computer uses the B drive for the 3 1/2" disks substitute B for the A in the command above).
   c. Then at the prompt, type "copy *.dis A:" and <return> to copy the dis files (substituting B if done in step B).
   d. Lastly, at the prompt, type "copy qdis3r.dat A:" to copy the data file.

2. Directions from windows
   a. At the opening windows screen, double click on the icon labeled "Main".
   b. Then double click on the icon labeled "File Manager".
   c. Scan down the list of file directories on the left hand side and look for "QDIS3R".
   d. When you find it click on it once.
   e. In the box on the right hand side, locate the files you wish to copy.
   f. Click on the file name once and the take the mouse arrow up to the command "File", and click on copy.
   g. In the box that says "To:" type the directory you wish the file to be copied onto [this would be either A or B as used above].

II. Printing
1. Printing can only be done from the DOS prompt
2. Directions at the DOS prompt
   a. At the "C:\>" prompt, type "CD\QDIS3R".
   This will bring you to the "C:\QDIS3R" prompt.
   b. At this prompt, type "print <filename>".
   The computer will then show a line which says:
   "Name of list device [PRN]: ".
   c. At this prompt type "LPT1" and <return>.
   d. You will then be given a message that your file is being printed or sent to the queue to be printed.
Appendix C
Quick Diagnostic Interview Schedule III-R

Version 1.0

Steven Marcus
Lee N. Robins, Ph.D.
Kathy Bucholz, Ph.D.
This Quick interview is based upon the:

**NIMH DIAGNOSTIC INTERVIEW SCHEDULE**
Version III Revised (DIS-III-R)
November 7, 1989

Authors:
Lee Robins, Ph.D.
John Helzer, M.D.
Unda Cottier, Ph.D.
Evelyn Goldring, M.A.T.

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PROGRAM TERMS:

i) This program is provided on an "as is" basis. Neither Washington University nor its Department of Psychiatry will be held liable for any damages resulting from its administration.

ii) This program may be copied for use on multiple computers serving the same project but may not be copied for use by other researchers or clinicians. Support the computer programs that you use.

iii) This program has been tested. However, if you have any problems, questions, or comments, please correspond with us in writing, by mail or FAX. If there is a problem, it is important to enclose a detailed description along with a hard copy of the .LST and .DIS files of the case in which the problem occurred. We will check it and get back to you.

CONTACT PERSON:
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Washington University School of Medicine
4940 Audubon Avenue
St. Louis, MO 63110

FAX: (314) 454-7194
454-36440

The Quick DIS-III-R is Copyright © 1990-1991 by Steven Marcus
All Rights Reserved
This manual consists of 4 pages of Instructions and an appendix. Please be absolutely sure to read the instructions before you begin using the program. The Appendix can be used at your leisure. It is organized by disorder. For each disorder there can be found the question text, a verbal description of the scoring program, and the actual program statements that create a diagnosis. You will want to use the Appendix as a reference to help you interpret the reports produced by the QDIS-III-R.

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* Presents a generic template for the following seven distinct drug categories:
  1. Marijuana
  2. Stimulants
  3. Sedatives
  4. Cocaine
  5. Heroin/Opiates
  6. PCP/Psychodelics
  7. Inhalants
The Computerized Quick DIS-III-R
For IBM PC's and Compatibles

INTRODUCTION

This computerized interview makes lifetime diagnoses in accordance with DSM-III-R criteria for positive symptoms. It does not assess exclusion rules that allow the presence of another disorder to preempt the index disorder. For those diagnoses it covers, lifetime diagnostic outcomes are identical with positive and negative results for the full DIS-III-R but the Quick DIS-III-R can be administered more quickly because it asks fewer questions. The Quick DIS-III-R should not be considered a screening interview because it does not sacrifice accuracy by asking only the "best" questions. Instead, it provides all the questions in making a lifetime diagnosis, but achieves brevity by attempting to classify subjects as cases or non-cases as soon as it can be determined whether or not positive diagnostic criteria will be met. The shortening without loss of accuracy is achieved in two ways: First, the interview skips remaining questions for a criterion as soon as that criterion can be shown to be positive. Second, as soon as a criterion is found to be negative, a negative diagnosis is made, and all remaining questions for that disorder are skipped.

Symptoms are assessed just as they are in the DIS-III-R. This interview follows the DIS-III-R's instruction as to whether the Probe Flow Chart is to be used, and in how much detail. Therefore, the Quick DIS-III-R, like its parent instrument, rules out symptoms that are not clinically significant and that have physical causes. Because the rules for probing and skipping are built into the program, the interview can be administered by an interviewer with little or no training, or can be self administered by literate subjects. Because the program checks for logical errors (e.g., ages of last symptom greater than age given in demographic section) and accepts only legitimate codes, no editor is required, and data sets are clean.

The user should nonetheless be aware of the limitations of the instrument as compared with the parent DIS-III-R. Although positive subjects are asked when the last assessed symptom occurred, a symptom not assessed may have occurred more recently; thus some active cases may be misjudged as in remission. The Quick DIS-III-R also provides less information than the DIS-III-R in a number of ways. Since all symptoms may not be asked, it provides no symptom counts. Because a negative criterion is sufficient to warrant a negative diagnosis, all criteria may not be assessed. Because all questions not needed to make a DSM-III-R diagnosis are dropped, DSM-III diagnoses cannot be made, as they can be with the DIS-III-R. Nor is information obtained about age of onset or whether symptoms were reported to a physician. A few disorders covered by DIS-III-R are omitted: dementia, dysthymia, somatic pain disorder, atypical bipolar disorder, and dependence on prescription drugs. Subtypes of DSM-III-R disorders are not distinguished. Thus there is no distinction made between substance abuse and dependence, between schizophrenia and schizophreniform, between schizophrenia plus mania or depression and schizoaffective disorder. Before using this instrument you should be certain that it provides as much detail as you need. The best way to judge this is to look at the diagnostic program which immediately follows the list of questions for each diagnosis in the appendix; it shows the diagnoses that the Q-DIS-III-R will provide.

THE QUICK DIS-III-R IS NOT INTENDED AS AN ALTERNATIVE TO THE CLINICAL JUDGEMENT OF A QUALIFIED MENTAL HEALTH CARE PROFESSIONAL WHILE IT CAN BE USED TO ALERT A CLINICIAN TO POSSIBLE DISORDERS, IT DOES NOT MAKE DEFINITIVE DIAGNOSES AND IT SHOULD NEVER BE USED AS THE SOLE CRITERION FOR DETERMINING A COURSE OF TREATMENT.
INSTALLATION

Installation of the program is quite straightforward. However, if any of the steps outlined below seem confusing to you or if your computer is configured differently than described, please seek out your local computer expert for assistance before proceeding.

As with any new computer program, be sure to first make a backup copy of your master diskette.

i) To install and run with a computer that has a hard drive:

1) From the C:> type MD QDIS3R (where J is the ENTER key)
2) Type CD \QDIS3R
3) With the Quick DIS-III-R diskette in the A: drive, type: COPY A:*.* C:\QDIS3R.
   When the computer says "All Files Copied" you are ready to run the program.
4) To run the program:
   From the C:\QDIS3R directory type QDIS3R to begin. Follow the instructions as they appear on the screen.

ii) To install and run with a computer having a floppy drive only:

1) Place the backup QDIS3R disk in the A: drive.
2) To run the program:
   From the A:> type QDIS3R. Follow the instructions as they appear on the screen.

iii) Changing the default for which diagnostic sections to administer

After you see the program's title screen and enter a case number, the diagnostic menu is presented. By pressing the space bar you can select or deselect the sections you wish to administer (Demographics is asked of all subjects). If you will be assessing the same diagnoses for a large number of persons, it will be more efficient to reset the default menu with these choices. Then the correctly selected sections will appear upon starting the program, and the interviewer only has to press ENTER. To modify the default menu:

1) From C:\QDIS3R, type CSE SECTLIST.TXT to use the provided public domain editor to make changes in this file (type this from A: if you are running from a floppy)
2) type ESC (the escape key) to enter edit mode.
3) use the up and down arrow keys to move to the section you wish to select
4) change the 0 in the first column to a 1
5) repeat steps 3 and 4 for each additional section you wish to have automatically selected
6) press the F3 key to save the file and exit the editor

Be extra careful not to change anything in the SECTLIST.TXT file except the first column!
NOTES ON USE

1) The up and down arrow keys are used to navigate menus. As an alternative, you may press the key corresponding to the first character of the menu item you wish to select.

2) The Backspace key is used to back up to a previous question within the same diagnostic section. Once you complete a section you cannot go back to a question within that section.

3) If you have a monochrome monitor (especially LCD laptop screens), try starting the program by typing QDIS3/ /b. This will start the program with monochrome video and will provide better visibility.

4) If you administer all diagnostic sections, the data files for each subject will occupy approximately 36K of disk space in the current directory. If you are running the program from a floppy disk, storage space will eventually be a problem. Be sure to closely monitor your available disk space! If you need to clear space, copy all files ending in .DAT, .LST and .DIS to another disk and delete them from your program disk (or QDIS3/ directory, if you are using a hard drive).

5) Ctrl-G (the Ctrl key and the G key together) will end the interview and will save the data for the diagnostic sections already administered. It will not save the section that is in progress. You may continue the interview at a later time by using the same case number. You will be reminded that this case number already exists.

6) Do not turn off the computer before completely exiting the program (i.e. only turn the computer off when you see the DOS prompt).

REPORTS

There are two reports generated at the completion of each interview: 1) a list of the disorders selected, their diagnostic score, and a score for each diagnostic criterion, and 2) a list of responses to all asked questions. You can send the reports to your printer by issuing the following commands from C:\QDIS3/ if you are using a hard drive or from A: if you are using a floppy:

Diagnostic Summary:
Type PRINT XXX..DIS (where XXX.. is the case number you specified at the start of the interview) to print the file containing a patient's diagnostic report. Each diagnostic section you selected from the main menu is listed and prefixed with a <+++> if the diagnosis is positive or a <--> if it is negative. Additionally, each criterion required for that diagnosis is prefixed with a <+> as a prefix if it is present or a <--> if it is either negative or not assessed. A criterion will not be assessed if the questions contained in the criterion were not asked.

Question by Question Summary:
Type PRINT XXX..LST to print the file containing the question by question report of that patient's responses. To interpret the responses you must refer to the Quick DIS-III-R question text in the Appendix. There you will find the QDIS-III-R question number along with its corresponding text. The standard symptom response codes are:

0 = Not asked
1 = Not present
2 = Not clinically significant
3 = Explained by drugs, alcohol, or medicine
4 = Explained by physical condition (and drugs, alcohol or medicine)
5 = Probable psychiatric symptom.

These standard codes are not in the text. Non-standard codes are listed below the question for which they are used.
EDITING CASES

Upon completion of each diagnostic section, the .LST and .DIS files are appended with reports generated from patient responses. If you subsequently need to re-administer the same diagnostic section to a patient, the .LST and .DIS files will contain both reports in chronological order with a date stamp to easily distinguish them. However, the QDIS3R.DAT file is updated if a section is re-administered so that only the most recent data are saved.

CREATING A DATABASE

The program also creates a file entitled QDIS3R.DAT, an ASCII data file, which can be used for batch data analysis with your favorite statistical package. It contains the question by question responses for each diagnosis that was administered, along with the scored diagnostic and recency information generated by the interview. In the C: \QDIS3R directory (or A: if you are using a floppy) is the file QDIS3R.SAS which contains a SAS input statement and program lines to produce diagnostic frequencies for all interviewed subjects*. This input statement could be modified to work with SPSS, BMDP or any other package that can import ASCII data. If the QDIS3R.DAT file becomes too large for your floppy drive you may copy it, along with the .LST and .DIS files, to a different floppy drive and delete them from your program disk.

As with any program - BACK UP YOUR DATA OFTEN!!!

SAMPLE CASES

There are two sample cases on the disk to allow you to see sample output before you begin, or to test that the statistical program you generate to create batch programs is working properly. There are two files ending in .LST, the corresponding reports that end in .DIS, and the data file TEST.DAT which can be read by modifying QDIS3R.SAS (described above).

* On a technical note: This SAS program will produce a dataset that contains 719 variables, which is quite large for analysis on a personal computer. If you encounter problems running this program due to memory constraints, contact your local SAS expert for advice on reducing the number of variables included in the analysis.
APPENDICES:

The following pages contain:

1 - Question text
2 - Definitions of DSM-III-R diagnostic criteria
3 - Scoring programs

for all Q-DIS-III-R sections.
NOTES

1) Question Text

- All question text used in the Q-DIS-III-R is included here with the exception of standard probe phrases from the Probe Flow Chart. Key words from the symptom question are selected and inserted into the standard probes just as interviewers do in administering the DIS-III-R.

- Where "INSERT POSITIVE SYMPTOMS" is shown, the computer lists the key words for all the symptoms from that diagnosis for which the respondent is positive, so that the respondent can review them.

- In the drug section, the word "DRUG" is replaced by one of 7 drug categories shown at the bottom of the Table of Contents.

- Question numbers correspond to the numbers in the DIS-III-R. When there are gaps in the number sequence, either the missing questions are not needed for the DSM-III-R diagnosis, are needed only for subtyping a diagnosis, or the missing number refers to an instruction to the interviewer that has been built into the computer program. Comparison of the question list with the DIS-III-R should make clear why gaps occur.

- The question number shown in the list appears in the lower left corner of the screen during administration of that question.

- Skip instructions are in the program but not displayed in the text.

- Standard codes of No=1 and Yes=2 and the standard Probe Flow Chart codes of 1-5 are used but not displayed. All other codes are displayed in upper case.

2) Description of the scoring program

- This section presents, in ordinary English, the definitions of the criteria used in making a diagnosis and shows, in the final statement, how these criteria are combined to make a diagnosis. This section presents all the criteria from DSM-III-R, and indicates whether or not each is assessed by the Quick DIS-III-R.

- The ± symbol is used to indicate diagnostic criteria that are not assessed.

- Although 7 drug categories are independently assessed, only a generic drug program is shown. Each drug disorder is assessed in a parallel fashion.

3) The program

- The Q-DIS-III-R was programmed with the Microsoft Quick Basic Professional Development System with additional routines from Crescent Software. The scoring programs that follow were extracted from the Basic source code but were modified to look more like the SAS program code that is used in the DIS-III-R scoring program. As a result, this code will not run in Basic or SAS, but is provided as pseudo-code for reference purposes only.
DEMOGRAPHICS

A1 Are you male or female?
   1) MALE
   2) FEMALE

A2 How old are you?

A4 Are you presently married or are you widowed, separated, divorced, or have you never been married?
   1) MARRIED
   2) WIDOWED
   3) SEPARATED
   4) DIVORCED
   5) NEVER MARRIED

A9 Have you ever lived with someone for at least a year as though you were married?

A11 Have you had any children, not counting any who are yours by adoption or were born dead?

A11A Have you ever acted as a parent for children who were not your own natural children?

A13 Are you employed now?
   1) YES
   2) NO

A14 What is the highest grade in school you completed?
   00-12 CODE ACTUAL GRADE
   13 1 YR OF COLLEGE OR TECHNICAL SCHOOL
   14 2 YRS COLLEGE
   15 3 YRS COLLEGE
   16 4 YRS COLLEGE: B.A., B.S.
   17 POST GRAD. M.D., PH.D

A15 What ethnic group do you belong to?
   1) AMERICAN INDIAN
   2) ASIAN
   3) PACIFIC ISLANDER
   4) BLACK-NOT OF HISPANIC ORIGIN
   5) BLACK-HISPANIC ORIGIN
   6) WHITE-NOT OF HISPANIC ORIGIN
   7) WHITE-HISPANIC ORIGIN
   8) OTHER
Now I'm going to ask you some questions about using tobacco. Have you ever smoked cigarettes daily for a month or more?

Did you smoke as many as 20 cigarettes per day during the period when you were smoking most?

Have you ever smoked cigars daily for a month or more?

Did you smoke as many as 3 cigars per day during the period when you were smoking most?

Have you ever smoked a pipe daily for a month or more?

Did you smoke as many as 4 pipes per day during the period when you were smoking most?

Have you ever used snuff or chewed tobacco daily for a month or more?

Did you do that as much as 4 times per day during the period when you were using most?

Have you often had periods when you smoked a lot more or used a lot more tobacco than you intended to?

Have you more than once wanted to quit or cut down on smoking or using tobacco?

Have you ever tried to quit or cut down on smoking or using tobacco?

Did you ever find you couldn't quit or cut down?

Did you try to cut down several times?

I'm going to ask you about some problems you might have had in the first day or two after you quit or cut down. For instance, did you crave tobacco?

Were you irritable or angry?

Were you nervous?

Were you restless?

Did you have trouble concentrating?

Did your heart slow down?

Did your appetite increase or did you gain weight?

In weeks, what is the longest any of these problems from cutting down lasted?

Did you have these problems several times after cutting down?

You said you've had problems with (INSERT POSITIVE SYMPTOMS HERE). Have you ever kept using tobacco or started up again to avoid any such problem or to avoid gaining weight or getting irritable?

Did you ever keep using tobacco or start up again to avoid problems like gaining weight or getting irritable?
B12 Did tobacco cause you any health problems like coughs, problems with your heart or blood pressure, or lung trouble?

B12A Did you continue to use tobacco after you knew it caused you health problems?

B13 Have you ever continued to smoke or use tobacco when you had a serious illness that you knew made it unwise to use tobacco?

B14 Did using tobacco make you nervous or jittery or cause you any other emotional or mental problems?

B14A Did you continue to use tobacco after you knew it caused you problems with your nerves?

B15 Have you ever given up or greatly reduced important activities like work or sports or associating with friends or relatives, so you could smoke or use tobacco?

B15A Have you repeatedly given up important activities to smoke or use tobacco or have you done so for at least a month?

RECTOB Within the last 12 months, have you smoked or used tobacco every day for a month or more?
The following variables are constructed to make the diagnosis and provide other information:

The "A" criterion symptoms for tobacco dependence. The underscore is replaced by a number from 1 - 9 corresponding to the DSM-III-R criterion symptom. The dependence symptoms are:

1. Greater consumption or duration than intended:
   B3  consumption in larger amounts or period than intended

2. A persistent desire, or unsuccessful efforts to control use:
   B4  persistent desire
   B6  unsuccessful at cutting down

3. Great deal of time spent consuming, acquiring, or recovering:
   * NOTE: This symptom is not assessed.

4. Frequent intoxication or withdrawal symptoms which impede major role obligations, or use when physically hazardous:
   * NOTE: This symptom is not assessed.

5. Important activities foregone due to use:
   B15  given up, reduced activities to use

6. Continued use despite knowledge of a social, psychological, or physical problem which is caused or exacerbated by use:
   B12A, B13  continued use despite illness exacerbated by use
   B14A  continued use despite emotional problems due to use

7. Marked tolerance:
   B1A8  20+ cigarettes per day
   B1B8  3+ cigars per day
   B1C8  4+ pipefuls per day
   B1D8  4+ uses of snuff/chewing tobacco per day

8. Withdrawal symptoms when cutting down (four of the following):
   B91  craving
   B92  irritability
   B93  anxiety
   B95  difficulty concentrating
   B94  restlessness
   B99  decreased heart rate
   B910  increased appetite or weight gain

9. Use to avoid or relieve withdrawal:
   B11  use to avoid or relieve withdrawal symptoms

The "A" criterion for dependence: the occurrence of at least three of the above listed dependence symptoms (1 - 9).

The "B" criterion for dependence: persistence of symptoms for at least one month, or repeated occurrence over a longer period of time.

The DSM-III-R diagnosis of nicotine dependence. Nicotine abuse is not assessed, since the DSM-III-R manual states that such abuse is virtually never present without a history of dependence. A positive diagnosis requires that both criteria "A" and "B" are met. The scoring of TOB3R is as follows:

1 = No nicotine dependence
5 = Mild, Moderate, or Severe nicotine dependence
TD3RA1 = (B3 = 5)
TD3RA2 = (B4 = 5 OR B6 = 5)
TD3RA5 = (B15 = 5)
TD3RA6 = (B12A = 5 OR B13 = 5 OR B14A = 5)
TD3RA7 = ((B1AB = 5) OR (B1BB = 5) OR (B1CB = 5) OR (B1DB = 5))
TD3RA8 = ((B91 = 5) +
  (B92 = 5) +
  (B93 = 5) +
  (B94 = 5) +
  (B95 = 5) +
  (B99 = 5) +
  (B910 = 5)) >= 4
TD3RA9 = (B11 = 5)

TD3RA = (TD3RA1 + TD3RA2 + TD3RA5 + TD3RA6 +
  TD3RA7 + TD3RA8 + TD3RA9) >= 3

TD3RB = ((TD3RA1 = 1) +
  (TD3RA2 = 1 AND B7 = 5) +
  (TD3RA5 = 1 AND B15A = 5) +
  (TD3RA6 = 1) +
  (TD3RA7 = 1) +
  (TD3RA8 = 1 AND ((4 <= B10 AND B10 <= 97) OR B10A = 5)) +
  (TD3RA9 = 1)) >= 2

Diagnosis = 1
IF TD3RA = 1 AND TD3RB = 1 THEN Diagnosis = 5
SOMATIZATION

Now I'm going to ask you some questions about your health. Has your physical health been pretty good or have you been sickly for the majority of your life?

1) PRETTY GOOD MOST OF LIFE
2) SICKLY MOST OF LIFE

How old were you the FIRST time you considered yourself sickly?

How old were you the LAST time you considered yourself sickly?

Have you ever had a lot of trouble with abdominal or belly pain not counting times when you were menstruating?

How old were you the FIRST time you had abdominal or belly pain?

How old were you the LAST time you had abdominal or belly pain?

Have you ever had a lot of trouble with back pain?

How old were you the FIRST time you had back pain?

How old were you the LAST time you had back pain?

Have you ever had pains in the joints?

How old were you the FIRST time you had pains in the joints?

How old were you the LAST time you had pains in the joints?

Have you ever had pains in your arms or legs other than in the joints?

How old were you the FIRST time you had pains in your arms or legs?

How old were you the LAST time you had pains in your arms or legs?

Have you ever had chest pains?

How old were you the FIRST time you had chest pains?

How old were you the LAST time you had chest pains?

Have you ever had a lot of trouble with excessively painful menstrual periods?

How old were you the FIRST time you had painful menstrual periods?

How old were you the LAST time you had painful menstrual periods?

Have you ever had pain when you urinated, that is, passed your water?

How old were you the FIRST time you had pain when you urinated?

How old were you the LAST time you had pain when you urinated?

Have you ever been completely unable to urinate, or pass water, or had great difficulty urinating for 24 hours or longer, other than after childbirth or surgery?

Quick Diagnostic Interview Schedule III-R
AOC9  How old were you the FIRST time you were unable to urinate?
ARC9  How old were you the LAST time you were unable to urinate?
C10   Have you ever had burning pain around your private parts?
AOC10  How old were you the FIRST time you had burning pain around your private parts?
ARC10  How old were you the LAST time you had burning pain around your private parts?
C11   Have you ever had pain anywhere else other than in the places we've already talked about?
AOC11  How old were you the FIRST time you had these other pains?
ARC11  How old were you the LAST time you had these other pains?
C14   Have you ever had a lot of trouble with vomiting (FEMALES: when you were not pregnant)?
AOC14  How old were you the FIRST time you had trouble with vomiting?
ARC14  How old were you the LAST time you had trouble with vomiting?
C15   During any pregnancy did you vomit all through the pregnancy?
AOC15  How old were you the FIRST time you vomited throughout your pregnancy?
ARC15  How old were you the LAST time you vomited throughout your pregnancy?
C16   Have you ever had a lot of trouble with nausea—feeling sick to your stomach but not actually vomiting?
AOC16  How old were you the FIRST time you had trouble with nausea?
ARC16  How old were you the LAST time you had trouble with nausea?
C17   Have you ever had a lot of trouble with loose bowels or diarrhea?
AOC17  How old were you the FIRST time you had trouble with diarrhea?
ARC17  How old were you the LAST time you had trouble with diarrhea?
C18   Have you ever had a lot of trouble with excessive gas or bloating of your stomach or abdomen?
AOC18  How old were you the FIRST time you had trouble with excessive gas?
ARC18  How old were you the LAST time you had trouble with excessive gas?
C19   Have you found that there were several kinds of foods that you couldn't eat because they made you ill?
AOC19  How old were you the FIRST time you felt ill because of foods you ate?
ARC19  How old were you the LAST time you felt ill because of foods you ate?
Quick Diagnostic Interview Schedule III-R

C20 Have you ever been blind in one or both eyes where you couldn’t see anything at all for a few seconds or more?

AOC20 How old were you the FIRST time you had blindness?

ARC20 How old were you the LAST time you had blindness?

C21 Has your vision ever become blurred for some period, when it wasn’t just due to needing glasses or changing glasses?

AOC21 How old were you the FIRST time you had blurred vision?

ARC21 How old were you the LAST time you had blurred vision?

C22 Have you ever been deaf when you completely lost your hearing for a period of time?

AOC22 How old were you the FIRST time you became deaf?

ARC22 How old were you the LAST time you were deaf?

C23 Have you ever had trouble walking?

AOC23 How old were you the FIRST time you had trouble walking?

ARC23 How old were you the LAST time you had trouble walking?

C24 Have you ever been paralyzed—that is, completely unable to move a part of your body for at least a few minutes?

AOC24 How old were you the FIRST time you were paralyzed?

ARC24 How old were you the LAST time you were paralyzed?

C25 Was there ever a time when you lost your voice for 30 minutes or more and couldn’t speak above a whisper?

AOC25 How old were you the FIRST time you lost your voice?

ARC25 How old were you the LAST time you lost your voice?

C26 Have you ever had a seizure or convulsion since you were 12 where you were unconscious and your body jerked?

AOC26 How old were you the FIRST time you had a seizure?

ARC26 How old were you the LAST time you had a seizure?

C27 Have you ever had fainting or falling out spells where you felt weak or dizzy and then passed out?

AOC27 How old were you the FIRST time you had a fainting spell?

ARC27 How old were you the LAST time you had a fainting spell?

C28 Have you ever been unconscious for any reason other than those already mentioned?

AOC28 How old were you the FIRST time you were unconscious?
ARC28  How old were you the LAST time you were unconscious?
C29   Have you ever had a period of amnesia—that is, a period of several hours or days where you couldn't remember anything afterwards about what happened during that time?
AOC29  How old were you the FIRST time you had amnesia?
ARC29  How old were you the LAST time you had amnesia?
C30   Have you ever had problems with double vision?
AOC30  How old were you the FIRST time you had double vision?
ARC30  How old were you the LAST time you had double vision?
C31   Have you ever had shortness of breath when you had not been exerting yourself?
AOC31  How old were you the FIRST time you had shortness of breath?
ARC31  How old were you the LAST time you had shortness of breath?
C32   Has your heart ever beat so hard that you could feel it pound in your chest?
C32A  Has that happened only when you were exerting yourself or at other times too?
   1) ONLY UPON EXERTION
   2) OTHER TIMES TOO
AOC32  How old were you the FIRST time your heart beat hard when you were not exerting yourself?
ARC32  How old were you the LAST time your heart beat hard when you were not exerting yourself?
C33   Have you ever been bothered by dizziness?
AOC33  How old were you the FIRST time you were bothered by dizziness?
ARC33  How old were you the LAST time you were bothered by dizziness?
C34   Have you ever been bothered by periods of weakness, that is, when you could not lift or move things you could normally lift or move?
AOC34  How old were you the FIRST time you had periods of weakness?
ARC34  How old were you the LAST time you had periods of weakness?
C35   Have you ever felt as though there was a lump in your throat that made it difficult to swallow?
AOC35  How old were you the FIRST time you experienced a lump in your throat?
ARC35  How old were you the LAST time you experienced a lump in your throat?
C37   Other than your first year of menstruation, have your menstrual periods ever been irregular?
AOC37  How old were you the FIRST time you had irregular menstrual cycles?
ARC37  How old were you the LAST time you had irregular menstrual cycles?
Have you ever had excessive bleeding with your menstrual periods?

How old were you the FIRST time you had excessive bleeding?

How old were you the LAST time you had excessive bleeding?

In general, has your sex life been important to you or could you have gotten along as well without it?

1) SOMEWHAT IMPORTANT OR NO SEXUAL EXPERIENCE
2) GOTTEN ALONG AS WELL WITHOUT IT

Has having sexual relations ever been physically painful for you?

How old were you the FIRST time sexual relations were painful?

How old were you the LAST time sexual relations were painful?

Have you had any other kind of sexual difficulties (MALES: such as a period of two months or more when you had trouble having an erection)?

How old were you the FIRST time you had sexual difficulties?

How old were you the LAST time you had sexual difficulties?

You said you have had problems or experiences with: (INSERT POSITIVE SYMPTOMS). Have you had a problem or experience like that within the last 12 months?
DSM-III-R SOMATIZATION DISORDER -- SOM3R

The following variables are constructed to make the diagnosis:

SOM3RB. The presence of individual somatization symptoms. The underscore is replaced with a number from 1 to 35 indicating one of the thirty-five symptoms listed in DSM-III-R. To be considered significant the symptom must meet three criteria:

1.) there is no related organic pathology to account for the symptom;
2.) it is not manifest only during panic episodes; and
3.) the symptom has caused the person to take medication, see a doctor, or alter their lifestyle.

The thirty-five listed symptoms are:

Gastrointestinal:
- C14 vomiting (other than during pregnancy)
- C1 abdominal pain (other than during menstruation)
- C16 nausea
- C18 bloating
- C17 diarrhea
- C19 intolerance of several different foods

Pains:
- C4 pain in extremities
- C2 back pain
- C3 joint pain
- C8 pain during urination
- C11 other pain (excluding headaches)

Cardiopulmonary:
- C31 shortness of breath when not under exertion
- C32 palpitations
- C5 chest pain
- C33 dizziness

Conversion or pseudoneurologic:
- C29 amnesia
- C35 difficulty swallowing
- C25 loss of voice
- C22 deafness
- C30 double vision
- C21 blurred vision
- C20 blindness
- C27,C28 fainting, or loss of consciousness
- C26 seizure or convulsion
- C23 trouble walking
- C24,C34 paralysis, or muscle weakness
- C9 urinary retention, or difficulty urinating
SOMATIZATION

Sexual:
- C10 burning sensation in sexual organs or rectum (other than during intercourse)
- R22 sexual indifference
- R25 pain during intercourse
- R27 impotence

Female reproductive:
- C7 painful menstruation
- C37 irregular menstrual periods
- C38 excessive menstrual bleeding
- C15 vomiting throughout pregnancy

SOM3RSX The total number of DSM-III-R lifetime somatization symptoms. This count ranges from 0 to 35.

SOM3R The total number of DSM-III-R somatization symptoms within the last year. This count ranges from 0 to 35.

SOM3RST The youngest age at which a somatization symptom was experienced. This is used in assessing criterion "A".

SOM3RLST The oldest age at which a somatization symptom was experienced. This is used in assessing criterion "A".

SOM3RA The "A" criterion requiring a history of many physical complaints or a belief that one is sickly, beginning before age 30 and persisting for several years.

SOM3RB The "B" criterion requiring the presence of thirteen out of the thirty-five somatic symptoms listed above.

SOM3R The DSM-III-R diagnosis for somatization disorder. A positive diagnosis is made if the criteria for both "A" and "B" above are met. The scoring of SOM3R is as follows:

1 = No somatization disorder
5 = Meets lifetime criteria for somatization disorder
SOM3RB1 = (C14 = 5)
SOM3RB2 = (C1 = 5)
SOM3RB3 = (C16 = 5)
SOM3RB4 = (C18 = 5)
SOM3RB5 = (C17 = 5)
SOM3RB6 = (C19 = 5)
SOM3RB7 = (C4 = 5)
SOM3RB8 = (C2 = 5)
SOM3RB9 = (C3 = 5)
SOM3RB10 = (C8 = 5)
SOM3RB11 = (C11 = 5)
SOM3RB12 = (C51 = 5)
SOM3RB13 = (C32 = 5)
SOM3RB14 = (C5 = 5)
SOM3RB15 = (C33 = 5)
SOM3RB16 = (C29 = 5)
SOM3RB17 = (C35 = 5)
SOM3RB18 = (C25 = 5)
SOM3RB19 = (C22 = 5)
SOM3RB20 = (C30 = 5)
SOM3RB21 = (C21 = 5)
SOM3RB22 = (C20 = 5)
SOM3RB23 = (C27 = 5 OR C28 = 5)
SOM3RB24 = (C26 = 5)
SOM3RB25 = (C23 = 5)
SOM3RB26 = (C24 = 5 OR C34 = 5)
SOM3RB27 = (C9 = 5)
SOM3RB28 = (C10 = 5)
SOM3RB29 = (R22 = 5)
SOM3RB30 = (R25 = 5)
SOM3RB31 = (R27 = 5)
SOM3RB32 = (C7 = 5)
SOM3RB33 = (C37 = 5)
SOM3RB34 = (C38 = 5)
SOM3RB35 = (C15 = 5)

SOM3RSX = SUM(OF SOM3RB1-SOM3RB35)
SOMATIZATION

SOM3RFST = MIN(OF AOC1 AOC2 AOC3 AOC4 AOC5 AOC7
AOC8 AOC9 AOC10 AOC11 AOC14 AOC15
AOC16 AOC17 AOC18 AOC19 AOC20 AOC21
AOC22 AOC23 AOC24 AOC25 AOC26 AOC27
AOC28 AOC29 AOC30 AOC31 AOC32 AOC33
AOC34 AOC35 AOC37 AOC38 AOR25 AOR27)

SOM3RLST = MAX(OF ARC1 ARC2 ARC3 ARC4 ARC5 ARC7
ARC8 ARC9 ARC10 ARC11 ARC14 ARC15
ARC16 ARC17 ARC18 ARC19 ARC20 ARC21
ARC22 ARC23 ARC24 ARC25 ARC26 ARC27
ARC28 ARC29 ARC30 ARC31 ARC32 ARC33
ARC34 ARC35 ARC37 ARC38 AR25 AR27)

SOM3RA = (C36 = 5 AND (ARC36 - AOC36 > 3) AND AOC36 < 30)
OR
(SOM3RSX > 5 AND (SOM3RLST - SOM3RFST > 3) AND SOM3RFST < 30)

SOM3RB = (SOM3RSX >= 13)

Diagnosis = 1
IF SOM3RA = 1 AND SOM3RB = 1 THEN Diagnosis = 5
PANIC DISORDER

D1 Have you ever had a spell or attack when all of a sudden you felt frightened, anxious uneasy in situations when most people would not be afraid or anxious—that is when you were not in danger, or the center of attention or anything like that?

D3AI During one of your worst spells of suddenly feeling frightened or anxious or uneasy, did you notice that you were short of breath—having trouble catching your breath?

D3BI During this spell did your heart pound?

D3CI During this spell were you dizzy or lightheaded?

D3DI During this spell did you have tightness or pain in your chest?

D3EI During this spell did your fingers or feet tingle?

D3FI During this spell did you feel like you were choking?

D3GI During this spell did you feel faint?

D3HI During this spell did you sweat?

D3II During this spell did you tremble or shake?

D3JI During this spell did you have hot flashes or chills?

D3KI During this spell did you or things around you seem unreal?

D3LI During this spell were you afraid that you might die?

D3MI During this spell were you afraid that you might act in a crazy way?

D3NI During this spell did you have nausea?

D3OI During this spell did you have belly pain?

D3PI During this spell did you feel like you were smothering?

D7A Have you ever had four or more of these spells within a four week period, that is, four or more spells where you felt anxious and had some of these other problems like (INSERT POSITIVE SYMPTOMS).

D8 After having an attack, did you ever have a month or more when you were afraid that you might have another attack?

D9 During at least several of your attacks of feeling frightened or anxious, did some of those problems begin suddenly, and get worse within the first few minutes of the attack?

RECPAN You said you’ve had sudden attacks of being afraid or anxious during which you had problems like: (INSERT POSITIVE SYMPTOMS). Have you had a problem or experience like that within the last 12 months?
DSM-III-R PANIC DISORDER -- PAN3R

The following variables are constructed to make the diagnosis and provide other information:

PAN3RA  The DSM-III-R "A" criterion for panic disorder:  The occurrence of any panic attacks which were both unexpected and triggered in the absence of being the focus of others' attention or being in a phobic situation.

PAN3RB  The DSM-III-R "B" criterion for the occurrence of at least four such attacks (as defined in "A") within a four week period, or one or more attacks have been followed by a period of at least a month of persistent fear of having another attack.

PAN3RC  The DSM-III-R "C" criterion requiring at least four of the following symptoms concurrent with an attack:

| D3AI, D3PI | shortness of breath or smothering |
| D3CI, D3GI | dizziness or faintness          |
| D3BI       | palpitations                     |
| D3II       | trembling, shaking               |
| D3HI       | sweating                         |
| D3FI       | choking                          |
| D3NI, D3CI | nausea or belly pain             |
| D3KI       | derealization                     |

NOTE: Depersonalization is not assessed.

D3EI       | tingling sensation               |
D3JI       | hot flashes or chills            |
D3DI       | chest pain or discomfort         |
D3LI       | fear of dying                    |
D3MI       | fear of acting crazy             |

PAN3RD  The DSM-III-R "D" criterion of sudden occurrence and rapid escalation after onset of at least four of the "C" symptoms during an attack.

*PAN3RE  Attack not caused by organic factors. NOTE: This measure is not made separately, since it is already contained within PAN3RA.

PAN3R  The DSM-III-R diagnosis of panic disorder:  A positive diagnosis requires all of the above criteria ("A"-"D") be met. The scoring of PAN3R is as follows:

1 = No panic disorder
5 = Full criteria for panic disorder
PAN3RA = (D1 = 5)
PAN3RB = (D7A = 5 OR D8 = 5)
PAN3RC = ((D3AI = 5 OR D3PI = 5) +
  (D3BI = 5) +
  (D3CI = 5 OR D3GI = 5) +
  (D3DI = 5) +
  (D3EI = 5) +
  (D3FI = 5) +
  (D3HI = 5) +
  (D3II = 5) +
  (D3JI = 5) +
  (D3KI = 5) +
  (D3LI = 5) +
  (D3MI = 5) +
  (D3NI = 5 OR D3OI = 5)) >= 4
PAN3RD = (D9 = 5)

Diagnosis = 1
IF PAN3RA = 1 AND PAN3RB = 1 AND
  PAN3RC = 1 AND PAN3RD = 1 THEN Diagnosis = 5
GENERALIZED ANXIETY

E1A Have you ever had a period of at least 6 months when you felt worried or anxious?
E2 During one of these periods, were you worrying about things that were unlikely to happen?
E2A Were you worrying a great deal over things that were not really serious?
E3 During any of those periods, did you have different worries on your mind at the same time?
E3A Were any of your worries about not having enough money or about bad things that might happen to family members or to you?
E3B Were all your worries about how you looked or behaved, or how you were feeling?
   1) YES
   2) NO, OTHER THINGS
E41 I'd like to ask you about other problems you might have had when you were worried and anxious—problems that could not be entirely explained by a physical illness or any medication, drugs or alcohol you had taken. When you were worried and anxious, were you also easily tired?
E42 When you were worried and anxious, were you also easily startled?
E43 When you were worried and anxious, were you also trembly or shaky?
E44 When you were worried and anxious, were you also restless?
E45 When you were worried and anxious, were you also bothered by tense, sore, or aching muscles?
E46 When you were worried and anxious, were you also having a lot of trouble keeping your mind on what you were doing?
E47 When you were worried and anxious, were you also keyed up or on edge?
E48 When you were worried and anxious, were you also particularly irritable?
E49 When you were worried and anxious, were you also sweating a lot?
E410 When you were worried and anxious, were you also aware of your heart pounding or racing?
E411 When you were worried and anxious, were you also having cold and clammy hands?
E412 When you were worried and anxious, were you also feeling dizzy or light-headed?
E413 When you were worried and anxious, were you also having a dry mouth?
E414 When you were worried and anxious, were you also having nausea or diarrhea?
E415 When you were worried and anxious, were you also having to urinate too frequently?
E416 When you were worried and anxious, were you also having hot flashes or chills?
E417 When you were worried and anxious, were you also short of breath or feeling like you were smothering?
When you were worried and anxious, were you also having trouble swallowing?

When you were worried and anxious, were you also having trouble falling asleep or staying awake?

You said that during a period of six months or more of feeling anxious and worried about several things, you also have had problems or experiences like: (INSERT POSITIVE SYMPTOMS)

Have you had a month or more like that in the last 12 months?
The following variables are constructed to make the diagnosis and provide other information:

**GAD3RA** The "A" criterion for generalized anxiety disorder (GAD) of unrealistic or excessive anxiety and worry about two or more life circumstances. This criterion refers to concern or anxiety over situations which are unlikely to occur, or which are not of a serious nature. The criterion requires that feelings of worry or anxiety must persist for a period of at least six months, during which the person is disturbed most days.

**GAD3RB** The "B" criterion requiring that the focus of the worry and anxiety (as defined in "A") is unrelated to symptoms of another Axis I disorder.

**GAD3RC** The "C" criterion requiring the presence of a disturbance (as defined above) other than during the course of a mood disorder or a psychotic disorder.

**GAD3RD** The "D" criterion requiring the presence of at least six of the following eighteen symptoms during a period of anxiousness. NOTE: Relationship of symptoms to panic attacks is not assessed.

**MOTOR tension**
- E43 trembling, feeling shaky
- E45 muscle tension, aches, soreness
- E44 restlessness
- E41 easy fatigability

**AUTONOMIC HYPERACTIVITY**
- E417 shortness of breath, smothering sensation
- E410 palpitations
- E49, E411 sweating, or cold clammy hands
- E413 dry mouth
- E412 dizziness, or lightheadedness
- E414 nausea, diarrhea
- E416 hot flashes, chills
- E415 frequent urination
- E418 trouble swallowing

**VIGILANCE AND SCANNING**
- E47 feeling keyed-up or on edge
- E42 easily startled
- E46 difficulty concentrating
- E419 trouble falling or staying asleep
- E48 irritability

**GAD3RE** The "E" criterion requires that the disturbance is not initiated and maintained by an organic factor. NOTE: This measure is not made separately, since it is operationalized through probing.

**GAD3R** The DSM-III-R diagnosis of generalized anxiety. The positive diagnosis requires all of the above criteria ("A" - "D") be met. The QDIS-III-R does not assess nor require criterion "C". The scoring of GAD3R is as follows:

1 = No generalized anxiety
5 = Meets lifetime criteria for generalized anxiety, except for exclusions
GAD3RA = (E1A = 5) AND (E3 = 5) AND (E2 = 5 OR E2A = 5)
GAD3RB = (E3A = 5) OR (E3B = 5)

GAD3RD = ( (E41 = 5) + (E42 = 5) + (E43 = 5) +
(E44 = 5) + (E45 = 5) + (E46 = 5) +
(E47 = 5) + (E48 = 5) + (E49 = 5 OR E411 = 5) +
(E410 = 5) + (E412 = 5) + (E413 = 5) +
(E414 = 5) + (E415 = 5) + (E416 = 5) +
(E417 = 5) + (E418 = 5) + (E419 = 5)) >= 6

Diagnosis = 1
IF (GAD3RA = 1) AND (GAD3RB = 1) AND (GAD3RD = 1) THEN Diagnosis = 5
AGORAPHOBIA

F1 Some people have such an unreasonably strong fear of being in a crowd, leaving home alone, travelling in buses, cars or trains, or crossing a bridge that they always get very upset in such a situation or avoid it altogether. Did you ever go through a period when being in such a situation always frightened you badly?

F4D When you were in any situation like that, did you ever feel dizzy, like you might fall?

F4E When you were in any situation like that, did you ever feel your heart pound?

F4F When you were in any situation like that, did you ever get nauseated or vomit?

F4G When you were in any situation like that, did you ever feel like you couldn't control your bodily functions?

F4I When you were in any situation like that, did you ever feel that you or things around you were unreal?

F8 Have you ever been unable to travel some place because of any of these fears?

RECCAP You said you feared situations like being in a crowd, or having to cross a bridge, or ride in public transportation, so much that you would (INSERT POSITIVE SYMPTOMS). Have you had a bad fear like that in the last 12 months?
AGP3R The DSM-III-R diagnosis of agoraphobia: Fear of being in places or situations from which exit might be difficult, or help not available if symptoms developed suddenly. The person restricts travel requires a companion, or endures situations with intense anxiety. The scoring of AGP3R is as follows:

1 = No agoraphobia
5 = Agoraphobia with or without panic disorder

AGP3RA = (F4D = 5) OR
(F4I = 5) OR
(F4G = 5) OR
(F4F = 5) OR
(F4E = 5) OR
(F3 = 5)

Diagnosis = 1
If AGP3RA = 1 THEN Diagnosis = 5
PHOBIA - SOCIAL

SOCIAL PHOBIA

F11 Some people have such an unreasonable fear of speaking in public, or using public toilets, or eating or drinking in front of others, or writing while someone watches, that they avoid those things or feel extremely uncomfortable or uneasy about doing them. Have you ever had a strong unreasonable fear of doing any of those things?

F13 Did any of these fears continue for months or even years?

F14C Did any of those fears or having to avoid those situations interfere with your life or activities a lot?

F15 Have you ever been very upset with yourself for having such a fear?

F16 Has an unreasonable fear of doing any of these things ever kept you from carrying out a task at work, taking on new responsibilities at work, or taking on a new job?

F17 When you had to do any of those things in public, did it almost always make you extremely nervous or panicky?

F17A Did it sometimes?

F18 Has an unreasonable fear of doing any of these things ever kept you from going to a party, social event or meeting?

RECSCE Have you had a problem with any of those fears within the last 12 months?
SCP3RA, SCP3RB, SCP3RF: The "A", "B", and "F" criteria for social phobia are covered by a single question which lists qualifying situations (criterion "A"), thus ruling out fears related to diagnoses (criterion "B"), and specifies that the fear is recognized as unreasonable (criterion "F"). Consequently, the SCP3RB and SCP3RF variables are not created, since they are already contained within SCP3RA.

SCP3RC: The "C" criterion: exposure to phobic stimulus invariably invokes an immediate anxious response.

SCP3RD: The "D" criterion: avoidance of the situation or endurance with intense anxiety.

SCP3RE: The "E" criterion: avoidant behavior interferes with occupational or social functioning or personal relationships, or causes marked distress.

SCP3RG: The "G" criterion: if person is under 18, the disturbance does not meet criteria for avoidant disorder of childhood or adolescence. NOTE: This criterion is not assessed.

SCP3R: The DSM-III-R diagnosis of social phobia: Excessive or unreasonable fear of embarrassment or humiliation when exposed to scrutiny by others. Examples include speaking in public, using public toilets, eating or drinking in public, talking to others, writing while others watch. The scoring of SCP3R is as follows:

- 1 = No social phobia
- 5 = Meets lifetime criteria for social phobia

\[
\begin{align*}
SCP3RA &= ((F11 = 5) \text{ AND } (F13 = 5)) \\
SCP3RC &= (F17 = 5) \\
SCP3RD &= ((F17 = 5 \text{ OR } F17A = 5) \text{ OR } (F18 = 5)) \\
SCP3RE &= (F14C = 5 \text{ OR } F15 = 5 \text{ OR } F16 = 5 \text{ OR } F18 = 5)
\end{align*}
\]

Diagnosis = 1

IF SCP3RA=1 AND SCP3RC=1 AND SCP3RD=1 AND SCP3RE=1 THEN Diagnosis:
SIMPLE PHOBIAS

F19 There are other things that frighten some people so much that they try to avoid them. Things like heights, flying, seeing blood, being near an insect, or a snake, a bird, a rat, a cat, or a dog, getting a shot, being in an open space, hearing thunder or seeing lightning, or being in water. Have you ever had such an unreasonable fear of something like that, that you tried to avoid it?

F21 Did any of these fears continue for months or even years?

F22C Did any of those fears or having to avoid those situations interfere with your life or activities a lot?

F23 Have you ever been very upset with yourself for having such a fear?

F24 Has an unreasonable fear of any of these things ever kept you from carrying out a task at work, taking on new responsibilities at work, or taking on a new job?

F25 When you had to be in such a situation, did it almost always make you extremely nervous or panicky?

F25A Did it sometimes?

F26 Has an unreasonable fear of any of these things ever kept you from going to a party, social event or meeting?

RECSMP Have you had a problem with any of those fears within the last 12 months?
**DSM-III-R SIMPLE PHOBIA -- SMP3R**

SMP3RA, *SMP3RE, *SMP3RF One question applies to three criteria by asking whether there is an unreasonable fear (criterion "E") of specified common stimuli (criterion "A"), thereby ruling out those whose only fears are obsessive or post-traumatic (criterion "F"). Consequently, the SMP3RE and SMP3RF variables are not created, since they are already contained within SMP3RA.

SMP3RB The "B" criterion: Exposure to phobic stimulus invariably invokes an immediate anxiety response.

SMP3RC The "C" criterion for simple phobia of avoidance or endurance of a situation with intense anxiety.

SMP3RD The "D" criterion for simple phobia requiring that the fear or avoidance behavior interferes with the person's normal routine, social functioning or relationships, or causes marked distress in the individual.

SMP3R The DSM-III-R diagnosis of simple phobia: The diagnosis covers all phobias other than agoraphobia and social phobia. Included are fears of heights, water, animals, and storms. The scoring of SMP3R is as follows:

1 = No simple phobia  
5 = Meets lifetime criteria for simple phobia

SMP3RA = (F19 = 5) AND (F21 = 5)  
SMP3RB = (F25 = 5)  
SMP3RC = (F25 = 5 OR F25A = 5) OR (F26 = 5)  
SMP3RD = (F22C = 5 OR F23 = 5 OR F24 = 5 OR F26 = 5)

Diagnosis = 1  
IF SMP3RA=1 AND SMP3RB=1 AND SMP3RC=1 AND SMP3RD=1 THEN Diagnosis = 5
POST-TRAUMATIC STRESS

G1  A few people have terrible experiences that most people never go through — things like being attacked (FEMALES: or raped), being in a fire or flood or bad traffic accident, being threatened with a weapon, or seeing someone being badly injured or killed. Did something like this ever happen to you?

G1X  Have you ever suffered a great shock because something like that happened to someone close to you?

G1A  What was the worst thing that like this that you experienced?
   1) MILITARY COMBAT
   2) RAPE
   3) BEING ATTACKED
   4) SEEING SOMEONE HURT OR KILLED
   5) BEING IN A FIRE, FLOOD OR OTHER DISASTER
   6) BEING THREATENED WITH A WEAPON
   7) BEING ALMOST KILLED OR BADLY HURT
   8) BEING IN AN ACCIDENT
   9) GETTING NEWS OF SOMEONE ELSE'S SUDDEN DEATH OR BAD ACCIDENT

G2A  Bad experiences can cause changes in the way some people feel. You might or might not have experienced any of these changes. For example, did you keep remembering EVENT when you didn’t want to?

G3A  Did you keep having dreams or nightmares about it afterwards?

G4A  Did you ever suddenly act or feel as though it was happening again, even though it wasn’t?

G5A  After EVENT, did you ever experience something that was similar or that reminded you of it?

G5AA  Did that upset you very much?

G5BA  Afterwards, when you would experience something that was similar to or reminded you of EVENT, did you sweat or did your heart beat fast or did you tremble?

G6A  Did you go out of your way to avoid activities or situations that might have reminded you of it?

G7A  After EVENT did you try hard not to think about it?

G8A  Do you remember it well or is your memory blank for all or part of it?
   1) REMEMBER WELL
   2) BLANK FOR ALL OR PART OF IT

G9A  Were you injured during EVENT?

G9AA  Did you suffer a head injury as a result of it?

G9BA  Were you unconscious for more than 10 minutes?

G10A  After EVENT, did you lose interest in doing things that used to be important to you?

G11A  Afterwards, did you find that you no longer had loving or warm feelings toward anyone?

G12A  After EVENT, did you feel isolated or distant from other people?
G13A  After EVENT*, did you begin to feel that there was no point in thinking about the future anymore?

G14A  Afterwards, did you have more trouble sleeping than is usual for you — either trouble falling asleep, or staying asleep?

G15A  After EVENT*, did you act unusually irritable or lose your temper a lot?

G16A  Afterwards, did you have more trouble concentrating than is usual for you?

G17A  After EVENT*, did you become overly concerned about danger or overly careful and watchful?

G18A  Afterwards, did you become jumpy or easily startled so that ordinary noises or movements would make you jump or put you on guard?

G20AA Did you continue to have any of these problems for at least a month because of EVENT**?

G18  Have you had any other terrible or shocking experience?

G181 What did you experience?

1) MILITARY COMBAT
2) RAPE
3) BEING ATTACKED
4) SEEING SOMEONE HURT OR KILLED
5) BEING IN A FIRE, FLOOD OR OTHER DISASTER
6) BEING THREATENED WITH A WEAPON
7) BEING ALMOST KILLED OR BADLY HURT
8) BEING IN AN ACCIDENT
9) GETTING NEWS OF SOMEONE ELSE’S SUDDEN DEATH OR BAD ACCIDENT

G28  Did you keep remembering EVENT2* when you didn’t want to?

G38  Did you keep having dreams or nightmares about it afterwards?

G48  Did you ever suddenly act or feel as though it was happening again, even though it wasn’t?

G58  After EVENT2*, did you ever experience something that was similar or that reminded you of it?

G5AB Did that upset you very much?

G5BB Afterwards, when you would experience something that was similar to or reminded you of EVENT2*, did you sweat or did your heart beat fast or did you tremble?

G68  Did you go out of your way to avoid activities or situations that might have reminded you of it?

G7B  After EVENT2* did you try hard not to think about it?

G8B  Do you remember it well or is your memory blank for all or part of it?

1) REMEMBER WELL
2) BLANK FOR ALL OR PART OF IT

G9B  Were you injured during EVENT2**?

G9AB Did you suffer a head injury as a result of it?
Were you unconscious for more than 10 minutes?

After EVENT2*, did you lose interest in doing things that used to be important to you?

Afterwards, did you find that you no longer had loving or warm feelings toward anyone?

After EVENT2*, did you feel isolated or distant from other people?

After EVENT2*, did you begin to feel that there was no point in thinking about the future anymore?

Afterwards, did you have more trouble sleeping than is usual for you — either trouble falling asleep, or staying asleep?

After EVENT2*, did you act unusually irritable or lose your temper a lot?

Afterwards, did you have more trouble concentrating than is usual for you?

After EVENT2*, did you feel isolated or distant from other people?

Afterwards, did you find that there was no point in thinking about the future anymore?

Did you continue to have any of these problems for at least a month because of EVENT2*?

You said you have had problems or experiences like: (INSERT POSITIVE SYMPTOMS). Have you had a problem or experience like that within the last 12 months?

*NOTE: The specific event in G1A is substituted for EVENT. The specific event in G1B is substituted for EVENT2.
The DIS questions evaluating Criteria "B" - "D" are asked only of events meeting Criterion A. Therefore, Criterion "A" is implicit if any other criterion is met and is not separately evaluated in this program. If effects of the first event meeting criterion A do not meet criteria for PTSD, a second event is evaluated (but not a third, as in DSM-III-R). Criteria "B" - "E" and variable constructions are represented by names presented with an underscore. This underscore is replaced by the letter A or B to indicate for which of two qualifying events the criterion or variable is being assessed. The nature of the event or events responsible for the disorder is reflected in separate variables.

**PTJR_B**

The DSM-III-R "B" Criterion for post-traumatic stress of reexperiencing the trauma.

The criterion requires the manifestation of at least one of the following symptoms:

- G2 recurrent and intrusive recollections of the event
- G3 recurrent distressing dreams of the event
- G4 sudden feeling that the event is recurring
- G5A psychological distress at exposure to events symbolic of, or resembling the event

**PTJR_C**

The DSM-III-R "C" Criterion: post-traumatic stress. The avoidance of stimuli associated with the event, or the numbing of general responsiveness (not present before the trauma) as indicated by at least three of the following symptoms:

- G7 efforts to avoid thoughts about the trauma
- G5 efforts to avoid activities which arouse recollection of the event
- G8 inability to recall all or part of event (psychogenic amnesia)
- G10 marked diminishment of interest in significant activities
- G11 feelings of detachment or estrangement from others
- G12 restricted affect (unable to have loving feelings)
- G13 sense of foreshortened future

**PTJR_D**

The DSM-III-R "D" criterion for at least two of the following symptoms indicative of increased arousal (not present before the trauma):

- G14 difficulty falling or remaining asleep
- G15 irritability or outbursts of anger
- G16 difficulty concentrating
- G17 overtly cautious, careful, or concerned about danger
- G18 exaggerated startle response
- G5B physiologic reactivity (sweating or trembling) to events symbolic or reminiscent of an aspect of the event

**PTJR_E**

The DSM-III-R "E" criterion for a duration of reactive symptoms of at least one month.

PT3RA, PT3RB, PT3R

The DSM-III-R diagnosis of post-traumatic stress. A positive diagnosis for any qualifying event requires that all criteria ("A" - "E") are met. The summary diagnosis is positive if either qualifying event met full criteria. The diagnostic variables are coded as follows:

- 1 = Reaction to trauma did not meet criteria or no trauma
- 5 = Meets lifetime criteria for post-traumatic disorder
PT3RAB = (G2A = 5) OR (G3A = 5) OR (G4A = 5) OR (G5AA = 5)

PT3RAC = ((G7A = 5) +
(G6A = 5) +
(G8A = 5 AND G9BA = 1) +
(G10A = 5) +
(G12A = 5) +
(G11A = 5) +
(G13A = 5)) >= 3

PT3RAD = ((G14A = 5) +
(G15A = 5) +
(G16A = 5) +
(G17A = 5) +
(G18A = 5) +
(G5BA = 5)) >= 2

PT3RAE = (G20AA = 5)

PT3RA = 1
IF (PT3RAB = 1 AND PT3RAC = 1 AND PT3RAD = 1 AND PT3RAE = 1) THEN PT3RA = 5

PT3RBB = (G2B = 5) OR (G3B = 5) OR (G4B = 5) OR (G5AB = 5)

PT3RBC = ((G7B = 5) +
(G6B = 5) +
(G8B = 5 AND G9BB = 1) +
(G10B = 5) +
(G12B = 5) +
(G11B = 5) +
(G13B = 5)) >= 3

PT3RBD = ((G14B = 5) +
(G15B = 5) +
(G16B = 5) +
(G17B = 5) +
(G18B = 5) +
(G5BB = 5)) >= 2

PT3RBE = (G20AB = 5)

PT3RB = 1
IF (PT3RBB = 1 AND PT3RBC = 1 AND PT3RBD = 1 AND PT3RBE = 1) THEN PT3RB = 5

Diagnosis = 1
IF PT3RA = 5 OR PT3RB = 5 THEN Diagnosis = 5
MAJOR DEPRESSIVE EPISODE

H1 In your lifetime, have you ever had two weeks or more when nearly every day you felt sad, blue, or depressed?

H6 Has there ever been a period of two weeks or longer when you lost your appetite?

H7 Have you ever lost weight without trying to — as much as two pounds a week for several weeks or as much as ten pounds altogether?

H8 Has there ever been at least 2 weeks when you had an increase in appetite?

H9 Have you ever had a period when your eating increased so much that you gained as much as two pounds a week for several weeks or 10 pounds altogether?

H10 Have you ever had two weeks or more when nearly every night you had trouble falling asleep, staying asleep, or waking up too early?

H11 Have you ever had two weeks or longer when nearly every day you were sleeping too much?

H13 Has there ever been a period lasting 2 weeks or more when you lacked energy or felt tired out all the time even when you had not been working very hard?

H15 Has there ever been two weeks or more when nearly every day you talked or moved more slowly than is normal for you?

H16 Has there ever been two weeks or more when nearly every day you had to be moving all the time — that is, you couldn't sit still and paced up and down?

H19 Has there ever been 2 weeks or longer when you lost all interest in things like work or hobbies or things you usually liked to do for fun?

H21 Has there ever been two weeks or more when nearly every day you felt worthless, sinful, or guilty?

H25 Has there ever been two weeks or more when nearly every day you had a lot more trouble concentrating than is normal for you?

H26 Have you ever had two weeks or more when nearly every day your thoughts came much slower than usual or seemed mixed up?

H27 Have you ever had two weeks or more when nearly every day you were unable to make up your mind about things you ordinarily have no trouble deciding about?

H28 Has there ever been a period of two weeks or more when you thought a lot about death — your own, someone else's, or death in general?

H29 Has there ever been a period of two weeks or more when you felt like you wanted to die?

H30 Have you ever felt so low you thought about committing suicide?

H31 Have you ever attempted suicide?
You said you've had a period of (FEELING DEPRESSED / LOSING INTEREST IN THINGS) and also
said you've had some other problems with (INSERT POSITIVE SYMPTOMS). Has there ever
been a time when (FEELING DEPRESSED / LOSING INTEREST IN THINGS) and some of these
other problems occurred together — that is, within the same month?

So you've never had a period of (FEELING DEPRESSED / LOSING INTEREST IN THINGS) at the
same time you were having some of these other problems?
1) NEVER BEEN A PERIOD
2) HAS BEEN A PERIOD

You said you have had periods of (INSERT POSITIVE SYMPTOMS). Was there ever a time when
several of these problems occurred together — that is, within the same month?

When you were having some of these problems, at about the same time were you feeling
okay or were you feeling low, gloomy, blue, or uninterested in everything?
1) OKAY
2) GLOOMY, LOW, ETC.

Have you ever had a period of three months or longer when you were feeling low and had
several of these other problems at the same time?

Was any spell so bad that it kept you from working or from seeing friends or relatives?

Did any of these spells occur just after someone close to you died?

Did you ever have a period like this, other than after a death?
1) NO, ONLY AFTER A DEATH
2) YES, OTHER TIMES

During that spell of depression did you lose your appetite?

During that spell of depression did you lose weight without trying to — as much as two
pounds a week for several weeks or as much as 10 pounds altogether?

During that spell of depression did you have an increase in appetite?

During that spell of depression did your eating increase so much that you gained as much as
two pounds a week for several weeks or 10 pounds altogether?

During that spell of depression did you have trouble falling asleep, staying asleep, or waking
up too early?

During that spell of depression were you sleeping too much?

During that spell of depression did you feel tired out all the time even when you had not
been working very hard?

During that spell of depression did you talk or move more slowly than is normal for you?

During that spell of depression did you have to be moving all the time — that is, you couldn't
sit still and paced up and down?

During that spell of depression did you lose all interest in things like work or hobbies or things
you usually liked to do for fun?

During that spell of depression did you feel worthless, sinful, or guilty?
H25II  During that spell of depression did you have a lot more trouble concentrating than is normal for you?

H26II  During that spell of depression did your thoughts come much slower than usual or seem mixed up?

H27II  During that spell of depression were you unable to make up your mind about things you ordinarily have no trouble deciding about?

H28II  During that spell of depression did you think a lot about death — your own, someone else’s, or death in general?

H29II  During that spell of depression did you feel like you wanted to die?

H30II  During that spell of depression did you feel so low you thought about committing suicide?

H31II  During that spell of depression did you attempt suicide?

RECDEP  In the last 12 months, have you had one of the spells of feeling low or sad, along with some of the other problems you have mentioned?
The following variables are constructed to make the diagnosis and provide other information:

**DEP3RA#** The # is replaced by a number from 1 to 9 corresponding to a specific group of symptoms. DEP3RA# is a count variable whose value is the number of positive symptoms within the specified group. The nine groups include the following symptoms of the worst period of depression:

- DEP3RA1 = H1 depressed mood
  - H35A feeling blue, gloomy, or uninterested (when experienced with other problems)
- DEP3RA2 = H19I diminished interest in activities (when experienced with other problems)
- DEP3RA3 = H6II lost appetite
  - H8II increased appetite
  - H7II lost weight
  - H9II weight gain
- DEP3RA4 = H10II insomnia
  - H12II hypersomnia
- DEP3RA5 = H15II psychomotor retardation
  - H16II psychomotor agitation
- DEP3RA6 = H13II fatigue
- DEP3RA7 = H21II worthlessness, guilt
- DEP3RA8 = H25II diminished ability to concentrate
  - H26II mixed or slowed thoughts
  - H27II indecisiveness
- DEP3RA9 = H28II thoughts of death
  - H29II wanted to die
  - H30II suicide ideation
  - H31II suicide attempt

**DEP3RGPS** The total number of positive groups, i.e. groups in which at least one symptom was positive during a selected episode.

**DEP3RA** The DSM-III-R "A" criterion for a change from previous functioning characterized by either a depressed mood, or loss of interest or pleasure. Positive symptoms in four of the above nine groups is also necessary to satisfy this criterion.

**DEP3RB2** DSM-III-R "B(2)" criterion. The depressive episode is not a normal reaction to bereavement. The "B(1)" criterion, exclusion for initiation and maintenance by organic factors, is met by probing causes of each symptom.

**DEP3RC** The DSM-III-R "C" exclusion for the occurrence of delusions or hallucinations for a period of, or exceeding, two weeks in the absence of prominent mood symptoms.

**DEP3RD** The DSM-III-R "D" exclusion for superimposition on schizophrenia, schizophreniform, delusional disorder, or psychotic disorder NOS.

**DEP3R** The DSM-III-R diagnosis for major depressive episode: Positive diagnosis requires an episode of other than uncomplicated bereavement of two or more weeks when five or more of the listed symptom groups, including either a depressed mood nearly every day (group 1) or a loss of interest or pleasure nearly every day (group 2), occurred.

1=No depressive episode
5=All criteria met except possibly for exclusions

Note: To diagnose Major Depression, exclude cases positive for a manic episode.
MAJOR DEPRESSIVE EPISODE

DEP3RA1 = 0
DEP3RA2 = 0
IF ((H1 = 5 OR H191 = 5) AND (H34 = 5 OR H34A = 5)) OR H35A = 5 THEN
  IF H1 = 5 OR H35A = 5 THEN DEP3RA1 = 1
  IF H191 = 5 THEN DEP3RA2 = 1
END

DEP3RA3 = 0
IF H6II = 5 THEN DEP3RA3 = DEP3RA3 + 1
IF H8II = 5 THEN DEP3RA3 = DEP3RA3 + 1
IF H7II = 5 THEN DEP3RA3 = DEP3RA3 + 1
IF H9II = 5 THEN DEP3RA3 = DEP3RA3 + 1

DEP3RA4 = 0
IF H10II = 5 THEN DEP3RA4 = DEP3RA4 + 1
IF H12II = 5 THEN DEP3RA4 = DEP3RA4 + 1

DEP3RA5 = 0
IF H15II = 5 THEN DEP3RA5 = DEP3RA5 + 1
IF H16II = 5 THEN DEP3RA5 = DEP3RA5 + 1

DEP3RA6 = 0
IF H13II = 5 THEN DEP3RA6 = DEP3RA6 + 1

DEP3RA7 = 0
IF H21II = 5 THEN DEP3RA7 = DEP3RA7 + 1

DEP3RA8 = 0
IF H25II = 5 THEN DEP3RA8 = DEP3RA8 + 1
IF H26II = 5 THEN DEP3RA8 = DEP3RA8 + 1
IF H27II = 5 THEN DEP3RA8 = DEP3RA8 + 1

DEP3RA9 = 0
IF H28II = 5 THEN DEP3RA9 = DEP3RA9 + 1
IF H29II = 5 THEN DEP3RA9 = DEP3RA9 + 1
IF H30II = 5 THEN DEP3RA9 = DEP3RA9 + 1
IF H31II = 5 THEN DEP3RA9 = DEP3RA9 + 1

DEP3RGPS = 0
IF DEP3RA1 >= 1 THEN DEP3RGPS = DEP3RGPS + 1
IF DEP3RA2 >= 1 THEN DEP3RGPS = DEP3RGPS + 1
IF DEP3RA3 >= 1 THEN DEP3RGPS = DEP3RGPS + 1
IF DEP3RA4 >= 1 THEN DEP3RGPS = DEP3RGPS + 1
IF DEP3RA5 >= 1 THEN DEP3RGPS = DEP3RGPS + 1
IF DEP3RA6 >= 1 THEN DEP3RGPS = DEP3RGPS + 1
IF DEP3RA7 >= 1 THEN DEP3RGPS = DEP3RGPS + 1
IF DEP3RA8 >= 1 THEN DEP3RGPS = DEP3RGPS + 1
IF DEP3RA9 >= 1 THEN DEP3RGPS = DEP3RGPS + 1

DEP3RA = 0
IF ((DEP3RA1 = 1 OR DEP3RA2 = 1) AND (DEP3RGPS >= 5)) THEN DEP3RA = 1

SumOf5 = 0
IF (H30II = 5) THEN SumOf5 = SumOf5 + 1
IF (H31II = 5) THEN SumOf5 = SumOf5 + 1
IF (H21II = 5) THEN SumOf5 = SumOf5 + 1
IF (H26II = 5) THEN SumOf5 = SumOf5 + 1
IF (H36 = 5) THEN SumOf5 = SumOf5 + 1
IF (H38D = 5) THEN SumOf5 = SumOf5 + 1

DEP3RB2 = 0
IF (SumOf5 >= 2) OR (H40 = 1 OR H40A = 5) THEN DEP3RB2 = 1

Diagnosis = 1
IF DEP3RA = 1 AND DEP3RB2 = 1 THEN Diagnosis = 5
Has there ever been a period of days when you were so happy or excited or high that you got into trouble, or your family or friends worried about it, or a doctor said you were manic?

Has there ever been a period when you were so much more active than usual that you or your family or friends were concerned about it?

Has there ever been a period of several days when you couldn’t sit still and paced up and down?

Has there ever been a period when you went on spending sprees — spending so much money that it caused you or your family some financial trouble, or had a period when you made foolish decisions about money?

Have you ever had a period when your interest in sex was so much stronger than is typical for you that you wanted to have sex a lot more frequently than is normal for you or with people you normally wouldn’t be interested in?

Has there ever been a period when you talked so fast that people said they couldn’t understand you or when you had to keep talking all of the time?

Have you ever had a period when thoughts raced through your head so fast that you couldn’t keep track of them?

Have you ever had a period when you felt that you had a special gift or special powers to do things others couldn’t do or that you were a specially important person?

Was there ever a period when you were easily distracted, so that any little interruption could get you off the track?

You said you had a period of feeling high or excited and also said you’ve had some feelings or experiences like (INSERT POSITIVE SYMPTOMS). Has there ever been a period when the feelings of being excited or manic and some of these other feelings or experiences occurred together?

So there’s never been a period when you felt high or excited at the same time you were having any of these other experiences?

1) NEVER BEEN A PERIOD
2) HAS BEEN A PERIOD

You said you’ve had some feelings or experiences like (INSERT POSITIVE SYMPTOMS). Was there ever a period when some of these feelings or experiences occurred together?

When you were feeling that way, were you unusually irritable or likely to fight or argue?

Were you ever in the hospital overnight because of any such spell?

Did any such spell interfere with your life, work or activities a lot?

During that spell of being high or irritable were you more active than usual?

During that spell of being high or irritable were you unable to sit still and did you pace up and down?
J4II During that spell of being high or irritable did you go on spending sprees?

J5II During that spell of being high or irritable was your interest in sex stronger than is usual for you?

J6II During that spell of being high or irritable did you talk so fast that people couldn’t understand you?

J7II During that spell of being high or irritable did your thoughts race through your head so fast that you couldn’t keep track of them?

J8II During that spell of being high or irritable did you feel that you had a special gift or special powers?

J9II During that spell of being high or irritable did you hardly sleep but didn’t feel tired?

J10II During that spell of being high or irritable were you easily distracted?

RECMAN In the last 12 months, have you had one of these spells of feeling high or irritable, along with some of these other problems?
The following variables are constructed to make the diagnosis and provide other information:

**MAN3RA** DSM-III-R "A" criterion for a distinct period of abnormally and persistently elevated, expansive, or irritable mood.

**MAN3RB#** The # is replaced by a number from 1 to 7 to identify a specific group of symptoms. The seven groups include the following symptoms:

- MAN3RB1 = J811 grandiosity
- MAN3RB2 = J911 decreased need for sleep
- MAN3RB3 = J611 more talkative
- MAN3RB4 = J711 thoughts raced
- MAN3RB5 = J1011 distractibility
- MAN3RB6 = J211 increased activity, or
- MAN3RB7 = J411 psychomotor agitation
- MAN3RB8 = J511 excessive involvement in pleasurable activities

**NOTE:** In evaluating these symptoms, those explained by organic factors are excluded, thus also meeting the DSM-III-R "F" criterion.

**MAN3RGP5** The total number of positive groups used in assessing the "B" criterion.

**MAN3RB** The DSM-III-R "B" criterion for persistence of at least three of the above symptom groups (four if the mood disturbance is only irritable).

**MAN3RC** The DSM-III-R "C" criterion for marked impairment in occupational or social functioning or hospitalization due to the mood disturbance.

**‡MAN3RD** The DSM-III-R "D" exclusion for the occurrence of psychotic symptoms for two weeks or more in the absence of prominent mood symptoms.

**‡‡MAN3RE** The DSM-III-R "E" exclusion for superimposition on psychotic disorders.

**MAN3R** The DSM-III-R diagnosis of manic episode: Full criteria are met with a) a distinct period of mood disturbance when b) three or more of the seven symptoms groups have been present and persisted, or irritability for a week or more during which symptoms in four groups persisted, and c) the episode met severity criteria.

1=Not manic
5=Mania criteria met except possibly for exclusion
MANIC EPISODE / BIPOLAR DISORDER

MAN3RA = (J1 = 5 OR J15A = 5)

MAN3RB1 = (J8II = 5)
MAN3RB2 = (J9II = 5)
MAN3RB3 = (J6II = 5)
MAN3RB4 = (J7II = 5)
MAN3RB5 = (J10II = 5)
MAN3RB6 = (J2II = 5) OR (J3II = 5)
MAN3RB7 = (J4II = 5) OR (J5II = 5)

MAN3RGPS = SUM(OF MAN3RB1-MAN3RB7)

MAN3RB = (J15A = 5 AND MAN3RGPS >= 4) OR
((J14 = 5 OR J14A = 5) AND MAN3RGPS >= 3)

MAN3RC = (J18 = 5) OR (J19C = 5)

Diagnosis = 1
IF MAN3RA = 1 AND MAN3RB = 1 AND MAN3RC = 1 THEN Diagnosis = 5
SCHIZOPHRENIA / SCHIZOPHRENIFORM

K1  Have you ever believed people were spying on you?
K2  Was there ever a time when you believed people were following you?
K3  Have you ever believed that you were being secretly tested or experimented on?
K4  Have you ever believed that someone was plotting against you or trying to hurt you or poison you?
K5  Have you ever believed that someone was reading your mind?
K6  Have you ever believed you could actually hear what another person was thinking, even though he was not speaking?
K7  Have you ever believed that others could hear your thoughts?
K8  Did you ever feel that you were under the control of some person, power or force, so that your actions and thoughts were not your own?
K9  Have you ever felt that strange thoughts or thoughts that were not your own were being put directly into your mind?
K10 Have you ever felt that someone or something could take or steal your thoughts out of your mind?
K11 Have you ever believed that you were being sent special messages through the television or radio, or that a program had been arranged just for you alone?
K12 Have you ever felt strange forces working on you, as if you were being hypnotized or magic was being performed on you, or you were being hit by x-rays or laser beams?
K13 Have you ever had the experience of seeing something or someone that others who were present could not see—that is, had a vision when you were completely awake?
K14 Have you more than once had the experience of hearing things or voices other people couldn’t hear?
K15 Did you ever hear that for more than a few minutes?
K16 Did you ever hear voices others could not hear?
K17 Did you ever hear voices that other people couldn’t hear that were commenting on what you were doing or thinking?
K18 Did you ever hear two or more voices that other people couldn’t hear talking to each other?
K19 Did you ever carry on a two-way conversation with the voices just as though someone was there with you?
K20 Have you ever been bothered by strange smells around you that nobody else seemed to be able to smell, perhaps even odors coming from your own body?
K21 Have you ever had unusual feelings inside or on your body—like being touched when nothing was there or feeling something moving inside your body?
We've talked about certain beliefs or experiences you had like: (INSERT POSITIVE SYMPTOMS). Have you ever had a week or more when you've had beliefs or experiences like these most of the time?

Did your beliefs or experiences like these last for as long as six months from the first time to the last time?

At the time you were having these beliefs or experiences were you your normal self otherwise, or were you feeling nervous, upset, unable to work, unable to go places, or unable to enjoy yourself?

1) NORMAL
2) NOT NORMAL

Did that period of not feeling or acting normal last six months or more?

Later, after you had these beliefs or experiences, did you find that you were less able to do your work well than before they began?

After you had these beliefs or experiences, were you less able to make friends or enjoy social relationships than before they began?

Think about the two years before you first had any of these beliefs or experiences. Were you up to doing your regular activities like school or work or housework throughout almost all of that two-year period?

1) YES
2) NO

Was that entirely due to physical illness or injury?

1) YES
2) NO

During that same two years, were you going out and seeing friends throughout almost all of that period?

1) YES
2) NO

You said you have had problems or experiences like: (INSERT POSITIVE SYMPTOMS). Have you had a problem or experience like that within the last 12 months?
The following variables are constructed to make the diagnosis and provide other information:

**SCZ3RA**  The DSM-III-R "A" Criteria: the presence of characteristic psychotic symptoms for at least one week during the active phase which satisfy either 1, 2, or 3 below:

1.) **SCZ3RA1** - at least two of the following:
   - **SCZ3RA1A** delusions (K1-K13)
   - **SCZ3RA1B** prominent hallucinations (K15-K18)
   - **SCZ3RA1C** incoherence or marked loosening of associations (W1-W2)
   - **SCZ3RA1D** catatonic behavior (NOTE: This is not assessed)
   - **SCZ3RA1E** flat or grossly inappropriate affect (W3)

2.) **SCZ3RA2** - bizarre delusions such as thought broadcasting or being controlled by another person.

3.) **SCZ3RA3** - prominent hallucinations of a voice if no apparent relation to depression or elation, or keeping a running commentary, or two or more voices conversing.

**SCZ3RB**  The DSM-III-R "B" criterion requires that during the disturbance, functioning in such areas as work or social relations is markedly below the highest level achieved prior to onset.

**SCZ3RC**  The DSM-III-R exclusion for schizoaffective disorder and mood disorder with psychotic features. The occurrence of a depressive or manic syndrome while symptoms in "A" were present has been brief relative to the total disturbance.

**SCZ3RD**  The DSM-III-R "D" criterion for continuous signs of a disturbance over a six month period which includes symptoms in "A" above. This six month period may include prodromal and residual phases with the following symptoms:

1. withdrawal
2. impaired role function
3. markedly peculiar behavior
4. marked impairment of hygiene (NOTE: This is not assessed)
5. blunted or inappropriate affect
6. poverty of speech/speech content
7. odd beliefs, magical thinking (NOTE: This is not assessed)
8. unusual perceptual experiences (NOTE: This is not assessed)
9. marked lack of initiative (NOTE: This is not assessed)

**SCF3R**  The DSM-III-R diagnosis for schizophrenia or schizophreniform disorder. According to the DSM-III-R text, the Schizophreniform diagnosis differs from the Schizophrenia diagnosis only in not meeting Schizophrenia criterion D (duration). However, the box containing criteria for Schizophreniform disorder omits Schizophrenia criterion B. Because this may well be an error, we require the B criterion. The diagnosis of Schizophrenia/Schizophreniform is made when Schizophrenia criteria A and B are present, whether or not the D criterion is met. The scoring of SCF3R is as follows:

1 = No Schizophreniform or Schizophrenia
5 = Meets lifetime criteria for Schizophreniform or Schizophrenia, except possibly for exclusion.

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Quick Diagnostic Interview Schedule III-R  
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SCZ3RA1A = ((K1 = 5) OR (K2 = 5) OR (K3 = 5) OR
(K4 = 5) OR (K5 = 5) OR (K6 = 5) OR
(K7 = 5) OR (K8 = 5) OR (K9 = 5) OR
(K10 = 5) OR (K11 = 5) OR (K12 = 5))

SCZ3RA1B = ((K15 = 5) OR (K16 = 5 AND K16B = 5) OR
(K17 = 5) OR (K18 = 5))

SCZ3RA1 = (SCZ3RA1A + SCZ3RA1B = 2)

SCZ3RA2 = ((K3 = 5) OR (K5 = 5) OR (K6 = 5) OR
(K7 = 5) OR (K8 = 5) OR (K9 = 5) OR
(K10 = 5) OR (K11 = 5) OR (K12 = 5))

SCZ3RA3 = ((K16 = 5) AND (K16D = 5 OR K16E = 5 OR K16F = 5))

SCZ3RA = ((SCZ3RA1 = 1 OR SCZ3RA2 = 1 OR SCZ3RA3 = 1) AND (K21 = 5))

SCZ3RB = (K25 = 5 OR K26 = 5 OR K31A = 5 OR K32 = 5)

Diagnosis = 1

IF SCZ3RA = 1 AND SCZ3RB = 5 THEN Diagnosis = 5
ANOREXIA

L1  Have you ever worried a lot about eating too much, gaining too much weight, or being too fat?

L2  Have you ever lost a lot of weight — that is, 15 pounds or more, either by dieting or without meaning to. Do not count having a baby or an operation.

L4LB What is the lowest weight you ever dropped to after losing 15 pounds or more?

L5  Did relatives or friends ever say that you were much too thin or looked like a skeleton?

L7FT How tall were you then? Enter as feet and inches. So, for example, if you are 5 feet 7 inches tall, enter 507.

L9  Did you ever think you were overweight when other people such as your parents or friends said you had gotten too thin?

L10 Did you ever miss three menstrual periods in a row around the time you were losing weight?

RECANR You said you have had problems or experiences like: (INSERT POSITIVE SYMPTOMS). Have you had a problem or experience like that within the last 12 months?
ANOREXIA

DSM-III-R ANOREXIA NERVOSA -- ANR3R

The following variables are constructed to make the diagnosis and provide other information:

**ANR3RA** The "A" criterion for anorexia nervosa: the refusal to maintain body weight over a minimal normal weight for age and height. This is assessed as the maintenance of a body weight 15% below average (Statistical Bulletin Metropolitan Life Insurance 40, 1959).

**ANR3RB** Criterion "B": fear of gaining weight even though underweight.

**ANR3RC** Criterion "C": disturbance in the way in which one's body weight is experienced.

**ANR3RD** The "D" criterion for females only: the absence of at least three consecutive menstrual cycles when otherwise expected to occur.

**ANR3R** The DSM-III-R diagnosis of anorexia nervosa: The DSM-III-R diagnosis is positive if all of the above criteria are met. The scoring of ANR3R is as follows:

1 = No anorexia nervosa
5 = Meets lifetime criteria for anorexia nervosa

\[ L4 = L4LB \]
\[ L2C = L7FT \]

**ANR3RA** = 0

IF Sex = "M" THEN
IF (0 < L4 < 82) OR
   (L2C = 409 AND 0 < L4 < 84) OR
   (L2C = 410 AND 0 < L4 < 86) OR
   (L2C = 411 AND 0 < L4 < 88) OR
   (L2C = 500 AND 0 < L4 < 90) OR
   (L2C = 501 AND 0 < L4 < 92) OR
   (L2C = 502 AND 0 < L4 < 94) OR
   (L2C = 503 AND 0 < L4 < 96) OR
   (L2C = 504 AND 0 < L4 < 98) OR
   (L2C = 505 AND 0 < L4 < 101) OR
   (L2C = 506 AND 0 < L4 < 104) OR
   (L2C = 507 AND 0 < L4 < 107) OR
   (L2C = 508 AND 0 < L4 < 110) OR
   (L2C = 509 AND 0 < L4 < 113) OR
   (L2C = 510 AND 0 < L4 < 116) OR
   (L2C = 511 AND 0 < L4 < 119) OR
   (L2C = 600 AND 0 < L4 < 122) OR
   (L2C = 601 AND 0 < L4 < 125) OR
   (L2C = 602 AND 0 < L4 < 128) OR
   (L2C >= 603 AND 0 < L4 < 131) OR
   (L5 = 5) THEN ANR3RA = 1
ELSE IF Sex = "F" THEN
IF (0 < L4 < 75) OR
\[(L2C = 409 \text{ AND } 0 < L4 < 77) \text{ OR} \]
\[(L2C = 410 \text{ AND } 0 < L4 < 79) \text{ OR} \]
\[(L2C = 411 \text{ AND } 0 < L4 < 80) \text{ OR} \]
\[(L2C = 500 \text{ AND } 0 < L4 < 82) \text{ OR} \]
\[(L2C = 501 \text{ AND } 0 < L4 < 84) \text{ OR} \]
\[(L2C = 502 \text{ AND } 0 < L4 < 87) \text{ OR} \]
\[(L2C = 503 \text{ AND } 0 < L4 < 89) \text{ OR} \]
\[(L2C = 504 \text{ AND } 0 < L4 < 91) \text{ OR} \]
\[(L2C = 505 \text{ AND } 0 < L4 < 93) \text{ OR} \]
\[(L2C = 506 \text{ AND } 0 < L4 < 96) \text{ OR} \]
\[(L2C = 507 \text{ AND } 0 < L4 < 99) \text{ OR} \]
\[(L2C = 508 \text{ AND } 0 < L4 < 102) \text{ OR} \]
\[(L2C = 509 \text{ AND } 0 < L4 < 105) \text{ OR} \]
\[(L2C = 510 \text{ AND } 0 < L4 < 108) \text{ OR} \]
\[(L2C = 511 \text{ AND } 0 < L4 < 111) \text{ OR} \]
\[(L2C = 600 \text{ AND } 0 < L4 < 114) \text{ OR} \]
\[(L2C \geq 601 \text{ AND } 0 < L4 < 117) \text{ OR} \]
\[(L5 = 5) \text{ THEN ANR3RA} = 1 \]
\end{equation}

\text{END}

\begin{align*}
ANR3RB &= (L1 = 5) \\
ANR3RC &= (L9 = 5) \\
ANR3RD &= ((\text{Sex} = "F") \text{ AND } (L10 = 5))
\end{align*}

Diagnosis = 1
IF Sex = "M" AND ANR3RA = 1 AND ANR3RB = 1 AND
ANR3RC = 1 THEN Diagnosis = 5
IF Sex = "F" AND ANR3RA = 1 AND ANR3RB = 1 AND
ANR3RC = 1 AND ANR3RD = 1 THEN Diagnosis = 5
BUUMIA

BUUMIA

L1  Have you ever worried a lot about eating too much, gaining too much weight, or being too fat?

L11A  Have you had several periods when you would eat abnormally large amounts of food within a few hours — that is, binge eating?

L11B  Have you ever had a period of 3 months or more when you went on eating binges at least twice a week?

L14  Have you ever been afraid that you might not be able to stop one of these eating binges?

L15  When you ate unusually large amounts, have you ever had to do something special to make yourself quit — like going to sleep, leaving the house or making yourself vomit?

L16  Have you sometimes stopped only because your stomach hurt?

L21  Have you several times tried fasting in order to make up for eating binges — not eating at all or only taking liquids?

L22A  Have you ever done anything regularly in order to keep from gaining weight — like exercising?

L22B  Have you regularly stayed on a strict diet in order to keep from gaining weight?

L22C  Have you regularly taken water pills or diuretics in order to keep from gaining weight?

L22D  Have you regularly taken laxatives or enemas in order to keep from gaining weight?

L22E  Have you regularly made yourself vomit in order to keep from gaining weight?

REC3UL  You said you have had problems or experiences like (INSERT POSITIVE SYMPTOMS). Have you had a problem or experience like that within the last 12 months?
The following variables are constructed to make the diagnosis and provide other information:

**BUL3RA** The A Criterion in DSM-III-R — recurrent episodes of binge eating.

**BUL3RB** The B Criterion in DSM-III-R — a feeling of lack of control over eating behavior during eating binges.

**BUL3RC** The C Criterion in DSM-III-R — regular use of self-induced vomiting, laxatives or diuretics, strict dieting or fasting, or vigorous exercise to avoid weight gain.

**BUL3RD** The D Criterion in DSM-III-R — averaged two or more binge eating episodes a week for at least three months.

**BUL3RE** The E Criterion in DSM-III-R — persistent overconcern with body shape and weight.

**BUL3R** The DSM-III-R diagnosis of bulimia nervosa. The diagnosis is positive if criteria A-E are all met. The scoring of BUL3R is as follows:

1 = No bulimia nervosa
5 = Meets lifetime criteria for bulimia nervosa

**BUL3RA** = (L11A = 5)
**BUL3RB** = (L14 = 5) OR (L15 = 5) OR (L16 = 5)
**BUL3RC** = (L21 = 5) OR (L22A = 5) OR (L22B = 5) OR (L22C = 5) OR (L22D = 5) OR (L22E = 5)
**BUL3RD** = (L11B = 5)
**BUL3RE** = (L1 = 5)

Diagnosis = 1
IF (BUL3RA = 1) AND (BUL3RB = 1) AND (BUL3RC = 1) AND (BUL3RD = 1) AND (BUL3RE = 1) THEN Diagnosis = 5
ALCOHOL

M3 Now I'm going to ask you some questions about your use of alcoholic beverages. Have you had any wine, beer, or any mixed drink or drink that contains alcohol at least once a month for six months or more? If so, what is the largest number of drinks that you've ever had in one day? (Enter 0 if you have not had at least one drink per month for six months or more)

M6 Have you ever gone on binges or benders where you kept drinking for a couple of days or more without sobering up?

M6A Did you neglect some of your usual responsibilities then?

M6B Did you do that several times or go on a binge that lasted a month or more?

M7 Did you ever get tolerant to alcohol, that is, you needed to drink a lot more in order to get an effect, or found that you could no longer get high on the amount you used to drink?

M7A Some months or years after you started drinking, did you begin to be able to drink a lot more before you would get drunk?

M7B Did your ability to drink more without feeling its effect last for a month or more?

M8 Have there been many days when you drank much more than you expected to when you began, or have you often continued drinking for more days in a row than you intended to?

M9 Have you more than once wanted to quit or cut down on your drinking?

M9A Have you ever tried to quit or cut down on drinking?

M9B Did you find you couldn't quit or cut down?
   1) NO, I WAS ABLE TO QUIT
   2) COULD NOT QUIT

M9C Were you unable to quit or cut down more than once?

M10 Some people try to control their drinking by making rules, like not drinking before 5 o'clock or never drinking alone. Have you ever made rules like that for yourself?

M10A Did you make these rules because you were having trouble limiting the amount you were drinking?

M10B Did you try to follow those rules for a month or longer or make rules for yourself several times?

M11 Has there ever been a period when you spent so much time drinking alcohol or getting over its effects that you had little time for anything else?

M11A Did the period when you spent a lot of time drinking last a month or longer?

M12 Have you ever given up or greatly reduced important activities in order to drink—like sports, work, or associating with friends or relatives?

M12A Did you give up or cut down on activities for a month or more, or several times, in order to drink?

M13 Has your drinking or being hung over often kept you from working or taking care of children?

M13A Have you often worked or taken care of children at a time when you had drunk enough alcohol to make your speech thick or make you unsteady on your feet?
Were there ever objections about your drinking from your family, friends, your doctor, or your clergyman, your boss or people at work or school? Or have you gotten into fights while drinking or have the police stopped or arrested you or taken you to a treatment center because of drinking?

1) NONE OF THOSE THINGS HAPPENED
2) AT LEAST ONE OF THOSE THINGS HAPPENED

Did you drink more than once after having any of these problems?

Have you ever had trouble driving because of drinking—like having an accident or being arrested for drunk driving?

Have you several times had trouble driving because of drinking?

Have you ever accidentally injured yourself when you had been drinking, for example, had a bad fall or cut yourself badly?

Did that happen several times?

Have you several times been high from drinking in a situation where it increased your chances of getting hurt—for instance, when driving a car or boat, using knives, machinery, or guns, crossing against traffic, climbing or swimming?

People who cut down or stop drinking after drinking for a considerable time often have withdrawal symptoms. Common ones are the 'shakes', being unable to sleep, feeling anxious or depressed, sweating, having your heart beat fast or having the DTs, or seeing or hearing things that aren't really there. Have you had any problems like that when you stopped or cut down on drinking?

Have you had withdrawal symptoms several times?

Did you ever take a drink right after you woke up to keep from having a hangover or the shakes?

Have you ever taken a drink to keep from having a hangover, the shakes, or any withdrawal symptoms or taken a drink to make them go away?

Have you several times taken a drink to keep from having withdrawal symptoms?

There are several health problems that can result from drinking. Did drinking ever cause you to have liver disease, or yellow jaundice, give you stomach disease, or make you vomit blood, cause your feet to tingle or feel numb, give you memory problems even when you weren't drinking, or give you pancreatitis?

Did you continue to drink more than once knowing that drinking caused you to have a health problem or an injury?

Have you continued to drink when you knew you had a serious physical illness that might be made worse by drinking?

Has alcohol ever caused you emotional or psychological problems, such as feeling uninterested in things, depressed, suspicious of others or paranoid, or caused you to have strange ideas?

Did you continue to drink more than once after you knew that drinking caused you psychological or emotional problems?

You said you have had problems or experiences like: (INSERT POSITIVE SYMPTOMS). Have you had a problem or experience like that within the last 12 months?
DSM-III-R - ALCOHOL ABUSE AND DEPENDENCE

The following variables are constructed to make the diagnosis and provide other information:

**AD3RA** The "A" criterion symptoms for alcohol dependence. The underscore is replaced by a number from 1 - 9 corresponding to the DSM-III-R criterion symptom. The dependence symptoms are:

1. Consumption greater or for longer than desired:  
   M8 consumption in larger amounts or over longer period than intended
2. A persistent desire, or unsuccessful efforts to control use:  
   M9 persistent desire to quit or cut down  
   M9B unsuccessful at quitting or cutting down  
   M10A made rules because of problems in limiting intake
3. Great deal of time spent consuming, acquiring, or recovering:  
   M11 excessive time spent consuming or recovering
4. Frequent intoxication or withdrawal symptoms which impede major role obligations, or use when physically hazardous:  
   M6A neglected responsibilities during binge  
   M13 use impeded caring for children  
   M13A often worked, cared for children when intoxicated  
   M17 driving problems due to use  
   M18 injured self during use  
   M19 use despite increased risk of injury
5. Important activities foregone due to use:  
   M12 gave up, reduced activities to drink
6. Continued use despite knowledge of a social, psychological, or physical problem which is caused or exacerbated by use:  
   M16 continued use despite social problems or others' objections  
   M26 continued use despite health problem or injury  
   M27 continued use despite physical illness  
   M29A continued use despite psychological problem
7. Marked tolerance:  
   M7 needed to drink more to gain effect  
   M7A able to drink more before intoxication
8. Withdrawal:  
   M21 occurrence of characteristic withdrawal symptoms
9. Use to avoid or relieve withdrawal:  
   M23A morning drink to avoid hangover  
   M23B drank to avoid or cure withdrawal symptoms

**AD3RA** The "A" criterion for dependence: the occurrence of at least three of the above listed dependence symptoms (1 - 9).

**AD3RB** The "B" criterion for dependence: persistence of symptoms for at least one month, or repeated occurrence over a longer period of time.

**AA3RA1, AA3RA2** The "A" criterion for symptoms of alcohol abuse: 1) continued use despite knowledge of a social, psychological, or physical problem caused or exacerbated by use; 2) recurrent use in situations in which use is physically hazardous.

**AA3RA** The "A" criterion for abuse: the presence of either of the two abuse symptoms listed above.

**AA3RB** The "B" criterion for abuse: persistence of symptoms for at least one month, or repeated occurrence over a longer period of time.

**$ALC3RIMP** Social or occupational impairment in functioning (Needed only for subtyping).

**ALC3R** DSM-III-R lifetime diagnosis of alcohol dependence or abuse. The diagnosis is scored as follows:

1 = No alcohol dependence or abuse  
5 = Mild, Moderate, or Severe alcohol dependence or abuse
AD3RA1 = (M8 = 5)
AD3RA2 = ((M9 = 5) OR (M9B = 5) OR (M10A = 5))
AD3RA3 = (M11 = 5)
AD3RA4 = (M6A = 5) OR (M13 = 5) OR (M13A = 5) OR
(M17 = 5) OR (M18 = 5) OR (M19 = 5)
AD3RA5 = (M12 = 5)
AD3RA6 = ((M16 = 5) OR (M26 = 5) OR (M27 = 5) OR (M29A = 5))
AD3RA7 = ((M7 = 5) OR (M7A = 5))
AD3RA8 = (M21 = 5)
AD3RA9 = ((M23A = 5) OR (M23B = 5))

AD3RA = SUM(OF AD3RA1-AD3RA9) >= 3

AD3RBSUM = (AD3RA1 = 1) +
(AD3RA2 = 1 AND ((M9C = 5) OR (M10A = 5 AND M10B = 5))) +
(AD3RA3 = 1 AND M11A = 5) +
(AD3RA4 = 1 AND
 ((M6A = 5 AND M6B = 5) OR
 (M13 = 5 OR M13A = 5) OR
 (M17A = 5) OR
 (M18A = 5) OR
 (M19 = 5))) +
(AD3RA5 = 1 AND M12A = 5) +
(AD3RA6 = 1) +
(AD3RA7 = 1 AND M7B = 5) +
(AD3RA8 = 1 AND M21A = 5) +
(AD3RA9 = 1 AND M23C = 5)

AD3RB = (AD3RBSUM >= 2)

AA3RA1 = (M16 = 5) OR (M26 = 5) OR (M27 = 5) OR (M29A = 5)
AA3RA2 = (M17A = 5) OR (M18A = 5) OR (M19 = 5)

AA3RA = (AA3RA1 + AA3RA2 >= 1)

AA3RB = (M16 = 5) +
(M17A = 5) +
(M18A = 5) +
(M19 = 5) +
(M26 = 5) +
(M27 = 5) +
(M29A = 5)

AA3RB = (AA3RB > 1)

Diagnosis = 1
IF AD3RA = 1 AND AD3RB = 1 THEN Diagnosis = 5
IF AA3RA = 1 AND AA3RB = 1 THEN Diagnosis = 5
OBSESSIONS

N1 I want to ask you next about whether you have ever been bothered by having certain unpleasant thoughts all the time. An example would be the persistent idea that your hands are dirty or have germs on them, no matter how much you wash them, or that relatives who are away have been hurt or killed. Have you ever had any kind of unreasonable thought like that?

N1A Was this only for a short time or was it over a period of at least 2 weeks?
   1) LESS THAN TWO WEEKS
   2) TWO WEEKS OR MORE

N2 Were these thoughts only about feeling guilty, losing weight, or using drugs, alcohol or tobacco?
   1) ONLY THESE THINGS
   2) OTHER THINGS

N3 Did these unreasonable thoughts keep coming back into your mind again and again no matter how hard you tried to get rid of them?

N5 Another example of an unpleasant thought would be the persistent idea that you might harm or cause the death of someone you loved, even though you really didn’t want to. Or that you had accidentally done something that harmed or endangered someone. Or you might have had thoughts you were ashamed of, but couldn’t keep out of your mind. Have you ever been bothered by these or by any other unpleasant and persistent thoughts?

N5A Was this only for a short time, or did these thoughts keep coming into your mind over a period of at least two weeks?
   1) LESS THAN TWO WEEKS
   2) TWO WEEKS OR MORE

N6 Were these thoughts only about feeling guilty, losing weight, or using drugs, alcohol or tobacco?
   1) ONLY THESE THINGS
   2) OTHER THINGS

N7 Did these unpleasant thoughts keep coming back into your mind again and again no matter how hard you tried to get rid of them?

N9 Did these thoughts often bother you for more than an hour at a time?

N9A Did thinking about these ideas interfere with your life or work, or cause you difficulty with your relatives or friends, or upset you a great deal?

RECOBS Have you had an unreasonable or unpleasant thought like this within the last 12 months?
DSM-III-R OBSESSIVE DISORDER -- OBS3R

The following variables are constructed to make the diagnosis and provide other information:

- **OBS3RA1**: Recurrent and persistent ideas, thoughts, impulses, or images that are experienced as intrusive and senseless.

- **OBS3RA2**: Attempts to ignore or suppress such thoughts or impulses or to neutralize them with some other thought or action.

- **OBS3RA3**: Recognition that obsessions are product of own mind. NOTE: This is implicit in the admission that the thoughts were unreasonable.

- **OBS3RA4**: Content of the obsession is unrelated to other Axis I disorder.

- **OBS3RB**: Obsessions cause marked distress, are time consuming, or significantly interfere with the person's life.

- **OBS3R**: The diagnosis of obsessive disorder for DSM-III-R: A diagnosis is positive if obsessions that meet these criteria cause the problems noted in the "B" criterion. The scoring of OBS3R is as follows:

  1 = No obsessive disorder
  5 = Meets lifetime criteria for obsessions

- **OBS3RA1** = (N1A = 5) OR (N5A = 5)
- **OBS3RA2** = (N3 = 5) OR (N7 = 5)
- **OBS3RA4** = (N2 = 5) OR (N6 = 5)
- **OBS3RB** = (N9 = 5) OR (N9A = 5)

**Diagnosis = 1**

**IF** (OBS3RA1 = 1 AND OBS3RA2 = 1 AND OBS3RA4 = 1 AND OBS3RB = 1) **THEN** Diagnosis = 5
Some people have the unpleasant feeling that they have to do something over and over again even though they know it is really foolish—but they can't resist doing it—things like washing their hands again and again, or going back several times to be sure they've locked a door or turned off the stove. Have you ever had to do something like that over and over?

Was there a time when you felt you had to do something in a certain order, like getting dressed perhaps, and had to start all over again if you did it in the wrong order?

Has there ever been a period when you felt you had to count something, like the squares in a tile floor, or always touch a particular thing, and couldn't resist doing it even when you tried to?

Did you have to do this several times over a period of at least two weeks?

1) NO, SHORTER TIME
2) YES, TWO WEEKS

When you did this, did it often take you more than an hour a day?

Did this interfere with your life or work, or cause you difficulty with your relatives or friends, or upset you a great deal?

You said you have had problems or experiences like: (INSERT POSITIVE SYMPTOMS). Have you had a problem or experience like that within the last 12 months?
**DSM-III-R COMPULSIVE DISORDER -- COM3R**

The following variables are constructed to make the diagnosis and provide other information:

**NOTE:** Category 2, that the purpose of the behavior is to neutralize or prevent discomfort or dreaded event, is not assessed.

**COM3RA1** Repetitive, purposeful, and intentional behaviors that are performed in response to an obsession, or according to certain rules or in a stereotyped fashion.

**COM3RA3** Recognition that behavior is excessive or unreasonable.

**COM3RB** Compulsions cause marked distress, are time consuming, or significantly interfere with the person's life.

**COM3R** The diagnosis of compulsive disorder for DSM-III-R: A diagnosis is positive if compulsions that meet these criteria cause the problems noted in the "B" criterion. The scoring of COM3R is as follows:

1 = No compulsive disorder  
5 = Meets lifetime criteria with compulsions

**COM3RA1** = (N15 = 5)  
**COM3RA3** = (N10 = 5) OR (N11 = 5) OR (N12 = 5)  
**COM3RB** = (N16 = 5) OR (N17 = 5)

Diagnosis = 1  
IF COM3RA1 = 1 AND COM3RA3 = 1 AND COM3RB = 1 THEN Diagnosis = 5
DRUGS

P50# (Marijuana only: Now I'd like to ask about your experience with drugs and other substances.) Have you ever used DRUG more than five times to get high or for other mental effects?

P11AO# Has there ever been a period when you spent a great deal of your time using DRUG, getting it, or getting over its effects?

P11BO# Was there ever a month or more when DRUG took up a lot of your time?

P12AO# Have you often used much larger amounts of DRUG than you intended to or for more days in a row than you intended to?

P13AO# Have you ever felt dependent on DRUG or found you were unable to keep from using it?

P13BO# Was there a month or more when you felt dependent on DRUG?

P14AO# Have you ever tried to cut down on DRUG but found that you couldn't?

P14BO# Have you several times found that you were unable to cut down on DRUG?

P15AO# Did you ever get tolerant to DRUG or need larger amounts of it to get an effect?

P16BO# Did stopping or cutting down on DRUG make you sick or cause you withdrawal symptoms?

P16CO# Did you get sick several times from cutting down on DRUG?

P16DO# Have you used DRUG several times to keep from having withdrawal symptoms (or to make them go away)?

P17# Did you have any health problems like an accidental overdose, a persistent cough, a seizure or fit, an infection, a cut, sprain, burn or other injury as a result of using DRUG?

P17BO# Did you use DRUG on more than one occasion after you knew it caused these health problems?

P18AO# Did DRUG cause you considerable problems with your family, friends, on the job, at school, or with the police?

P18BO# Did you use DRUG on more than one occasion after you realized it was causing these problems?

P19AO# Have you often been high on DRUG or suffering its after effects while working or taking care of children?

P20# Did you have any emotional or psychological problems from using DRUG — such as feeling uninterested in things, depressed, suspicious of people, paranoid, or having strange ideas?

P20BO# Did you use DRUG on more than one occasion after you found out it was causing you emotional problems?

P21AO# Have you ever given up or greatly reduced important activities in order to use DRUG — activities like sports, work, or associating with friends or relatives?

P21BO# Did you ever give up any important activities for DRUG for a month or more or several times?
DG#D3RA1 = (P12A0# = 5)
DG#D3RA2 = ((P13A0# = 5) OR (P14A0# = 5))
DG#D3RA3 = (P11A0# = 5)
DG#D3RA4 = ((P19A0# = 5) OR (P22A0# = 5))
DG#D3RA5 = (P21A0# = 5)
DG#D3RA6 = ((P17B0# = 5) OR (P18B0# = 5) OR (P20B0# = 5))
DG#D3RA7 = (P15A0# = 5)
DG#D3RA8 = (P16B0# = 5)
DG#D3RA9 = (P16D0# = 5)

DG#D3RA = SUM(OF DG#D3RA1-DG#D3RA9) >= 3

DG#D3RB = SUM(OF
(DG#D3RA1 = 1)
(DG#D3RA2 = 1 AND (P13B0# = 5 OR P14B0# = 5))
(DG#D3RA3 = 1 AND P11B0# = 5)
(DG#D3RA4 = 1 AND (P19A0# = 5 OR P22B0# = 5))
(DG#D3RA5 = 1 AND P21B0# = 5)
(DG#D3RA6 = 1)
(DG#D3RA7 = 1)
(DG#D3RA8 = 1 AND P16C0# = 5)
(DG#D3RA9 = 1)) >= 2)

DG#A3RA1 = (P17B0# = 5) OR (P18B0# = 5) OR (P20B0# = 5)
DG#A3RA2 = (P22A0# = 5)

DG#A3RA = ((DG#A3RA1 = 1) + (DG#A3RA2 = 1)) >= 1)

DG#A3RB = ((P17B0# = 5) +
(P18B0# = 5) +
(P20B0# = 5) +
(P22B0# = 5)) > 1)

Diagnosis = 1
IF DG#D3RA = 1 AND DG#D3RB = 1 THEN Diagnosis = 5
IF DG#A3RA = 1 AND DG#A3RB = 1 THEN Diagnosis = 5
ANTISOCIAL PERSONALITY

R5  Now I'd like to ask you about your life as a child before you were 15 years old. Did you ever skip school or play hooky at least twice in one year?

R5A  Was that only in your last year in school or before that?
   1) LAST YEAR ONLY
   2) BEFORE LAST YEAR

R5B  Before you were 15, did you skip school or play hooky as much as 5 days a year in at least two school years, not counting your last year in school?

R6  Before you were 15, did you often get into fights that you had started?

R7  Did you more than once use a weapon in a fight or threaten someone with a weapon before you were 15?

R8  Before you were 15, did you sometimes try to physically hurt anyone?

R9  Did you ever hurt or kill an animal on purpose before you were 15? (Do not include hunting, fishing, or exterminating rats, mice or insects.)

R10  Before you were 15, did you skip school or play hooky as much as 5 days a year in at least two school years, not counting your last year in school?

R10A  Did you run away more than once before 15?

R10B  Did you return home to live after running away?
   1) YES
   2) NO

R11  Of course, no one tells the truth all the time, but did you tell a lot of lies before you were 15 years old?

R12  Before you were 15 years old, did you more than once swipe things from stores or from other children or steal from your parents or from anyone else?

R13  Before you were 15, did you ever rob or mug anyone or snatch a purse or threaten to hurt anyone if they didn’t give you money or jewelry?

R14  Since you’ve been 15, have you stolen anything or robbed or threatened anyone?

R15  Before you were 15, did you intentionally damage someone’s car or do anything else to destroy or severely damage someone else’s property?

R16  Before you were 15, did you intentionally start any fires? Don’t count fires that you were supposed to start like bonfires, or fires in stoves or fireplaces.

R17  Since age 15, have you intentionally set any fires or tried to destroy something that belonged to someone else?

R19A  Have you more than once been arrested for anything other than traffic violations since 15?

R20  Have you ever been convicted of a felony?

R21  Have you had at least four traffic tickets in your life for speeding or running a light or causing an accident?
R31B  Before you were 15, did you ever force someone to have sex with you?

R33  Have you ever been faithful for more than a year — with no other sexual relationships at all during that period?
   1) YES, OR NEVER HAD A PROLONGED PARTNERSHIP
   2) NO

R35  Have you ever been paid for having sex with someone?

R36  Have you ever made money by finding customers for male or female prostitutes?

R37  Have you ever made money illegally by buying or selling stolen goods, selling drugs, or being part of a gambling or betting operation?

R38  Have you ever moved to avoid paying rent or borrowed money without making any payments on it?

R39A Have you more than once been sued for a bad debt or had things you bought taken back because you didn’t meet the payments?

R42B Have you more than once hit or thrown things at your wife/husband or partner first, regardless of who started the argument?

R43  Have you ever spanked or hit any child hard enough so that he or she had bruises or had to stay in bed or see a doctor?

R44  Since age 15, have you been in more than one fight that came to swapping blows, other than fights with your wife/husband or partner?

R45  Since you’ve been 15, have you ever used a weapon like a stick, knife, or gun in a fight?

R46  Since you were 15, have you ever physically attacked anyone other than while fighting?

R48  You mentioned (INSERT POSITIVE SYMPTOMS). Did you feel that doing that was okay because you had been mistreated or the person deserved it?

R51  Have you ever quit a job three times or more before you already had another job lined up?

R52  On any job you have had since 18, were you late or absent an average of 3 days a month or more?

R52  Was your being absent 3 days or more a month always due to a physical illness or injury?

R54  In the last 5 years, have you been out of work for six months or more not including times you were retired, in school full-time, a housewife, or too physically ill to work?

R55  Have you ever used an alias or assumed name? Do not include pen names or stage names.

R56  Since you’ve been 15, have you thought you lied pretty often?

R57  Since you’ve been 15, have you ever traveled around for a month or more without having any arrangements ahead of time and not knowing how long you were going to stay or where you were going to work?

R58  Since you’ve been 15, has there ever been a period when you had no regular place to live, for at least a month or so?
R60  Has there ever been a period when you did not provide your child with the financial support you were supposed to?

R61  Since you've been 15, have you sometimes left young children under 6 years old at home alone while you were out shopping or doing anything else?

R62  Since you've been 15, have there been times when someone else fed a child of yours or a child you were caring for because you didn't cook or have food in the house, or has someone kept your child overnight because no one was taking care of him or her at home?

R63  Since you've been 15, has a nurse or social worker or teacher ever said that any child of yours or a child you were taking care of wasn't being given enough to eat or wasn't being kept clean enough or wasn't getting medical care when it was needed?

R64  Since you've been 15, have you more than once run out of money for food for your family because you had spent the food money on yourself or on going out?

M17  Since you've been 15, have you ever had trouble driving because of drinking — like having an accident or being arrested for drunk driving?

RECASTP  You said you have had problems or experiences like: (INSERT POSITIVE SYMPTOMS). Have you had a problem or experience like that within the last 12 months?
The following variables are constructed to make the diagnosis and provide other information:

**ASP3RA**  The "A" criterion requiring a current age beyond 18 years.

**ASP3RB**  The assessment of presence of individual DSM-III-R conduct disorder symptom groups. The underscore is replaced by a number from 1 - 12 to identify a specific group of behavior problems occurring before age 15. The conduct disorder symptom groups are:

1.) R5B often truant
2.) R10A running away from home more than once, or never returning home after running away
3.) R6 starting fights
4.) R7 used weapon in more than one fight
5.) R31B forced someone into sexual relations
6.) R9 physically cruel to animals
7.) R8 physically cruel to other people
8.) R15 deliberately destroyed other's property
9.) R16 deliberate fire-setting
10.) R11 frequent lying
11.) R12 stealing without confrontation more than once
12.) R13 stealing with confrontation

**ASP3RB**  The "B" criterion for conduct disorder problems. Conduct disorder is indicated by the presence of three or more of the twelve symptom groups listed above.

**#ASP3RCON**  The total number of conduct disorder groups which are present.

**ASP3RC**  The assessment of presence of individual DSM-III-R antisocial symptom groups. The underscore is replaced by a number from 1 - 10 to identify a specific group of behavior problems occurring since age 15. The group (ASP3RC ) is given a value equal to the number of behaviors in that group which are positive. The antisocial symptom groups are:

1.) inability to sustain consistent work behavior:
   - R54 six months or more unemployment in last 5 yrs
   - R52 repeated absences not due to illness
   - R51 leaving several (3) jobs without plans for others
2.) Failure to conform to social norms of lawful behavior
   - R17 vandalism
   - R35 prostitution
   - R36 made money finding customers for prostitutes
   - R37 making money outside the law (e.g. drug dealing, fencing stolen goods)
   - R19A multiple non-traffic arrests
   - R20 felony conviction
   - R14 stealing with confrontation
3.) Irritable and aggressive behavior
   - R44 repeated physical fights
   - R45 using a weapon in a fight
   - R46 physically attacking someone (other than fighting)
   - R43 injuring a child
   - R42B physical assault on spouse
4.) Repeated failure to honor financial obligations
   - R39A sued for bad debts or had goods repossessed

Quick Diagnostic Interview Schedule III-R
ANTISOCIAL PERSONALITY

R60  failed to support children
R38  moved to avoid paying rent

5.) Failure to plan ahead, or impulsive behavior
R57  traveling without plans for work or shelter
R58  lack of a fixed address for a month or more

6.) No regard for the truth
R55  use of aliases
R56  frequent lying

7.) Reckless regarding own or others' personal safety
R21  recurrent moving traffic violations
M17  accident or arrest due to drunk driving

8.) Unable to function as a responsible parent or guardian
R61  left children under 6 yrs alone at home
R62  neighbor fed, kept child overnight due to failure
R63  comment on poor care for child from others
R64  no money for food because of self-indulgence

9.) R33 no sustained monogamous relationship (never faithful for a full year)

10.) R48 lacks remorse (thinks aggressive acts justified)

ASP3RGPS The total number of positive adult behavior problem groups ever.

ASP3RC The "C" criterion requiring a pattern of irresponsible and antisocial behavior since age 15. This is indicated by the presence of a positive symptom in at least four of the ten symptom groups listed above.

#ASP3RD The "D" criterion requiring antisocial behavior at times other than during a manic or schizophrenic episode. The diagnosis is excluded if ever had a manic episode or met criteria for schizophrenia.

ASP3R The DSM-III-R diagnosis of antisocial personality. A positive diagnosis requires that all three of the above criteria are met: A) age 18 or older, B) onset of three or more positive conduct disorder groups before age 15, C) four or more positive adult behavior problem groups. The scoring of ASP3R is as follows:

1 = No antisocial personality disorder
5 = Meets lifetime criteria for antisocial personality disorder, except possibly for exclusions
ASP3RA = (Age >= 18)

ASP3RB1 = (R5B = 5)
ASP3RB2 = (R10A = 5 OR R10B = 5)
ASP3RB3 = (R6 = 5)
ASP3RB4 = (R7 = 5)
ASP3RB5 = (R31B = 5)
ASP3RB6 = (R9 = 5)
ASP3RB7 = (R8 = 5)
ASP3RB8 = (R15 = 5)
ASP3RB9 = (R16 = 5)
ASP3RB10 = (R11 = 5)
ASP3RB11 = (R12 = 5)
ASP3RB12 = (R13 = 5)

ASP3RB = SUM(OF ASP3RB1-ASP3RB12) >= 3

ASP3RC1 = (R54 = 5) + (R52 = 5) + (R51 = 5)
ASP3RC2 = (R17 = 5) + (R35 = 5) + (R36 = 5) + (R37 = 5) + (R19A = 5) + (R20 = 5) + (R14 = 5)
ASP3RC3 = (R44 = 5) + (R45 = 5) + (R46 = 5) + (R43 = 5) + (R42B = 5)
ASP3RC4 = (R39A = 5) + (R60 = 5) + (R38 = 5)
ASP3RC5 = (R57 = 5) + (R58 = 5)
ASP3RC6 = (R55 = 5) + (R56 = 5)
ASP3RC7 = (R21 = 5) + (M17 = 5)
ASP3RC8 = (R61 = 5) + (R62 = 5) + (R63 = 5) + (R64 = 5)
ASP3RC9 = (R33 = 5)
ASP3RC10 = (R48 = 5)

ASP3RGPS = (ASP3RC1 >= 1) + (ASP3RC2 >= 1) + (ASP3RC3 >= 1) + (ASP3RC4 >= 1) + (ASP3RC5 >= 1) + (ASP3RC6 >= 1) + (ASP3RC7 >= 1) + (ASP3RC8 >= 1) + (ASP3RC9 >= 1) + (ASP3RC10 >= 1)

ASP3RC = (ASP3RGPS >= 4)

Diagnosis = 1
IF ASP3RA = 1 AND ASP3RB = 1 AND ASP3RC = 1 THEN Diagnosis = 5
PATHOLOGICAL GAMBLING

$1A$ Have you gambled or bet or bought a lottery ticket or used a slot machine more than 5 times in your life?

$2$ Have you ever spent a lot of time on gambling, betting, playing the lottery or trying to get money to do so?

$3$ Have you often gambled, bet or played the lottery too much, or for a longer time than you intended to?

$4$ Have there been times when you got restless or irritable if you could not gamble, bet, or play the lottery?

$5$ When you were not actually gambling or betting, was it on your mind most of the time?

$7$ Did risking the amounts that excited you at first begin to bore you later on so that you had to increase the amount in order to continue to find it interesting?

$8$ Have you often gone back to the place where you lost money to try to win it back?

$9$ Have you more than once wanted to or tried to quit or cut down on your gambling, betting, or playing the lottery?

$10$ Have you often gone gambling instead of working or doing something you were supposed to be doing with your family or friends?

$11$ Have you ever given up or cut down on your work, sports, or friendships in order to gamble, bet, or play the lottery?

$12$ Has gambling ever caused you to have trouble paying your debts, trouble with the law, or problems with your family or friends?

$13$ Did you continue to gamble or bet after you knew it was causing these problems?

RECGAM You said you have had problems or experiences like: (INSERT POSITIVE SYMPTOMS). Have you had a problem or experience like that within the last 12 months?
NARRATIVE MESSAGE

Appendix H - Sample of BUMED Message

ROUTINE

100020Z JUL 95 ZYB

FROM BUMED WASHINGTON DC //22//

TO NAVMEDCEN BETHESDA MD //00//
NAVMEDCEN OAKLAND CA //00//
NAVMEDCEN PORTSMOUTH VA //00//
NAVMEDCEN SAN DIEGO CA //00//
NAVMEDCLINIC ANNAPOLIS MD //00//
NAVMEDCLINIC BANGOR WA //00//
NAVMEDCLINIC KINGS BAY GA //00//
NAVMEDCLINIC LONG BEACH CA //00//
NAVMEDCLINIC NEW ORLEANS LA //00//
NAVMEDCLINIC PEARL HARBOR HI //00//
NAVMEDCLINIC PORTSMOUTH NH //00//
NAVMEDCLINIC QUANTICO VA //00//
NAVHOSP BEAUFORT SC //00//
NAVHOSP BREMERTON WA //00//
NAVHOSP CAMP LEJEUNE NC //00//
NAVHOSP CAMP PENDLETON CA //00//
NAVHOSP CHARLESTON SC //00//
NAVHOSP CHERRY PT NC //00//
NAVHOSP GREAT LAKES IL //00//
NAVHOSP GROTON CT //00//
NAVHOSP JACKSONVILLE FL //00//
NAVHOSP MILLINGTON TN //00//
NAVHOSP OAK HARBOR WA //00//
NAVHOSP OKINAWA JA //00//
NAVHOSP PATUXENT RIVER MD //00//
NAVHOSP PENSACOLA FL //00//
NAVHOSP ROOSEVELT ROADS PR //00//
NAVHOSP ROTA SP //00//
NAVHOSP WHIDBEY ISLAND WA //00//
NAVHOSP YOKOSUKA JA //00//
BFMEDCLINIC CORONADO CA //00//
BFMEDCLINIC EL TORO CA //00//
BFMEDCLINIC JACKSONVILLE FL //00//
BFMEDCLINIC MCRD SAN DIEGO CA //00//
BFMEDCLINIC NAS NORTH ISLAND CA //00//
BFMEDCLINIC TREASURE ISLAND CA //00//
BFMEDCLINIC NAVSTA NORFOLK VA //00//
BFMEDCLINIC NAS OCEANA VA //00//

CLN = MED666 MCN = 95191/26236 TOR = 951912148
/C96191/26236/ /191 1 EMA 0186 191/22:05Z 100020Z JUL 95
CSM: MED 666 191/22:07Z
C96191/26236/

UNCLASSIFIED
MEDCLINIC NAVSTA SAN DIEGO CA//00//
INFO NAVHLTHRSCHCEN SAN DIEGO CA//00//
BT
UNCLAS //NOG400//
MSGID/GENADMIN/BUMED//
SUBJ/DEFENSE WOMEN HEALTH RESEARCH PROGRAM COMPREHENSIVE SURVEY//
FOC/SCHW/LCDR/NAVLTHRSCHCEN SDIEGO CA/-/TEL:619-363-8461
/TEL: DSN 553-8461//
FOC/HOURANI/DR/NAVLTHRSCHCEN SDIEGO CA/-/TEL:619-555-8460
/TEL: DSN 553-8460//

FS/1. NAVHLTHRSCHCEN IS CONDUCTING A NAVY-WIDE COMPREHENSIVE
HEALTH SURVEY ON A WIDE RANGE OF HEALTH CONDITIONS AND POTENTIAL
RISK FACTORS AFFECTING ACTIVE DUTY NAVY AND MARINE PERSONNEL. A
SAMPLE OF 18,000 ACTIVE DUTY MEN AND WOMEN HAS BEEN CHOSEN TO
COMPLETE A SELF-REPORT QUESTIONNAIRE. SELECTED SUBJECTS WILL ALSO
RECEIVE PHYSICAL MEASUREMENTS AND TELEPHONE INTERVIEWS.

2. TO FACILITATE STUDY ADMINISTRATION, REQUEST YOU DESIGNATE
MILITARY LIAISON OFFICER (MLO). SUGGEST USING HEALTH PROMOTION
OFFICERS OR EQUIVALENT. MLO WILL ASSIST FIELD TEAMS FROM
NAVLTHRSCHCEN AND THE RESEARCH TRIANGLE INSTITUTE (RTI) WITH TEAM
VISITS/LOGISTICS, AND WILL COORDINATE WITH CMDS IN THEIR GEOGRAPHIC
AREA TO NOTIFY SELECTED INDIVIDUALS AND ARRANGE SURVEY FACILITIES.
MLO IS TO BE CONSIDERED MILITARY REPRESENTATIVE FOR ALL MATTERS
PERTINENT TO SURVEY WITHIN GEOGRAPHIC AREA.

3. REQ FWD THE FOLLOWING INFO CONCERNING THE DESIGNATED MLO NLT
1. JULY 95 TO NAVHLTHRSCHCEN.
A. MLO NAME AND RANK
B. MAILING ADDRESS
C. OVERNIGHT SHIPPING ADDRESS (INCLUDE BLDG AND RM NO).
D. DSN NUMBER
E. COMMERCIAL PHONE NO. (OVERSEAS: INCLUDE COUNTRY CODE)
F. COMMERCIAL FAX NO.

4. STRONG COMMAND SUPPORT AND MAXIMUM PARTICIPATION BY SELECTED
PERSONNEL IS A MUST TO ENSURE THE SURVEYS SUCCESS.//

CC:

U//UNCLASSIFIED//U

//236/0664/
CSN: MED 066G 191/22:082
C95191/26236 /
Appendix I - MLO Guidelines

M L O   G u i d e l i n e s

RESEARCH TRIANGLE INSTITUTE
Survey Research Division

MEMORANDUM

DATE: July 28, 1995
TO: LCDR Larry Shaw
FROM: Randy Keesling
SUBJECT: MLO Guidelines Letter

Larry, attached is a draft of my attempt to boil the MLO Manual down to as brief a letter format as possible. I was able to make it only 4 pages of text (plus a fifth page for the closing). It also includes the scheduling worksheets I mentioned on the phone to you yesterday that we developed to facilitate the MLO's room scheduling. In practice, we will only send an MLO the number of pages s/he needs for the number of days we will be on site at an FSU. Since that can be as many as 5, we developed 5 days worth of sheets and all are attached for your review.

There is one other item enclosed with this fax but which is not part of the MLO letter. It is a revised draft of the Phase 2 cover letter that would go in each packet that is mailed to non-attendees. I understand a separate letter would be needed to enclose in the packets being mailed to all those sampled on the ships that Frank Garland is surveying like the Cable, Yellowstone, etc. I am assuming that NHRC is drafting that letter so as to clarify the difference between the two surveys. So that nothing falls through the cracks on that point, please be sure to confirm my assumption or instruct me otherwise.

As before, I'd ask that you please provide copies of these documents to Laurel and Diane and let me have your collective feedback on them. As time is growing short, and unless you folks find the MLO letter to be a "blow-up" job in terms of editing, I'd like to shoot for faxing the letter to the MLO's by next Wednesday (8/2). So your timely review and feedback would be appreciated.

Thanks.

attachments
Welcome to the "1995 POWR Assessment: Perceptions of Wellness and Readiness" survey. On behalf of the Naval Health Research Center (NHRC) and Research Triangle Institute (RTI), I want to thank you ahead of time for any and all assistance you provide towards the ultimate success of this research endeavor.

BACKGROUND

Informatively, NHRC has contracted with RTI, a not-for-profit research organization associated with the University of North Carolina, North Carolina State University, and Duke University, to collect data for their 1995 POWR survey. The purpose of the research is to conduct a worldwide survey of the health of active-duty Navy and Marine Corps women and men, with a special focus on women's health care needs.

A total of 45 nucleus installations, or what our statisticians call "first stage units" (FSU's), were randomly selected across the Navy and Marine Corps worldwide for this study. A further random sample of over 20,000 active duty men and women across all paygrades were selected at these 45 FSU's. Attached you will find a copy of the "Sample Summary" for your FSU. It lists by UIC the number of personnel selected to participate in the POWR95 survey.

THE PLAN

Here is an overview of the plan to collect the data for the POWR95 survey. A two-person team from RTI is scheduled to visit your installation on ___________. They will administer the questionnaire in group sessions on these dates only. A letter will be sent to each UIC commanding officer from NHRC advising them of the survey and providing a list of selected personnel along with the session they are scheduled to attend.
At each session, our team will pass out a questionnaire booklet, a participation consent form, and a pencil to each attendee. The team will explain the nature of the survey and then allow the participants to complete the survey on their own. The team will collect the completed questionnaires and, before leaving your installation, will ship them in bulk to a scoring contractor in North Carolina for processing.

Those that do not attend a scheduled session will be sent a questionnaire asking them to reply through the mail. This often results in a low response rate, therefore, it is imperative that we try to get as many selected personnel into one of the group sessions.

YOUR ROLE

As the Military Liaison Officer (MLO) for your FSU, you have an opportunity to ensure the success of the survey at your installation as well as the overall success of the entire research project. The RTI field team assigned to your FSU shares in this goal and will assist you in any way they can to accomplish it. Your assistance to the team in accomplishing various tasks will be greatly appreciated.

The first task we need you to assist with is the scheduling of the sessions. My staff and I at RTI will handle the task of assigning UIC personnel into individual sessions. We will also be responsible for sending the notices I mentioned earlier to each UIC commander. Where we need your help is in finding and reserving suitable facilities in which to conduct the group sessions. The room(s) should preferably be:

- centrally located,
- adequately lighted, ventilated, heated/cooled,
- able to seat approximately 50 to 60 people (up to two smaller rooms seating 25 to 30 each will suffice if they are in the same building), and
- large enough to provide appropriate seating and writing space (i.e., seats far enough apart to assure confidentiality of each person's recorded answers).

If the anticipated travel time to a proposed survey facility exceeds 30 minutes for the participants, an alternative facility should be considered and arranged.

Please reserve, as soon as possible, a room or rooms for each of the days the field team will be on site. Each scheduled session should be allotted one and a half hours. We have provided a worksheet for your use in scheduling and reserving the rooms. Please reserve a room(s) for each of the sessions noted on the attached worksheets. If the location must change from session to session, please try to keep it reasonably close to the original location so the team will have time to travel to it (we do not want to be late for a session).
Please complete the worksheets and fax them to my attention at (919) 541-7198 no later than 7 August 1995. If you encounter problems in finding adequate space, call me at (919) 541-6665 or, in my absence, Mr. Matt Rueckert at (919) 541-7364, Monday thru Friday, 0830-1700 Eastern.

As mentioned earlier, once I have all of your room schedules, my staff will assign UIC personnel to a session, and send the UIC CO a letter from NHRC along with a list of names and the session they are to attend. At that point, we will have to rely largely on the CO's pro-action to notify and encourage the selected personnel to attend their session.

I will provide you with a completed "master" schedule prior to the CO letters being sent. At some point after the UIC CO's receive their notice and schedule, those having a major conflict with the scheduled session will likely contact you as you will be referenced in the letter as the local point-of-contact regarding the survey scheduling. To the extent that they can be rescheduled during the dates the team is on site, you may reschedule them into one of the later sessions that we will keep open for that purpose. If necessary, and if the UIC CO is agreeable, our teams will conduct a special session "after hours" for any group not able to attend a regularly scheduled session.

In an effort to minimize the number of no-shows, it would be helpful if you could make a telephone contact with the UIC CO's that you have not already heard from, approximately one week prior to the scheduled sessions. Since your FSU may have numerous UIC's, we would ask that you at least contact those UIC CO's that have 10 or more selected personnel. For most FSU's, that should reduce the number of calls needing to be made to about 10 or fewer. During the call, we would ask that you just confirm with the CO that they received the letter and attachments from NHRC, and that his/her selected staff have been notified to attend a session. Also ask the CO to read off the names of anyone s/he knows will not be able to attend a session and the reason why. Provide this information to the field team when they arrive.

The field team will need to account for all selected personnel while on site. In each case where the person does not attend any of the sessions, the team will have to record an absence code which most closely describes why the person did not attend. Acceptable codes include: PCS'd, separated from service, AWOL, ill or in hospital, on leave, TDY/TAD, brig, geographically separated unit, or deployed. Anyone not falling into one of these categories gets labelled a "no-show." These need to be minimized to the extent possible. The team can use your assistance in determining the reason for any and all absences. After a scheduled session begins, the team will know who did not show up as scheduled. It would be extremely helpful if you could make a call to the unit and inquire as to the person's whereabouts and see if they can be notified to attend ANY of the remaining scheduled sessions. If the person cannot be rescheduled, please ask for a reason why so that the team may code their absence accurately.
There are also a few miscellaneous tasks where your assistance would be greatly appreciated. During the week of 14 August, our scoring contractor, Information Services Group (ISG) from Morrisville, NC, will be shipping boxes of questionnaires and other materials needed by the team to conduct the group sessions. These will be shipped to your attention. You do not need to do anything with the contents of the boxes. All we would like you to do is secure the boxes until the team arrives. The shipment varies by PSU but should, on average, be comprised of only 3 or 4 boxes. Please note the exact number of boxes received and report this to the field team leader when s/he contacts you. The team leader will know exactly how many boxes were shipped to you. The boxes should also be marked "1 of 3," "2 of 3," etc., so you will know when the shipment arrives whether they are all there or not.

When the team arrives, they will be carrying Invitational Travel Authorizations issued by the Department of the Navy. These orders will allow various privileges to the team members while on base including messing and billeting. To the extent that billeting is available on base, it saves the Navy Department money on this project. While we do not ask, and in no way is it your responsibility to make any arrangements for billeting on base for the team members, it would be helpful if you could provide the name and commercial telephone number of the person on base that the team leader could contact to make these arrangements for him/herself. Also, if billeting is not available, your recommendations of commercial lodging near the base would also be helpful to the team.

Beyond that, any assistance you can give the team while on site in pointing them in the right direction to such places as the post office, mess halls, base exchange, etc. would be appreciated by them. Again, the team members will try to be as little burden on you while on site as they possibly can, and I know they will be as appreciative of your efforts as we are here at RTI and NHRC.

GETTING STARTED

The RTI team leader assigned to your FSU will be contacting you soon to begin assisting you and answering any questions you may have. At anytime, please feel free to contact either myself or Matt Rueckert at the numbers noted above if you have any questions. You may also contact LCDR Larry Shaw in San Diego at DSN: 553-8461 with questions or support issues. He is the Headquarters Liaison Officer at NHRC for this project.

Again, thank you for taking on this research responsibility. We know and appreciate that you have other regular and important daily duties to perform. We also know and appreciate the fact that you probably were not given the opportunity to "volunteer" for this assignment. The field teams and project staff at RTI will do what we can to minimize any burdens this assignment entails for you. I can't, however, emphasize enough the critical role you play in the overall success of the project.
Appendix J

STATEMENT OF WORK

The Principal Investigator will be responsible for completion of the following tasks by the following dates:

### Data Collection - Phase I (Questionnaire mailout activity)

<table>
<thead>
<tr>
<th>Task</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Updates and delivers Phase I mailout sample personnel rosters to RTI</td>
<td>10/16</td>
</tr>
<tr>
<td>Prepares and prints Wave 1 CO letters and envelopes and sends to RTI</td>
<td>10/20</td>
</tr>
<tr>
<td>Monitors RTI mailout and return of Wave 1</td>
<td>11/6</td>
</tr>
<tr>
<td>Prepares and prints Wave 2 CO letters and envelopes and sends to RTI</td>
<td>11/22</td>
</tr>
<tr>
<td>Monitors RTI mailout and return of Wave 2</td>
<td>12/11</td>
</tr>
<tr>
<td>Decide on need for Wave 3 based on response rate to date</td>
<td>1/16</td>
</tr>
<tr>
<td>Monitor Wave 3 mailout as needed</td>
<td>1/22</td>
</tr>
</tbody>
</table>

### Data Collection - Phase 2 (Body measurement site (BMS) activity)

<table>
<thead>
<tr>
<th>Task</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephones 350-400 BMS CO's and notifies MLOs of site visits</td>
<td>10/15</td>
</tr>
<tr>
<td>Prepares and prints BMS CO letters and envelopes and sends to RTI</td>
<td>11/20</td>
</tr>
<tr>
<td>Prepares and delivers BMS sample personnel address files to RTI</td>
<td>12/4</td>
</tr>
<tr>
<td>Monitors and attends RTI field team training activities and conducts refresher training for NHRC BMS surveyors</td>
<td>1/5</td>
</tr>
<tr>
<td>Field data collection CONUS (California) completed</td>
<td>1/19</td>
</tr>
<tr>
<td>Field data collection OCONUS (Pearl Harbor) completed</td>
<td>2/2</td>
</tr>
</tbody>
</table>

### Data Collection - Phase 3 (Telephone interview activity)

<table>
<thead>
<tr>
<th>Task</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completes training of interviewers and pilot testing</td>
<td>11/1</td>
</tr>
<tr>
<td>Telephone interviewing/sampling completed</td>
<td>2/26</td>
</tr>
</tbody>
</table>

### File Management/Data Analysis

<table>
<thead>
<tr>
<th>Task</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS computerized files cleaned</td>
<td>2/12</td>
</tr>
<tr>
<td>Preliminary file received from scanners and cleaned</td>
<td>2/19</td>
</tr>
<tr>
<td>Preliminary analysis of telephone interview and BMS data</td>
<td>3/8</td>
</tr>
<tr>
<td>Provide RTI with updated population counts and monitor data</td>
<td></td>
</tr>
<tr>
<td>weighting procedures of final scanned files</td>
<td>3/15</td>
</tr>
<tr>
<td>Data collection debriefing meeting at NHRC</td>
<td>3/27</td>
</tr>
<tr>
<td>Receive unedited final weighted file from RTI</td>
<td>4/5</td>
</tr>
<tr>
<td>All files edited and merged</td>
<td>4/29</td>
</tr>
<tr>
<td>Analysis and 4-5 technical reports and articles completed</td>
<td>9/30</td>
</tr>
</tbody>
</table>