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Persian Gulf Women's Health Linkage Study

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FOREWORD

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SECTION 1 INTRODUCTION

The Department of Defense (DoD) and Department of Veterans Affairs (DVA) lack baseline epidemiologic and health services data to adequately monitor health effects of women who were deployed to the Persian Gulf. This baseline data is needed to appropriately understand the impact of Persian Gulf deployment on health care problems that either have been or may be experienced by women who served in the Persian Gulf.

The Persian Gulf Women's Health Linkage Study will provide baseline health and risk factor information to estimate the prevalence of selected health conditions, with an emphasis on reproductive health. The research will compare the incidence, prevalence, and general health outcomes and risks of women deployed in the PG theater of operations to a control population of PG-era military women who were not deployed to the theater. Comparisons will be made between exposed subpopulations and other deployed female veteran and civilian populations.

The epidemiological study will augment and integrate information gained from current on-going research. The study approach includes the administration of a self-reported health questionnaire to a control-based sample of women deployed to the Persian Gulf area and a comparison sample of active duty or reservists who were not deployed to the Persian Gulf (Persian Gulf era veterans). The approach also includes assessing patterns of findings from other studies, using meta-analytic techniques.

This epidemiological research, "Persian Gulf Women's Health Linkage Study", is targeted to the research gap in understanding the impact of deployment in the Persian Gulf on women's health. The Persian Gulf deployment represents a good opportunity to begin establishing a database on women veterans' health because in contrast to previous US conflicts, a larger proportion of participants were women. This study involves primary data collection and augment and integrate information gained from current on-going research. The study will also assess patterns of findings from other studies, using meta-analytic techniques.

This study will provide baseline health and risk factor information to estimate the prevalence of selected health conditions, including reproductive health. The research will compare the incidence, prevalence, and general health outcomes and risks of women deployed in the PG theater of operations compared to a control population of PG-era military women who were not deployed to the theater. Comparisons will be made between exposed subpopulations and other deployed female veteran and civilian populations.

The research has the following five objectives:

1. Link individual self-reported environmental/occupational and psychological exposures and Defense Manpower Data Center (DMDC) Geographical Information System (GIS) data to health outcomes.
2. Compare short-term (within 3-5 years of deployment) overall health and incidence of health conditions of women deployed to the PG theater to PG-era women who were not deployed to the PG theater (reproductive health; cancers; psychological; and other health conditions and health status).
3. Compare and combine results from the proposed study with those of other studies: DVA; CDC; DoD using meta-analytic techniques.
4. Compare results from the proposed study to those of women who served during the Vietnam era (theater and non-theater).
5. Establish the protocol and baseline database for a longitudinal assessment of overall health and incidence of health conditions of women deployed to the PG theater compared to PG-era women who were not deployed to the PG theater. This will allow further research into malignant tumors in female reproductive organs and other latent adverse outcomes for further understanding of the risk associated with PG service and will allow comparisons with that of Vietnam-era women veterans.

The study will also advance methodological understanding of the impact of recall and selection bias among individuals deployed to actual theaters compared to other areas by method of interview (mail--PG; telephone--Vietnam) and validation of adverse events via medical records and DoD records.

We will attempt to relate the outcomes to specific agents, and we will compare the results by subgroups of respondents based on the exposure information elicited from both the respondents and the DoD troop movement file. We will also collect data on lifestyle and family history variables and use these as additional control variables in the analysis.

This multi-faceted epidemiologic research addresses many areas of interest regarding health of women PG-era veterans. Specifically, this study:

1. Involves members of the Armed Forces or civilian employees of the DoD during the Persian Gulf War as well as their spouses and children;
2. Involves a control group of members of the Armed Forces or civilian employees of the DoD during the time of the Persian Gulf War but not in the actual theater of the Persian Gulf War;

3. Involves historical comparison of PG War illnesses and symptoms with health experiences in other recent deployments (Vietnam);
4. Involves assessment/linkage of potential exposures to outcomes;
5. Compares incidence, prevalence, and nature of illnesses, symptoms, and potential adverse birth outcomes for children conceived by individuals who participated in the Persian Gulf War with an appropriate control group; and
6. Involves reproductive outcomes, pediatric disorders and reproductive risks (e.g., miscarriage, infertility).

The linkage study will expand information gained from and fill information gaps on other on-going studies regarding the incidence of general health problems, with an emphasis on reproductive health outcomes, experienced by women who served in the Persian Gulf theater, as well as quantification of potential risk factors. It fills research gaps of current and planned studies of Persian Gulf veterans in the following manner:

- Collection of information not considered in other studies (e.g., tumors, self-reported lifestyle and exposure factors, etc.);
- Collection of data on a sufficient number of women to allow powerful findings, especially for rare events/outcomes;
- Collection of comparable data on women unmarried at the time of active Persian Gulf theater or era duty;
- Link exposure to outcome using DoD data as well as self-reported data; and
- Establish a longitudinal base for later comparative research on the effects of different deployments (e.g., malignant tumors in female reproductive organs).

The survey instrument elicits information on a variety of chronic diseases, disabilities, and conditions. This study examines the physical and psychological correlates of occupational and combat stress. Infertility, spontaneous abortions, still births, live births with congenital malformations, infant deaths, birth weight, pre-term delivery, and number of children are the reproductive outcomes that will be studied. This study also investigates risks associated with malignant tumors in female reproductive organs which may be observed in the future, if not already.

As part of the instrument development, we reviewed many survey instruments and created a crosswalk of the instruments with the current draft of the survey instrument developed for this study. The crosswalk is included in the Appendix A, which identifies particular surveys reviewed and relates questions between those surveys and the current draft instrument for this study.

SECTION 2

EXPERIMENTAL METHODS, ASSUMPTIONS, AND PROCEDURES

The basic design approach proposed is a retrospective cohort study which compares the health in four dimensions: reproductive; cancers; psychological; and other health conditions of a sample of women deployed to the Persian Gulf to those of an equal number of comparative women who were not deployed to the Persian Gulf. The study will have a pilot and a full study phase.

Women Persian Gulf veterans, for the purpose of this study, are defined as those women who were assigned to the Southwest Asia theater of operations between August 7, 1990 through June 13, 1991, a period during which there was significant U.S. military involvement in the Persian Gulf. Women non-Persian Gulf troops, for the purpose of this study, are defined as those who were either on active duty or reservists in the U.S. military anytime between August 7, 1990 to June 13, 1991, and whose assignment or status did not include service in the Persian Gulf region.

The control group will consist of women who similar characteristics as the Persian Gulf group with respect to branch of service, rank, and military occupation. Potential control subjects from each branch of service will be selected using the same selection procedures as for the female Persian Gulf veterans.

The epidemiologic objectives require the use of demographic and medical information to understand risk factors and outcomes, both immediate and latent, of each study participant and then subsequently the study sample.

Study statistical objectives involve quantifying measurement errors and interactions among the epidemiologic risk factors. Estimates of measurement error, non-response bias, impact of risk factors in the presence of interaction, etc. are critical statistical issues that affect the credibility of the epidemiologic objectives. Statistical objectives involve a deeper investigation into measurement issues that camouflage and/or exacerbate apparent epidemiologic findings.

Information on exposure variables will be collected from the mailed surveys and follow-on telephone interviews, supplemented with and validated by military personnel records. Data on the outcome variables will also be collected and validated by reviews of medical and hospital records. Information on effect modifiers and confounders will be collected to the extent feasible from military and medical records and from the study participants and will be considered in the analyses.

The self-reported adverse health outcomes such as cancers, still births, infant deaths, MS, congenital malformations, post-traumatic stress, adverse health treatments (e.g., infertility workups, malignancies, hospitalizations for stress, etc.) will be verified against medical records. To determine the degree to which adverse health outcomes are under-reported, medical records will be reviewed for a sample of the study participants not reporting adverse health conditions. All birth records of

children who were mentioned as having birth defects at birth will be reviewed for false positives. Medical records to substantiate reporting of other outcomes that were treated in hospitals (outpatient or inpatient) will be verified via hospital records (e.g, surgeries).

A sample of 10,000 women deployed to the Persian Gulf theater will be selected for the study. A control group will consist of 10,000 Gulf-era women who have similar characteristics as the Persian Gulf group. We will coordinate with DVA to ensure that women selected for the National Health Survey of Persian Gulf Veterans and their Family Members are not also sampled for this study (3,000 Persian theater and 3,000 non-theater). We are working with DoD and DVA to define the frame of female PG veterans and female non-PG veterans. We anticipate selecting a stratified random sample of female veterans, with strata defined by whether served in PG and branch of service during the summer of 1997.

The pilot study will test the study design, procedures, and systems with 100 PG area and 100 PG-era females. Consequently, the focus of the statistical analysis of the pilot study is three-fold:

1. Validation of the self-reported data;
2. Estimates of selection bias (medical records, non-response, etc.); and
3. Demonstrate the feasibility of the study design and instruments, including the planned implementation.

We assume that we will be able to locate selected participants following the procedures we have used for other veteran studies: Study of Women Vietnam-era Veterans and the Army Chemical Corps. We met with Dr. Jack Heller and staff of the Center for Health Promotion and Preventive Medicine (CHPPM) during the fall of 1996 and expect to continue our interaction once we select the sample to link the daily unit location information with the information we obtain from the survey responses and medical record data. We expect assistance from DoD's Data Manpower Data Center to obtain the information from which to select the sample and begin our location task.

The analysis of the primary data will determine the effects of military service in the Persian Gulf theater on health outcomes of women Persian Gulf veterans. Therefore, the overall main exposure of interest is Persian Gulf deployment. Other covariates we will consider as potential confounders or effect modifiers include exposures, stress, maternal age, race, gravidity, birth control method, complication during labor and delivery, medical conditions during pregnancy, medication or treatment during pregnancy, alcohol use, family history, smoking or high risk job. If the distribution of the non-exposure potential confounding variables among Persian Gulf and non-Persian Gulf women is similar for both, a conclusion may be reached that the variables are not related to Persian Gulf deployment and therefore they do not confound the "Persian Gulf experience" and health outcome association. However, if there exists a significant difference, we will adjust for the effects of these confounders in the analysis. We will use both stratified and multivariate analysis. Stratification by pertinent covariates provides a direct method for eliminating biased comparisons that result from confounding.

We will perform analysis among subsets of the respondents that will include investigation of non-response bias, validation of medical record with telephone interview responses, military data and telephone interview responses, as well as adverse reproductive outcomes and other health conditions.

Appendix C includes documents that have been developed to ensure the project continues along a schedule that ensures completion by the end of the summer of 1998.

SECTION 3

RESULTS AND DISCUSSION

We have developed the questionnaire and will perform the pilot during September 1997. We will select the final sample and begin the mailing process during October 1997. We will begin the medical record release process during January 1998.

The current draft instrument is provided in the appendices. A proxy instrument has also been developed which will be used in case the respondent is deceased or otherwise unable to answer a questionnaire. The current draft is included in the Appendix B.

The study team will present a poster of the status of the results at the 1997 American Public Health Association Conference during November 1997. The title of the poster is, "The Persian Gulf Women's Health Linkage Study: A Longitudinal Study Designed to Assess Short-term and Long-term Effects of Gulf War Service."

SECTION 4 RECOMMENDATIONS

Since we are currently completing the field work period, we have no recommendations to make. The project is progressing, and should be completed on schedule. We believe that this data will provide a valuable baseline of deployed women that should be investigated at later time periods and used as a basis of more in-depth specialized studies (i.e., clinical evaluations) by other investigators.

SECTION 5

CONCLUSIONS

The project is progressing and should be completed on schedule, by September 1998. Our current experience performing two similar studies of veterans should allow us to locate the study participants at the desired rates, interview them, and obtain their medical records. We have obtained a license and received training in the use of NetMap and other specialized software that we believe will assist in the complicated analysis of the exposure and outcome linkage analysis.

REFERENCES

Numerous related survey instruments were reviewed and are listed at the beginning of the crosswalk (Appendix A).

APPENDICES

CROSSWALK OF DRAFT SURVEY INSTRUMENT WITH OTHER SURVEYS

LISTING of CROSSWALK SURVEYS

1. National Health Survey PG War Era Vets
2. Reproductive Health Study of Women Vietnam Vets - (Telephone)
3. Reproductive Health Study of Women Vietnam Vets - (Self Admin)
4. Reproductive Health Study of Women Vietnam Vets - (Proxy)
5. National Maternal & Infant Health Survey - Child Health
6. National Maternal & Infant Health Survey - Pregnancy Loss
7. National Maternal & Infant Health Survey - Maternal Health & Repro Outcomes
8. NHIS 1995 Supplement
9. National Survey of Veterans
10. 1992 DoD Health Care Survey
11. Survey of Female Veterans (KANG)
12. 1989 Women's Health Survey
13. CDC PG Survey
14. Desert Storm Reunion Survey - Phase 1 & 2
15. CCEP Case Assessment Protocol
16. Health Assessment of Persian Gulf War Vets from Iowa
17. Vietnam Veterans' Risks for Fathering babies with Birth Defects

SUMMARY TABLE of CROSSWALK SURVEYS

Survey Name	Sponsor	Data Period	Survey Method	Study Pop	Focus
National Health Survey PG War Era Vets	VA Veterans Health Admin	1995	Mail Survey	PG War Veterans & Families	Veteran/Family Health
VAREPRO - Repro Health Study of Women Vietnam Vets	VA Envr. EPI Service	1993	Telephone Survey	Female Veterans	Repro Health
Repro. Health Study of Women Vietnam Vets	VA Envr. EPI Service	1993	Self-Admin	Female Veterans	Repro Health & Cancer
Repro. Health Study of Woman Vietnam Vets	VA	1993	Telephone Survey - Proxy	Female Veterans	Repro Health & Cancer
National Maternal & Infant Health Survey - Child Health Study (NMIHS)	National Center for Health Statistics (NCHS)	1991	Mail Survey	NMIHS Participants with 1988 pregnancy	Child Health & Medical Care
NMIHS - Maternal Health (Preg Loss) Study	NORC, NCHS	1991	Mail Survey	NMIHS Participants with pregnancy loss in 1988	Maternal Health & Repro outcomes
NMIHS - Maternal Repro Health Study	Bureau of Census, NCHS	1989	Mail Survey	NMIHS Participants any pregnancy outcome	Maternal Health & Repro outcomes
NHIS 1995 Supplement	NCHS	1995	Telephone Survey	NHIS Participants	Behavioral Health
National Survey of Veterans	VA	1993	Telephone Survey (CATI)	Non-Active Duty Veterans	X-Section of Veteran Characteristics
1992 DoD Health Care Survey	DoD	1992	Mail Survey	Recipients of Military Health Care benefits	Health Care Service Use
Survey of Female Veterans	VA Office of Envr. EPI (Kang)	1985	Telephone Survey	Female Veterans	Social, Health, Economic, Demog. Char.
Women's Health Survey	DoD	1989	Mail Survey	Active Duty Women in Armed Forces & Coast Guard	Adequacy of Health Care Services
CDC PG Survey	CDC	1994	Mail Survey	Male & Female PG Veterans	Health & Exposures

SUMMARY TABLE of CROSSWALK SURVEYS

Survey Name	Sponsor	Data Period	Survey Method	Study Pop	Focus
Desert Storm Reunion Survey Phase 1 & 2	VA, Boston Environmental Hazards Center of Boston Univ.	Phase 1 -1992 Phase 2 - 1993	Self-Admin	Active Duty Veterans based at Ft. Devons, MA	Post-Deployment Readjustment issues
Comp. Clinical Eval. Pgm. CCEP Case Assessment Protocol	DoD, DVA	1995	Case Series Report from clinical evaluations	PG Veterans	Diagnostic results of clinical evaluations
Health Assessment of Persian Gulf War Vets from IOWA	University of Iowa, CDC	1995	Telephone Survey	Active Duty Personal with Iowa as home of record	Self reported health status and exposure
Vietnam Veterans' Risks for Fathering Babies with Birth defects	CDC - Center for Environmental Health	1983	Telephone Survey	Vietnam Veterans who had fathered children	Birth defects

CROSSWALK OF OTHER SURVEYS

FEMALE VETERANS PG SURVEY	Natl. Hlth. Survey PG War Era Vets	VAREPRO	VAREPRO Self-Admin.	VAREPRO - Proxy	NM&IHS Child Study	NM&IHS Preg. Loss Study	NM&IHS Maternal Repro. Hlth Study	NHIS 1995 Supplement	Natl. Survey of Veterans	1992 Health Care Survey	Kang Survey of Female Veterans	Women's Health Survey	CDC PG Survey
FULL NAME	1 25	640	Page 7						S6		H2		
MAIDEN	2	644											
OTHER NAME	3												
SSN	4 26								P2				
DOB	5 27	43		P1	D6				A1		F3		A4
BIRTHPLACE	6	47, 48			D7								
RACE	7				D16				SC9, 02	5	F2	7	A6
HISPANIC ORIGIN	8				D17, D18				SC8, 01	4		8	A6
EDUCATION	9	49			D19	E1	H1		SC10	6	11,57d-e,F1	9	
INCOME	10				F1-4	F1-20	I1-14, I36			19	78,81a-b, 82,83,84		
OCCUPATION	11	50,590, 593-600			D26a-g				D2	17	77a-b		A8,A9
BRANCH	12	500, 503, 506, 509, 512, 515	S2c						A8, SC5			1	
ENLISTMENT DATE	13	502, 505, 508, 511, 514, 517	S2a						A4		6a		
SERVICE STATUS	14	498							SC3-6, A10	17	2,3,4a		
UNIT	15	524									10		
DISCHARGE DATE	16		S2b						A5		6b		
DUTY TIME	17	502, 505, 508, 511, 514, 517										5	A13,A14
PG ASSIGNMENT	18 1a	521'											
DEPLOY STATUS	19	523'											A12
DEPLOY DATE	20 1b												D1
DEPLOY PG BASE	21												

CROSSWALK OF OTHER SURVEYS

FEMALE VETERANS PG SURVEY	Natl. Hlth. Survey PG War Era Vets	VAREPRO	VAREPRO Self-Admin.	VAREPRO - Proxy	NM&IHS Child Study	NM&IHS Preg. Loss Study	NM&IHS Maternal Repro. Hlth Study	NHIS 1995 Supplement	Natl. Survey of Veterans	1992 Health Care Survey	Kang Survey of Female Veterans	Women's Health Survey	CDC PG Survey
PG ASSIGNMENT BASE	22												D2,5
MOSC	23	535'									9		
PAY GRADE	24									1	8		
RANK	25												A17
PG TIME	26 1b	529'							S6				
PG EXPOSURE	27	566-583'											E2,F7,G5
PG STRESS	28												F7,I6,I5,J3
MENSTRUAL AGE	29	152											
BIRTH CONTROL	30	199, 431											
GYN CONDITION	31	58, 60-61, 174, 226, 487								44	30-10 - 30-16		C3aa-ij
EVER PREGNANT	32	217	S5a	P9a							36a		
PREGNANCY AGE	33	235											
NO. PREGNANCY	34	218	S5b	P9b		B9	B(1)2,3				36b,37		
PRENATAL CARE	35	237											
PREGNANCY OUTCOME	36 12 a-d	219-222, 225, 264, 274	S5c-f, S7a	P9a-f, P11a-11b	C11a	B9					38,39,40, 41a-b,42,43		L2,L3
PREG COMPLICATIONS	37 13a	268, 321-366	S6a	P10a-P10c				C9					L5
CANCER	38 8a-4,5	65, 88-90, 95	S3a-c	P7a				C9	G1, G2A	44	33a-b,34a-b		C3m,n
CHRONIC CONDITIONS	39 8a-7,9,12,13,16,20,23,24,29							C4-C10	G1, G2A	44	30-2 - 30-5, 30-21, 30-32, 36,37,38,45,59		C3
ACUTE CONDITIONS	40 19a-1,16,27,28,29, 31,37	58								44	30-32		B3,B5a2,c,e,k, r,s,t,aa,bb,cc, dd
MEDICATIONS	41	369-379, 211											B12,C4
STRESS INDEX	42												B16
STRESS HELP	43					A1		D5					L8

CROSSWALK OF OTHER SURVEYS

FEMALE VETERANS PG SURVEY		Natl. Hlth. Survey PG War Era Vets	VAREPRO	VAREPRO Self-Admin.	VAREPRO - Proxy	NM&IHS Child Study	NM&IHS Preg. Loss Study	NM&IHS Maternal Repro. Hlth Study	NHIS 1995 Supplement	Natl. Survey of Veterans	1992 Health Care Survey	Kang Survey of Female Veterans	Women's Health Survey	CDC PG Survey
PSYCH CONDITIONS	44						D4	G11	D1-D4	G1, G2A		18,19a		L8
OTHER BEHAVIORS	45	17, 18	103, 118-120, 126-151			A35-44 A50-55	B5, B6	G2, G5-7	A1-A7 E2a,E4	G1, G2A	44	18		B4,B7,B9,B10, C1,C3-F
MARITAL STATUS	46		617, 618			D1-D5	E3, E4	H4, H5		O4	10	12,73		A7
PG MARITAL STATUS	47		417											
PG CHILD/CHILDREN	48						D1							C2b1,C2d1
HP EXPOSURE	49	9a-1,9,10												
HP STRESS	50													
HP REPRODUCTIVE	51		483								44			
HP CANCER	52										44			
HP CHRONIC	53										44			
HP ACUTE	54										44			
HP PSYCH	55													
HP OTHER	56										44			
PRIM PROVIDER	57										35	29a	83	
PRIM SPECIALTY	58										56			
VA PROVIDER	59									X4	46		21,83	
CARE FREQUENCY	60		57								58		20	L9
LAST VISIT	61									H4	57		23MIH	
OB/GYN	62										57		40,MIH58	
LAST PAP	63										45		64MIH	
LAST MAMMOGRAM	64										45		64MIH	
HEALTH INDEX	65		53				D1	G1		E1	34, 53	20		B1

*Question is the same — different conflict.

CROSSWALK OF OTHER SURVEYS - #2

FEMALE VETERANS PG SURVEY		Desert Storm Reunion S.	CCEP Protocol ¹	Iowa	Viet Vets Risks for Fathering Babies w/Birth Defects												
					Father	Mother											
FULL NAME	1	X ¹	1			a. - P. 265											
MAIDEN	2																
OTHER NAME	3																
SSN	4	X ¹	1		E38												
DOB	5	X ¹	X		A1	B1a											
BIRTHPLACE	6																
RACE	7	X ¹	X		H1,H3	I1,I3											
HISPANIC ORIGIN	8		X														
EDUCATION	9	X ¹		100	H5,H6	I5,I6											
INCOME	10			101	H7	I7											
OCCUPATION	11	X ¹		97A-D	E2, E46	A3, G2											
BRANCH	12	X ¹	2		E6, E10	G6, G10											
ENLISTMENT DATE	13				E9	G9											
SERVICE STATUS	14		X														
UNIT	15		X														
DISCHARGE DATE	16				E11	G11											
DUTY TIME	17																
PG ASSIGNMENT	18																
DEPLOY STATUS	19																
DEPLOY DATE	20																
¹ Questions not numbered; X indicates inclusion.																	
² Questions compared using database extract.																	

CROSSWALK OF OTHER SURVEYS - #2

FEMALE VETERANS PG SURVEY		Desert Storm Reunion S.	CCEP Protocol ¹	Iowa	Viet Vets Risks for Fathering Babies w/Birth Defects												
					Father	Mother											
DEPLOY PG BASE	21																
PG ASSIGNMENT BASE	22		X														
MOSC	23		X														
PAY GRADE	24		X														
RANK	25	X ¹	X ¹														
PG TIME	26																
PG EXPOSURE	27	5,15,17,27, 30	124,126- 134,136, 143,146	32A-B (1-16)													
PG STRESS	28	5,9	147,149, 150,151														
MENSTRUAL AGE	29																
BIRTH CONTROL	30			34A(a)		D1-12											
GYN CONDITION	31		112,113A,B	11A-C (46,53),63													
EVER PREGNANT	32																
PREGNANCY AGE	33																
NO. PREGNANCY	34		14	62	1	1											
PRENATAL CARE	35																
PREGNANCY OUTCOME	36		14,110, 111A-B, 114,115A-B, 116,117A-B, 118,119A-B	65	5	5											
PREG COMPLICATIONS	37		120,121A-B	65	10,11	10,11											
CANCER	38			11A-C(36-39)	12-16,A10, G7	12-16,B11, H6-7											

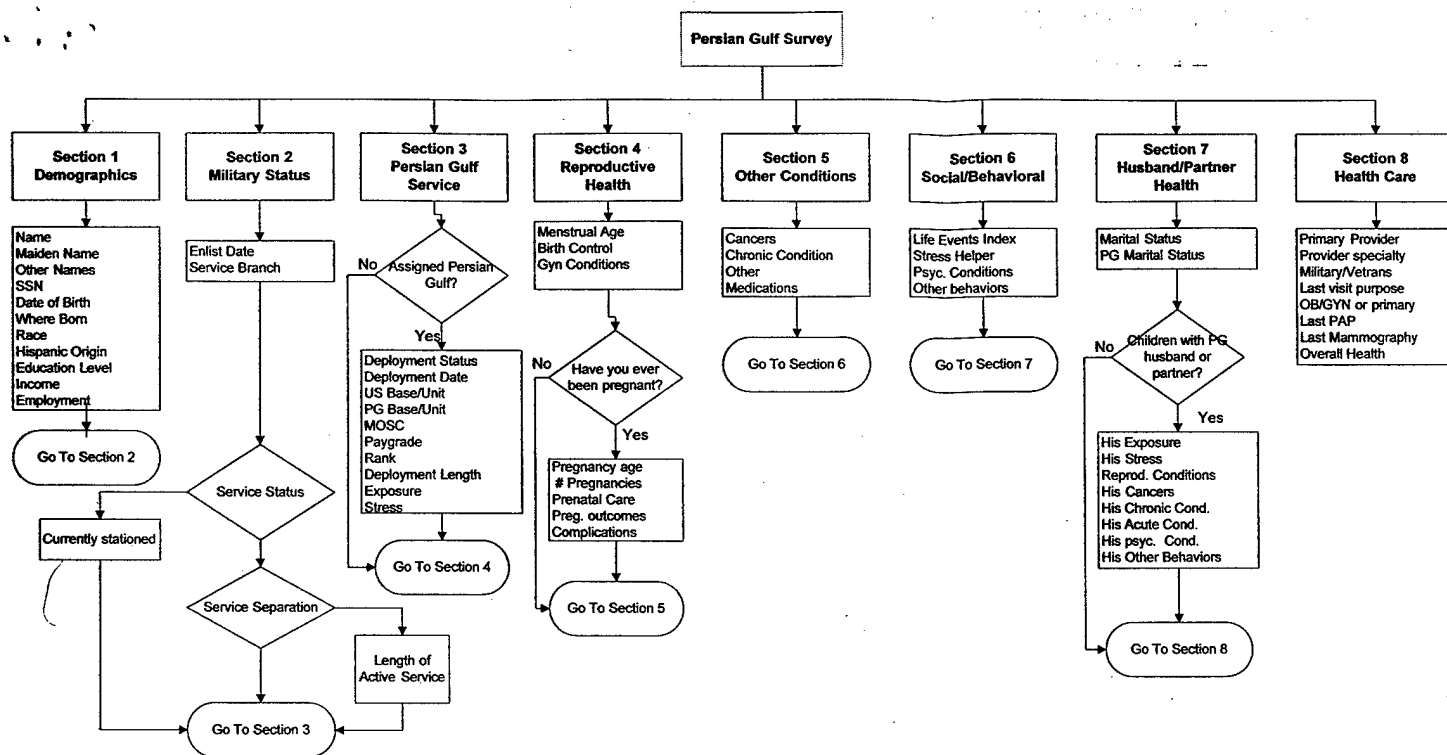
CROSSWALK OF OTHER SURVEYS - #2

FEMALE VETERANS PG SURVEY		Desert Storm Reunion S.	CCEP Protocol ^F	Iowa	Viet Vets Risks for Fathering Babies w/Birth Defects														
					Father	Mother													
CHRONIC CONDITIONS	39			11A,B,C (1-4, 7, 11, 17, 20-28, 30- 32, 48, 49-51)	A5, A18, G1, G16	B5, B20, B21, H1													
ACUTE CONDITIONS	40	16	15, 16, 34, 47, 58, 64, 76, 82, 94	11A-C6, 29, 34		D16-19, D21- 23, H15													
MEDICATIONS	41			12A-C(2), 34C(1-3)	A7-9, A12- 14, A21-23, C5-6, G3- 6, G9-12, G19- 21	B8-10, B13- 16, B23- 26, C5, D33- 34, D42-48, H3-5, H8-10, H17-19													
STRESS INDEX	42																		
STRESS HELP	43	Part II 19																	
PSYCH CONDITIONS	44	23, 24	15, 28, 70, 103	11A-C55- 57, 59F, 60															
OTHER BEHAVIORS	45	16, 17, 18	7A-B, 8, 9, 15	8-10, 12A- C(1, 4), 51C(2, 5, 6, 8, 11, 13, 18, 23, 25, 26, 33), 34A- B(4-8), 58	C14-23, G26- 41	D49-58, H20- 35													
MARITAL STATUS	46																		
PG MARITAL STATUS	47																		
PG CHILD/CHILDREN	48																		
HP EXPOSURE	49																		
HP STRESS	50																		
HP REPRODUCTIVE	51																		
HP CANCER	52																		
HP CHRONIC	53																		
HP ACUTE	54																		
HP PSYCH	55																		

CROSSWALK OF OTHER SURVEYS - #2

FEMALE VETERANS PG SURVEY		Desert Storm Reunion S.	CCEP Protocol ^F	Iowa	Viet Vets Risks for Fathering Babies w/Birth Defects														
					Father	Mother													
HP OTHER	56			86, 91A															
PRIM PROVIDER	57																		
PRIM SPECIALTY	58			91B, 92B															
VA PROVIDER	59																		
CARE FREQUENCY	60			36B, 85															
LAST VISIT	61																		
OB/GYN	62																		
LAST PAP	63																		
LAST MAMMOGRAM	64																		
HEALTH INDEX	65		4, 5	13-15															

CURRENT DRAFT SURVEY AND ASSOCIATED MATERIALS



(LOGO)
Persian Gulf Women's Health Linkage Study
Klemm Analysis Group, Inc.

Department of Defense Department of Health and Human Affairs Department of Veterans Affairs

Dear Persian Gulf-era Veteran,

Klemm Analysis Group, Inc., a nationally recognized survey research firm, is currently conducting a health study of 20,000 Persian Gulf-era women veterans sponsored by the Departments of Defense, Health and Human Services, and Veterans Affairs. Of 12 grants awarded recently to institutions to advance research on Persian Gulf veterans' illnesses, this is the only study that focuses on women's health conditions.

We have randomly selected 20,000 Persian Gulf-era women veterans who were and were not deployed to the Persian Gulf, and are asking them to fill out a confidential questionnaire which takes about 30 minutes to complete. You were one of the veterans selected to participate. The questionnaire asks each veteran questions about her military experience, Persian Gulf service, reproductive and other medical conditions, social/behavioral patterns, spouse/partner's health, and health care use. You will also be asked to authorize release of medical records to supplement the data provided by the questionnaire. Your participation will help us learn more about women veterans' health conditions, so that appropriate programs and services can be provided.

The package we have sent you contains the following:

- survey questionnaire to be mailed back in the postage-paid envelope;
- two copies of medical release forms for you and your child/children (one is to be mailed back; one is for your records);
- postage-paid return envelope; and
- a gift pen designed for Persian Gulf-era veterans that's yours to keep.

Your participation is voluntary; however, the success of the study depends on having everyone respond, so your help is very important. All information collected will be confidential. No identifying information will appear in any report of study results. The number assigned to your name is solely for tracking responses and will only be used by our research personnel.

If you have any questions, please call 1-800----- or (202)667-5244 and ask for the Manager of the study. We will be glad to answer your questions. Thank you.

Sincerely yours,

Rebecca Klemm, Ph.D.
President
Klemm Analysis Group, Inc.

INSTRUCTIONS FOR COMPLETING THE MEDICAL RELEASE FORMS

1. If you received medical care from more than one medical care provider, please copy the form and fill it out for your other provider(s) of care.
2. If your child/children has changed medical care providers, please provide us with the name of the medical care professional most familiar with your child/children's birth and infant care.

INSTRUCTIONS FOR SURVEY COMPLETION

We estimate that this survey will take about 20-30 minutes of your time. Thank you.

1. Read each question carefully and follow all instructions.
2. Use a pen to mark your answers or to fill in the requested information.
3. Write any additional information or comments in the "FOLLOW-UP INFORMATION" section on the last page of the survey.
4. Place the completed survey and the medical release forms in the postage paid envelope.
5. Send the envelope to: XXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXX
6. ☐ Check if you would like to see a copy of the study's results.

WE ACKNOWLEDGE THAT THE STUDY PARTICIPANT MAY BE UNABLE TO RESPOND TO OUR SURVEY. IF YOU WOULD FEEL COMFORTABLE RESPONDING FOR THE STUDY PARTICIPANT, PLEASE RETURN THIS SURVEY TO US ALONG WITH YOUR NAME. WE WILL SEND YOU A PROXY SURVEY TO COMPLETE FOR THE STUDY PARTICIPANT.

Your Name _____

Signature: _____

Address _____

Your Relationship to Participant: _____

City, State, Zip _____

Study Participant is unable to respond due to:

☐ Deceased	☐ Mentally Incapacitated
☐ Hospitalized	☐ Physically Incapacitated
☐ Out-of-Country	☐ Incarcerated
☐ Called to Duty	☐ Not Interested/Refused

PERSIAN GULF WOMEN'S HEALTH LINKAGE STUDY

SECTION ONE: DEMOGRAPHICS

1. What is your name? _____
First MI Last
2. What is your maiden name? _____
3. List any other legal name used _____
First Last

First Last
4. What is your Social Security Number? ____ - ____ - ____
5. What is your date of birth? (ie. 09/01/1965) ____ / ____ / ____
6. Where were you born? _____
City State Country
7. What is your race?
☐ White ☐ American Indian, Alaska Native
☐ Black ☐ Don't Know/ Not sure
☐ Asian, Pacific Islander ☐ Other (specify) _____
8. Are you of Spanish or Hispanic origin?
☐ Yes ☐ Don't Know/ Not Sure
☐ No
9. What is your highest level of education completed?
☐ Some High School ☐ High School Graduate/GED
☐ 1-3 years College or Technical school ☐ 4 year College Graduate
☐ Graduate/Professional Degree
10. What category best describes your total household income before taxes in 1996?
☐ Less than \$15,000 a year ☐ \$45,000 - < \$60,000
☐ \$15,000 - < \$30,000 ☐ \$60,000 a year or more
☐ \$30,000 - < \$45,000
11. Have you ever been employed outside of the military?
☐ Yes **Fill in the box below begin with your most recent non-military job**
☐ No **GO to QUESTION 12**

Employment Dates	Ave. Hrs. Worked Per Week	Type of Work	Occupation (ie. Teacher)
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

PERSIAN GULF WOMEN'S HEALTH LINKAGE STUDY

SECTION TWO: MILITARY SERVICE

12. What is/was your Service Branch? _____
13. What was your Enlistment date? (ie. 09/01/1980) ____/____/____
14. What is your Service Status?
☐ Active Duty
☐ Reserve
☐ Honorably Discharged **GO to QUESTION 16**
☐ Released (other than honorably discharged) **GO to QUESTION 16**
☐ Retired **GO to QUESTION 16**

15. Where are you currently stationed?

Base/Unit Name	City Location	State	Country
----------------	---------------	-------	---------

**** IF YOUR SERVICE STATUS IS ACTIVE DUTY OR RESERVE - GO to QUESTION 18**

16. What was your Service Separation or Discharge date? (ie. 09/01/1996) ____/____/____
17. What was your length of active service? _____ **OR** _____
Months Years
Write in the number of months OR years of service

SECTION THREE: PERSIAN GULF SERVICE

18. Were you assigned to the Persian Gulf region at any time between August 7, 1990 to June 13, 1991?
☐ Yes
☐ No **GO to QUESTION 29**
19. What was your Status at deployment?
☐ Active Duty
☐ Reservist
☐ Civilian (Dept. of Defense)
20. What was your date(s) of deployment to the Persian Gulf? (ie. 09/01/1990)
First date: ____/____/____ Second date: ____/____/____ Third date: ____/____/____
21. What Base or Unit were you deployed from?
- | Base/Unit Name | City Location | State | Country |
|----------------|---------------|-------|---------|
|----------------|---------------|-------|---------|
22. What was your unit assignment and primary location in the Persian Gulf?
- | Base/Unit Name | City Location or Region | State | Country |
|----------------|-------------------------|-------|---------|
|----------------|-------------------------|-------|---------|

PERSIAN GULF WOMEN'S HEALTH LINKAGE STUDY

SECTION THREE: PERSIAN GULF SERVICE

23. What was your Military Occupation Specialty Code (MOSC) at deployment? _____ Don't Know/
Not Sure
24. What was your paygrade at deployment?
- | Enlisted | Warrant Grade | Officer Grade | _____ Don't Know/Not Sure |
|----------|---------------|------------------|---------------------------|
| ____ E-1 | ____ W-1 | ____ O-1 | |
| ____ E-2 | ____ W-2 | ____ O-2 | |
| ____ E-3 | ____ W-3 | ____ O-3 | |
| ____ E-4 | ____ W-4 | ____ O-4 | |
| ____ E-5 | ____ W-5 | ____ O-5 | |
| ____ E-6 | | ____ O-6 | |
| ____ E-7 | | ____ O-7 to O-10 | |
| ____ E-8 | | | |
| ____ E-9 | | | |
25. What was your rank at deployment?
- | | |
|----------------------|-------------------------------|
| ____ Enlisted | ____ Non-commissioned Officer |
| ____ Warrant Officer | ____ Commissioned Officer |
| ____ Not applicable | |
26. What was your total length of deployment to the Persian Gulf? _____ OR _____
Weeks Months
27. During your assignment to the Persian Gulf, do you recall being exposed (ie. by inhaling, digesting or coming in contact) to any of the following?

	Your Exposure			How Long?		
	Yes	No	Don't Know	6 Days	6-30 Days	> 30 Days
Pesticides (personal or otherwise)						
Excessive Heat						
Decontaminating Agents						
Nerve Gas						
Mustard Gas or other blistering agents						
Smoke from Oil Well Fires						
Soil Toxins						
Diesel, Kerosene or other petrochemical fumes						
Skin contact with diesel, kerosene or petrochemicals						
Burning trash or feces						
CARC (Chemical Agent Resistant Compound paint)						
Other paints, solvents						
Depleted Uranium (DU)						
Microwaves or other Radiation						
Food contaminated by smoke, oil or other chemicals						
Ate local food not provided by military						
Water contaminated by chemicals, oil						

PERSIAN GULF WOMEN'S HEALTH LINKAGE STUDY

SECTION THREE: PERSIAN GULF SERVICE

28. During your assignment to the Persian Gulf, do you recall feeling bothered by any of the following?
Please circle the appropriate number, or check N/A for situations you did not experience.

	Not at all bothered	A little bothered	Moderately bothered	Quite a bit bothered	Extremely bothered	N/A	Don't Know
Direct Combat Duty	1	2	3	4	5		
Contact with POWs	1	2	3	4	5		
Witnessed deaths	1	2	3	4	5		
Chemical/Biological War Threat	1	2	3	4	5		
SCUD Missile Attack	1	2	3	4	5		
Rapid Deployment	1	2	3	4	5		
Length of Deployment	1	2	3	4	5		
Physical Duty Demands	1	2	3	4	5		
Wore chemical protective gear	1	2	3	4	5		
Crowded Living Conditions	1	2	3	4	5		

29. Since your return from the Persian Gulf, have you experienced any of the following problems or complaints sometimes reported by veterans or military personnel?

Only immediately following your return to the USA Since your return and continuing to present

	Yes	No	Yes	No
Had repeated, disturbing memories of your military experiences?				
Had repeated, disturbing dreams of your military experiences?				
Suddenly acted or felt as if your military experiences were happening again?				
Felt very upset when something happened that reminded you of your military experiences?				
Had trouble remembering important parts of your military experiences?				
Lost interest in activities you used to enjoy?				
Felt distant or cut off from other people?				
Felt emotionally numb or unable to have loving feelings for those close to you?				
Felt as if your future will somehow be cut short?				
Had trouble falling or staying asleep?				
Been feeling irritable or had angry outbursts?				
Had difficulty concentrating?				
Been overly alert, watchful or on guard?				
Been feeling jumpy or easily startled?				
Had physical reactions when something reminded you of your military experiences?				
Avoided thinking about your military experiences or avoided having feelings about them?				
Avoided activities or situations because they reminded you of your military experiences?				

PERSIAN GULF WOMEN'S HEALTH LINKAGE STUDY

SECTION FOUR: REPRODUCTIVE HEALTH

30. How old were you when you had your first menstrual period? _____ Years of Age

31. What method(s) of birth control have you used?
Answer for all methods listed and estimate the total amount of time a method was used.

METHOD	Useage?			How Long?	
	Yes	No	Don't Know	Months	Years
Birth Control Pills/Injection					
Diaphragm/Cervical Cap					
IUD					
Contraceptive Sponge					
Jelly/Foam/Suppositories					
Condom					
Withdrawal					
Rhythm/Calendar Method					
Tubal Ligation/Other Sterilization					
Abstinence					
No Method					

32. Have you ever been diagnosed by a health care professional for any of the following reproductive/gynecological conditions?

CONDITION	Yes	No	Don't Know	First Diagnosis		Treatment?	
				Month	Year	Yes	No
Sexually Trans. Disease (STD)							
Pelvic Inflammatory Disease (PID)							
Abnormal Pap Smear							
Ovarian Cysts							
Endometriosis							
Infertility (Ovulatory, Pelvic, Cervical Cause)							
Ectopic/Tubal Pregnancy							
Amenorrhea							
Abnormal Uterine Bleeding							

33. Have you ever been pregnant?
 ___ Yes ___ No **GO to QUESTION 38**

34. What was you age at your first pregnancy? ___ Age in Years

35. How many times have you been pregnant? ___ Number of Pregnancies

36. Have you obtained prenatal care at any time from a health care professional during pregnancy?
(This does not include childbirth classes).

___ Yes ___ No **32**

PERSIAN GULF WOMEN'S HEALTH LINKAGE STUDY

SECTION FOUR: REPRODUCTIVE HEALTH

37. What was the outcome of your pregnancy?

Outcome Choices:

<i>Therapeutic Abortion</i>	1
<i>Spontaneous Abortion</i>	2
<i>Stillbirth/Miscarriage</i>	3
<i>Preterm Live Birth (birth at less than 37 weeks)</i>	4
<i>Fullterm Live Birth (birth at 37 weeks or later)</i>	5
<i>Infant Death (within 12 months of birth)</i>	6

Write the pregnancy outcome number describing your pregnancy outcome. List your first pregnancy as the first entry and fill-in the birth-related information for all livebirths.

PREGNANCY	Preg1	Preg2	Preg3	Preg4	Preg5	Preg6	Preg7	Preg8
Outcome								
Outcome Date								
No. Weeks Pregnant								
Birthweight (Lbs, Ozs)								
<i>If answer is Yes, check the box</i>	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
C-Section								
Multiple Births								
Pregnancy Birth Complications								
Child Living								

38. What were the complications experienced during your pregnancy?

Check all conditions that apply to each pregnancy.

MATERNAL COMPLICATIONS	Preg1	Preg2	Preg3	Preg4	Preg5	Preg6	Preg7	Preg8
Infection during pregnancy								
Gestational Diabetes								
Pregnancy-induced Hypertension/Eclampsia/Toxemia								
Anemia								
Bleeding in 1st or 2nd Trimester								
Poor Weight Gain								
Placental Problems								
Intrauterine Growth Retardation (IUGR) (small fetal size for age)								
Premature Rupture of Membranes								
NEWBORN COMPLICATIONS								
Infection at Birth								
Low Birth Weight (< 5 lbs, 5 oz.)								
Preterm birth (less than 37 weeks)								
Respiratory Distress Syndrome								
Congenital Heart Defect								
Spina Bifida/other Central Nervous System Defect								
Chromosomal Defect								
Musculoskeletal Defect								

PERSIAN GULF WOMEN'S HEALTH LINKAGE STUDY

SECTION FIVE: OTHER MEDICAL/CONDITIONS and ILLNESSES

39. How tall are you without your shoes on?

_____ Feet _____ Inches _____ Don't Know

40. What is/was your weight in pounds?

Prior to the Persian Gulf War _____ Lbs. _____ Don't Know

During the Persian Gulf War _____ Lbs. _____ Don't Know

Current weight _____ Lbs. _____ Don't Know

41. Has a physician ever treated you for any of the following types of cancer?

CANCER	Diagnosis Date		Treatment Status		Family History		
	Yes	No	mm/yy	In-treat	Out-treat	Yes	No
Breast							
Uterine-cervical							
Uterine-other							
Ovarian							
Endometrial							
Colorectal							
Lung							
Pancreatic							
Lymphoma							
Leukemia							
Skin							

42. Has a physician ever treated you for any of the following chronic medical conditions or illnesses?

Date 1st Treated Treatment Status Family History							
CONDITION/ILLNESS	Yes	No	mm/yy	In-treat	Out-treat	Yes	No
Heart Disease							
Hypertension							
Diabetes							
Thyroid Disease							
Musculoskeletal Disorders							
Gastrointestinal Disorders							
Pancreatic/Liver Disease							
Neurological Disorders							
Asthma							
Migraine Headaches							
Chronic Fatigue							
Allergies							
Immunity Disorders							
Chronic Skin Conditions							
Fibrocystic Breast Disease (Non-cancerous)							
Birth Defect, please specify							

PERSIAN GULF WOMEN'S HEALTH LINKAGE STUDY

SECTION FIVE: OTHER MEDICAL/CONDITIONS and ILLNESSES

43. Has a physician ever treated you for any of the following acute medical conditions or illnesses?

CONDITION/ILLNESS	Ever Treated?		Since PG WAR?		Date Last Treated mm/yy
	Yes	No	Yes	No	
Unexplained fever					
Skin Rash					
Urinary Tract/Kidney Infection					
Nausea/Vomiting (Non-pregnancy)					
Insomnia					
Recurrent Headaches					
Stomach Cramps/Diarrhea					
Muscle Ache/Pain					
Blisters or Cold Sores					
Unusual Fatigue					
Swollen Lymph Glands/Recurrent sore throat					
Numbness or tingling					
Shortness of Breath					
Sensitivity to foods or chemicals					
Parasitic Infection					

44. Have you ever taken any of the following medications?
Answer for all medications listed and estimate the length of time taken.

MEDICATION	Usage?			How Long?		During Pregnancy?			
	Yes	No	Don't Know	Months	Years	Yes	No	Never Preg	Don't Know
Antibiotics									
Analgesics including aspirin, acetaminophen, Ibuprofen									
Oral Chemotherapy									
Hormones (eg. estrogen, fertility drugs)									
Corticosteroids and other anti-inflammatory drugs									
Cardiovascular agents and anti-hypertensives									
Insulin									
Antidepressants									
Anticonvulsants									
Tranquilizers									
Antacids/Anti-spasmodics									

PERSIAN GULF WOMEN'S HEALTH LINKAGE STUDY

SECTION SIX: SOCIAL/BEHAVIORAL HEALTH

45. Have you ever experienced any of the following life events?

LIFE EVENT	Prior to Aug. 1990		During PG WAR?		After June 1991?	
	Yes	No	Yes	No	Yes	No
Serious Accident, Injury or Illness (non-combat)						
Spouse or Partner Serious Accident, Injury or Illness						
Child/ren Serious Accident, Injury or Illness						
Parent/Close friend Serious Accident, Injury or Illness						
Major financial problem						
Fired, demoted or laid-off from job						
Divorce or Separation						
Emotional or physical abuse as a child						
Natural Disaster -Fire,Earthquake, Flood						
Longterm hospitalization						
Threat of or subject to violent act (Non-combat)						
Arrested or incarcerated						

46. Who do you usually seek help or support from when you experience stress or are confronted with problem situation?

SUPPORT SYSTEM	Yes	No
Husband or partner		
Mother/Father/Sibling		
Other Relative		
Close Friend		
Organized Support Group (military or non-military)		
Pastor/Church Group		
Health Care Professional		
No Support System		

47. Has a health care professional ever treated you for any of the following psychological or behavioral conditions?

CONDITION	Prior to Aug. 1990?		During PG WAR?		After June 1991?	
	Yes	No	Yes	No	Yes	No
Anxiety						
Depression						
Attempted Suicide						
Marital Problems						
Substance Abuse						
Alcoholism						
Weight Loss						
Memory Loss						
Post Traumatic Stress Disorder						

PERSIAN GULF WOMEN'S HEALTH LINKAGE STUDY

SECTION SIX: SOCIAL/BEHAVIORAL HEALTH

48. Have you ever consumed or engaged in any of the following behaviors?

BEHAVIOR	Ever Do?		Amount (eg. 1 pk)	Frequency (eq. Daily)	How Long (eg. Years)	Currently Do?	
	Yes	No				Yes	No
Drink Alcohol							
Smoke Cigarettes							
Use Illegal Drugs							
Abuse Prescription Drugs							
Drink Caffeinated Beverages							
Exercise Regularly							

SECTION SEVEN: HUSBAND or PARTNER HEALTH

49. What is your marital status?

- ☐ Married
- ☐ Living with a partner
- ☐ Separated
- ☐ Divorced
- ☐ Single, never married
- ☐ Widowed

50. What was your marital status during the Persian Gulf War, August 7, 1990 to June 13, 1991?

- ☐ Married
- ☐ Living with a partner
- ☐ Separated
- ☐ Divorced
- ☐ Single, never married
- ☐ Widowed

51. Do you have a child or children to a husband or partner that was assigned to the Persian Gulf at any time between August 7, 1990 to June 13, 1991?

- ☐ Yes
- ☐ No
- ☐ No Children

GO to QUESTION 57

GO to QUESTION 57

PERSIAN GULF WOMEN'S HEALTH LINKAGE STUDY

SECTION SEVEN: HUSBAND or PARTNER HEALTH

52. Was your husband or partner exposed (by inhaling, ingesting or coming in contact) to any of the following during his assignment to the Persian Gulf?

	Husband/Partner Exposure			How Long?		
	Yes	No	Don't Know	6 Days	6-30 Days	> 30 Days
Pesticides (personal or otherwise)						
Excessive Heat						
Decontaminating Agents						
Nerve Gas						
Mustard Gas or other blistering agents						
Smoke from Oil Well Fires						
Soil Toxins						
Diesel, Kerosene or other petrochemical fumes						
Skin contact with diesel, kerosene or petrochemicals						
Burning trash or feces						
CARC (Chemical Agent Resistant Compound paint)						
Other paints, solvents						
Depleted Uranium (DU)						
Microwaves or other Radiation						
Food contaminated by smoke, oil or other chemicals						
Ate local food not provided by military						
Water contaminated by chemicals, oil						

53. During your husband or partner's assignment to the Persian Gulf, do you recall if he was bothered by any of the following? *Please circle the appropriate number, or check N/A for situations he did not experience.*

	Not at all bothered	A little bothered	Moderately bothered	Quite a bit bothered	Extremely bothered	N/A	Don't Know
Direct Combat Duty	1	2	3	4	5		
Contact with POWs	1	2	3	4	5		
Witnessed deaths	1	2	3	4	5		
Chemical/Biological War Threat	1	2	3	4	5		
SCUD Missile Attack	1	2	3	4	5		
Rapid Deployment	1	2	3	4	5		
Length of Deployment	1	2	3	4	5		
Physical Duty Demands	1	2	3	4	5		
Wore chemical protective gear	1	2	3	4	5		
Crowded Living Conditions	1	2	3	4	5		

PERSIAN GULF WOMEN'S HEALTH LINKAGE STUDY

SECTION SEVEN: HUSBAND or PARTNER HEALTH

54. Has your husband or partner ever been diagnosed by a health care professional for any of the following reproductive conditions?

CONDITION	First Diagnosis			Treatment?	
	Yes	No	Don't Know	mm/yy	No
Sexually Trans. Disease					
Anatomic Defects (ie. obstruction)					
Infertility (eg. Sperm Motility)					
Endocrine/Hormone Disorder					
Sexual Dysfunction					

55. Has a physician ever treated your husband or partner for any of the following types of cancer?

CANCER	Diagnosis Date		Treatment Status		FamilyHistory	
	Yes	No	mm/yy	In-treat	Out-treat	No
Prostate						
Testicular						
Colorectal						
Lung						
Pancreatic						
Lymphoma						
Leukemia						
Skin						

56. Has a physician ever treated your husband or partner for any of the following chronic medical conditions or illnesses?

CONDITION/ILLNESS	Date 1st Treated		Treatment Status		FamilyHistory	
	Yes	No	mm/yy	In-treat	Out-treat	No
Heart Disease						
Hypertension						
Diabetes						
Thyroid Disease						
Musculoskeletal Disorders						
Gastrointestinal Disorders						
Pancreatic/Liver Disease						
Neurological Disorders						
Asthma						
Migraine Headaches						
Chronic Fatigue						
Allergies						
Immunity Disorders						
Chronic Skin Conditions						
Birth Defect, please specify						

PERSIAN GULF WOMEN'S HEALTH LINKAGE STUDY

SECTION SEVEN: HUSBAND or PARTNER HEALTH

57. Has a physician ever treated your husband or partner for any of the following acute medical conditions or illnesses?

Ever Treated? Since PG WAR? Date Last Treated					
CONDITION/ILLNESS	Yes	No	Yes	No	mm/yy
Unexplained fever					
Skin Rash					
Urinary Tract/Kidney Infection					
Nausea/Vomiting					
Insomnia					
Recurrent Headaches					
Stomach Cramps/Diarrhea					
Muscle Ache/Pain					
Blisters or Cold Sores					
Unusual Fatigue					
Swollen Lymph Glands/Recurrent sore throat					
Numbness or tingling					
Shortness of Breath					
Sensitivity to foods or chemicals					
Parasitic Infection					

58. Has a health care professional ever treated your husband or partner for any of the following psychological or behavioral conditions?

CONDITION	Prior to Aug. 1990?			During PG WAR?			After June 1991?		
	Yes	No	Don't Know	Yes	No	Don't Know	Yes	No	Don't Know
Anxiety									
Depression									
Attempted Suicide									
Marital Problems									
Substance Abuse									
Alcoholism									
Weight Loss									
Memory Loss									
Post Traumatic Stress Disorder									

59. Has your husband or spouse ever consumed or engaged in any of the following behaviors?

BEHAVIOR	Ever Do?			Currently?				
	Yes	No	Don't Know	Amount (ie. 1 pk)	Frequency (ie. daily)	How Long (ie. years)	Yes	No
Exercise Regularly								
Drink Caffeinated Beverages								
Smoke Cigarettes								
Drink Alcohol								
Abuse Prescription Drugs								
Use Illegal Drugs								

PERSIAN GULF WOMEN'S HEALTH LINKAGE STUDY

SECTION EIGHT: HEALTH CARE UTILIZATION and ATTITUDES

60. Do you have a primary health care provider?

☐ Yes
☐ No

61. What is your primary provider's medical specialty? _____ [] Don't Know

62. Is your primary provider of health care based at a military base or other veteran's health care facility?

☐ Yes
☐ No

63. How often do you seek health care from your primary health care provider?

☐ Weekly ☐ Twice a year
☐ Monthly ☐ Once a Year

64. What was the purpose of your last visit to your primary health care provider?

☐ Scheduled Appt. for illness ☐ Allergy Shots or Immunizations
☐ Routine care or checkup ☐ Other _____

65. Is your Obstetric/Gynecology health care provider the same as your primary care provider?

☐ Yes
☐ No

66. What was the month and year date of your last pap smear? ____ / ____

If you do not know the date or have never had a pap smear, check the appropriate box.

[] Don't Know
[] Never had one

67. What was the month and year date of your last mammography? ____ / ____

If you do not know the date or have never had a mammography, check the appropriate box

[] Don't Know
[] Never had one

68. How do you perceive your overall health?

Time Period	Always Healthy	Usually Healthy	More Ill, than Healthy	Always Ill
Ten Years Ago				
Five Years Ago				
Last Year				
Current				
Five Years from now				
Ten Years from now				

PERSIAN GULF WOMEN'S HEALTH LINKAGE STUDY

SECTION NINE: FOLLOW-UP INFORMATION

We may need to recontact you in the future to obtain additional health-related information. We would like you to provide us with a name, address and telephone number of someone not currently living in your household who would know where to reach you should we have trouble locating you.

CONTACT PERSON: First _____ MI ____ Last _____

RELATIONSHIP: _____

ADDRESS: Street _____

City _____ State _____ Zip _____

TELEPHONE: Area Code (____) _____

Is there anything else you would like to tell us about yourself, your health or your experience during the Persian Gulf War?

Please return this survey and the authorization to release medical records in the postage-paid envelope to:

XXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXX

THANK YOU FOR YOUR COOPERATION.
WE WELCOME YOUR COMMENTS OR SUGGESTIONS ABOUT THIS SURVEY.

A. What is your name? First _____ MI _____ Last _____

☐	Husband or Partner	☐	Grandfather	☐	Nephew
☐	Mother	☐	Grandmother	☐	Other Relative
☐	Father	☐	Father-in-law	☐	Roommate or Friend
☐	Sister	☐	Mother-in-law	☐	Legal/Financial Advisor
☐	Brother	☐	Aunt	☐	Guardian
☐	Daughter	☐	Uncle	☐	Non-Relative
☐	Son	☐	Niece		

☐]	Deceased	☐]	Mentally incapacitated
☐]	Hospitalized	☐]	Physically incapacitated
☐]	Out-of-Country	☐]	Incarcerated
☐]	Called to Duty	☐]	Not interested/Refuses

If study participant is deceased, please provide us with the date of death / /
Mo Day Yr

☐ Yes **PLEASE TURN TO THE NEXT PAGE**
☐ No
☐ Don't Know/Unsure

NAME _____

ADDRESS _____

CITY/STATE _____ ZIP _____

**PERSIAN GULF WOMEN'S HEALTH LINKAGE STUDY
PROXY QUESTIONNAIRE****SECTION ONE: DEMOGRAPHICS**

1. Fill in the study participant's name. First _____ MI ____ Last _____
2. What is her maiden name? Last _____
3. What is her Social Security Number? ____ - ____ - ____
4. What is her date of birth? (ie. 09/01/1965) ____ / ____ / ____
5. Where was she born? City _____ State ____ Country _____
6. What is her race? ____ White ____ Other (*specify*)
____ Black
____ American Indian, Alaska Native ____ Don't Know
____ Asian, Pacific Islander
7. What is her highest level of education completed?
____ Some High School
____ High School Graduate/GED
____ 1 -3 years College or Technical school
____ 4 year College Graduate
____ Graduate/Professional Degree

SECTION TWO: PERSIAN GULF SERVICE

8. What is/was her Service Branch? _____
9. Was she assigned to the Persian Gulf region at any time between August 7, 1990 to June 13, 1991?
____ Yes ____ No **GO to QUESTION 13**
10. What was her Status at deployment?
____ Active Duty ____ Reservist ____ Civilian (Dept. of Defense) ____ Don't Know
11. What was her Unit assignment and primary location in the Persian Gulf?

Base/Unit Name	City Location or Region	State	Country
____ Don't Know			
12. What was her rank at deployment?
____ Enlisted ____ Non-commissioned Officer ____ Warrant Officer ____ Commissioned Officer
____ Not applicable ____ Don't Know

**PERSIAN GULF WOMEN'S HEALTH LINKAGE STUDY
PROXY QUESTIONNAIRE**

SECTION THREE: HEALTH OUTCOMES

13. Has she ever been diagnosed by a health care professional for any of the following reproductive/gynecological conditions?

When Diagnosed?

CONDITION	Yes	No	Don't Know	Month	Year	Don't Know
Sexually Trans. Disease (STD)						
Pelvic Inflamm. Disease (PID)						
Abnormal Pap Smear						
Ovarian Cysts						
Endometriosis						
Infertility (Ovulatory, Pelvic, Cervical Cause)						
Ectopic/Tubal Pregnancy						
Amenorrhea						
Abnormal Uterine Bleeding						

14. What was the outcome of her pregnancy?

<i>Outcome Choices:</i>	<i>Therapeutic Abortion</i>	1
	<i>Spontaneous Abortion</i>	2
	<i>Stillbirth/Miscarriage</i>	3
	<i>Preterm Live Birth (birth at less than 37 weeks)</i>	4
	<i>Fullterm Live Birth (birth at 37 weeks or later)</i>	5
	<i>Infant Death (within 12 months of birth)</i>	6

Write in the pregnancy outcome number describing pregnancy outcome. List the first pregnancy as the first entry and fill-in the birth-related information for all livebirths.

PREGNANCY	Preg1	Preg2	Preg3	Preg4	Preg5	Preg6	Preg7	Preg8
Prenatal Care (Yes/No)								
Outcome								
Outcome Date mo/day/yr								
No. Weeks Pregnant								
Birthweight (Lbs, Ozs)								
C-Section (Yes/No)								
Multiple Births (Yes/No)								
Pregnancy or Birth Complications (Yes/No)								
Child Living ? (Yes/No)								

**PERSIAN GULF WOMEN'S HEALTH LINKAGE STUDY
PROXY QUESTIONNAIRE**

SECTION THREE: HEALTH OUTCOMES

15. What were the complications experienced during her pregnancy?
Check all conditions that apply to each pregnancy.

**IF PREGNANCY OR BIRTH COMPLICATIONS DID NOT EXIST,
GO TO QUESTION 16.**

MATERNAL COMPLICATIONS	Preg1	Preg2	Preg3	Preg4	Preg5	Preg6	Preg7	Preg8
Infection during pregnancy								
Gestational Diabetes								
Pregnancy-induced Hypertension/ Eclampsia/Toxemia								
Anemia								
Bleeding in 1st or 2nd Trimester								
Poor Weight Gain								
Placental Problems								
Intrauterine Growth Retardation (IUGR) (small fetal size for age)								
Premature Rupture of Membranes								
NEWBORN COMPLICATIONS								
Infection at Birth								
Low Birth Weight (< 5 lbs, 5 oz.)								
Preterm Birth (less than 37 weeks)								
Respiratory Distress Syndrome								
Congenital Heart Defect								
Spina Bifida/ other Nervous System Defect								
Chromosomal Defect								
Musculoskeletal Defect								
Pregnancy or Birth Complications Unknown								

PERSIAN GULF WOMEN'S HEALTH LINKAGE STUDY
PROXY QUESTIONNAIRE

SECTION THREE: HEALTH OUTCOMES

16. Has a physician ever treated her for any of the following types of cancer?

CANCER	Diagnosis Date			Family History?		
	Yes	No	Don't Know	Mo.	Year	Don't Know
Breast						
Uterine-Cervical						
Uterine-Other						
Ovarian						
Endometrial						
Colorectal						
Lung						
Pancreatic						
Lymphoma						
Leukemia						
Skin						

17. Has a physician ever treated her for any of the following chronic medical conditions or illnesses?

CONDITION/ ILLNESS	Date first treated			Family History?		
	Yes	No	Don't Know	Mo.	Year	Don't Know
Heart Disease						
Hypertension						
Diabetes						
Thyroid Disease						
Musculoskeletal Disorders						
Gastrointestinal Disorders						
Pancreatic/Liver Disease						
Neurological Disorders						
Asthma						
Migraine Headaches						
Chronic Fatigue						
Allergies						
Immunity Disorders						
Chronic Skin Conditions						
Fibrocystic Breast Disease (Non-cancerous)						
Birth Defect, <i>please specify</i>						

PERSIAN GULF WOMEN'S HEALTH LINKAGE STUDY **PROXY QUESTIONNAIRE**

SECTION THREE: HEALTH OUTCOMES

18. Has a physician ever treated her for any of the following acute medical conditions or illnesses?

Since Persian Gulf War?

CONDITION/ILLNESS	Yes	No	Don't Know	Yes	No	Don't Know
Unexplained Fever						
Skin Rash						
Urinary Tract/Kidney Infection						
Nausea/Vomiting (Non-pregnancy)						
Insomnia						
Recurrent Headaches						
Stomach Cramps/Diarrhea						
Muscle Ache/Pain						
Blisters or Cold Sores						
Unusual Fatigue						
Swollen Lymph Glands /Recurrent Sore Throat						
Numbness or tingling						
Shortness of Breath						
Sensitivity to foods or chemicals						
Parasitic Infection						

19. Has a health care professional ever treated her for any of the following psychological or behavioral conditions?

Prior to August 1990?

During Persian Gulf War? After June 1991?

BEHAVIOR	Yes	No	Don't Know	Yes	No	Don't Know	Yes	No	Don't Know
Anxiety									
Depression									
Attempted Suicide									
Marital Problems									
Substance Abuse									
Alcoholism									
Weight Loss									
Memory Loss									
Post Traumatic Stress Disorder									

SECTION FOUR: HUSBAND or PARTNER HEALTH

20. Does she have a child or children to a husband or partner that was assigned to the Persian Gulf at any time between August 7, 1990 to June 13, 1991?

___ Yes ___ No ___ No Children

THANK YOU FOR YOUR HELP

(LOGO) Persian Gulf Women's Health Linkage Study
Klemm Analysis Group, Inc.

Department of Defense

Department of Health and Human Services

Department of Veterans Affairs

(Date)

Dear Persian Gulf-era Veteran,

About a month ago you should have received a **Persian Gulf Women's Health Linkage Study** package containing a questionnaire, medical records release forms, a postage-paid return envelope, and a gift pen. Unfortunately, we have not received your response, and are therefore sending you another complete package.

The **Persian Gulf Women's Health Linkage Study** is a survey of 20,000 Persian Gulf-era women who were and were not deployed to the Persian Gulf theater. It aims to determine the relationship between Persian Gulf service and women veterans' health conditions, so that appropriate programs and services can be provided. It is being conducted by Klemm Analysis Group, Inc., and is sponsored by the Departments of Defense, Health and Human Services, and Veterans Affairs.

Your participation is voluntary; however, the success of the study depends on having everyone selected respond, so your help is vitally important. Let us assure you that all the information collected will be kept completely confidential. No identifying information will appear in any report of the study results.

Please take the time to fill out the questionnaire and medical records release forms, and return them in the postage-paid return envelope. We truly appreciate your participation in making this study a success.

If you have any questions, please call us at 1-800----- or (202)667-5244 between 9 am and 5 pm EST and ask for the Manager of the Persian Gulf Women's Health Linkage Study. We will be glad to answer your questions.

Thank you.

Sincerely yours,

Rebecca Klemm, Ph.D.
President
Klemm Analysis Group, Inc.

(LOGO) Persian Gulf Women's Health Linkage Study
Klemm Analysis Group, Inc.

Department of Defense

Department of Health and Human Services

Department of Veterans Affairs

Medical Records Release Form
(study participant)

(Date)

Dear Medical Records Administrator:

I am participating in a survey entitled **Persian Gulf Women's Health Linkage Study** to gather information on the health of Persian Gulf-era women veterans. As part of the survey, medical providers who have delivered health-care services to me are being asked to supplement the information I have already provided to this study.

By this statement or a photocopy of it, I hereby authorize and request you to furnish Klemm Analysis Group, Inc. with medical information in your records concerning the services I received between 1990-1995. I understand that the information will be used only for statistical purposes, and no information that identifies me, the hospitals, doctors, or other medical providers will ever be released.
--

Thank you very much.

Sincerely,

SSN: _____

Date of Birth: _____

print name

Signature: _____

Date: _____

Name of Provider: _____ Provider's tel no.: _____

Provider's office address: _____

(LOGO) Persian Gulf Women's Health Linkage Study
Klemm Analysis Group, Inc.

Department of Defense

Department of Health and Human Services

Department of Veterans Affairs

Medical Records Release Form
(study participant's child/children)

(Date)

Dear Medical Records Administrator:

I am participating in a survey entitled **Persian Gulf Women's Health Linkage Study** to gather information on the health of Persian Gulf-era women veterans. As part of the survey, medical providers who have delivered health-care services to my child/children are being asked to supplement the information I have already provided to this study.

By this statement or a photocopy of it, I hereby authorize and request you to furnish Klemm Analysis Group, Inc. with medical information in your records concerning the services received by my child/children listed below between 1990-1995. I understand that the information will be used only for statistical purposes, and no information that identifies me, my child/children, the hospitals, doctors, or other medical providers will ever be released.

Thank you very much.

Sincerely,

Signature: _____ Date: _____

*Please fill out the tables below:

Name of children	SSN	Date of birth
1		
2		
3		
4		

Provider's name	Provider's tel no.	Provider's office address
child 1:		
child 2:		
child 3:		
child 4:		

(LOGO)

Persian Gulf Women's Health Linkage Study

Klemm Analysis Group, Inc.

1785 Massachusetts Avenue NW, 5th Floor

Washington, DC 20036

Name of participant

Street address

City, state, zip

Department of Defense

Department of Health and Human Services

Department of Veterans Affairs

* This is the back page of the reminder postcard. It is the same for both reminder cards sent to non-responders.

Date

Dear Persian Gulf-era Veteran,

About a month ago we sent you a **Persian Gulf Women's Health Linkage Study** package containing a survey questionnaire, medical records release forms, a postage-paid return envelope, and a gift pen. We also sent you a reminder postcard two weeks ago. Unfortunately, we have not received your response.

This study seeks to determine women's health issues related to Persian Gulf deployment by looking at problems experienced by women who were deployed vs. women who were not sent to the Persian Gulf. The success of the study depends on the participation of all women veterans who were selected for the study.

We would like to reiterate that all information collected will be kept confidential. No identifying information will appear in any report of study results. We would appreciate it if you could fill out the questionnaire and medical release forms and send them back in the postage-paid return en. If you need another package, or have any questions about the study, please call us at 1-800----- or (202)6675244 and we will gladly send you one and answer your questions immediately.

Thank you for your participation in making this study on Persian Gulf women veterans' health conditions a success.

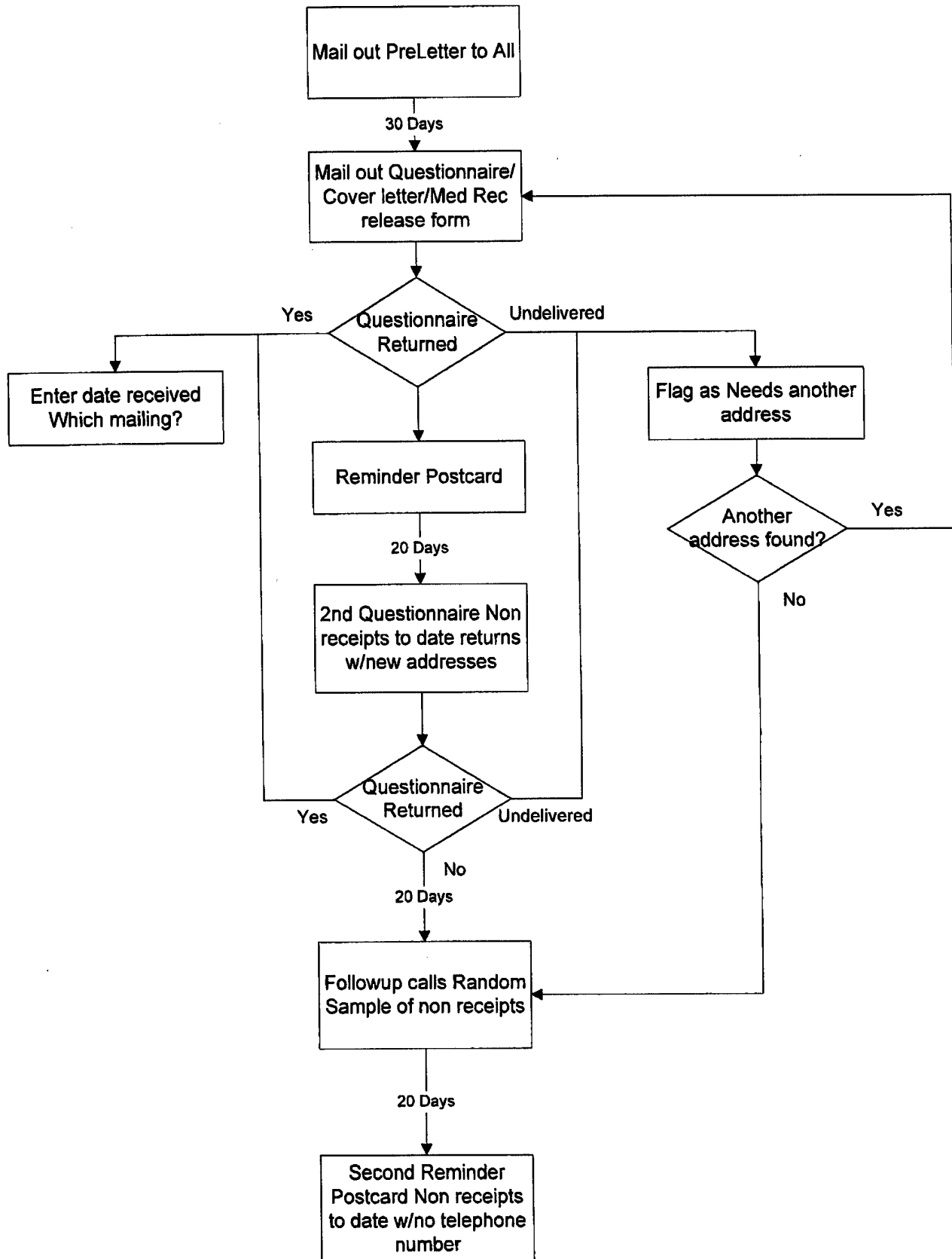
Sincerely,

Rebecca Klemm, Ph.D., President
Klemm Analysis Group, Inc.

* This is the letter page of the second reminder postcard.

SURVEY PROCEDURES AND DATABASE DESIGN

Mail Survey with Telephone Follow Up



PRODUCTION REPORTS ENVISIONED FROM MAILING EVENTS

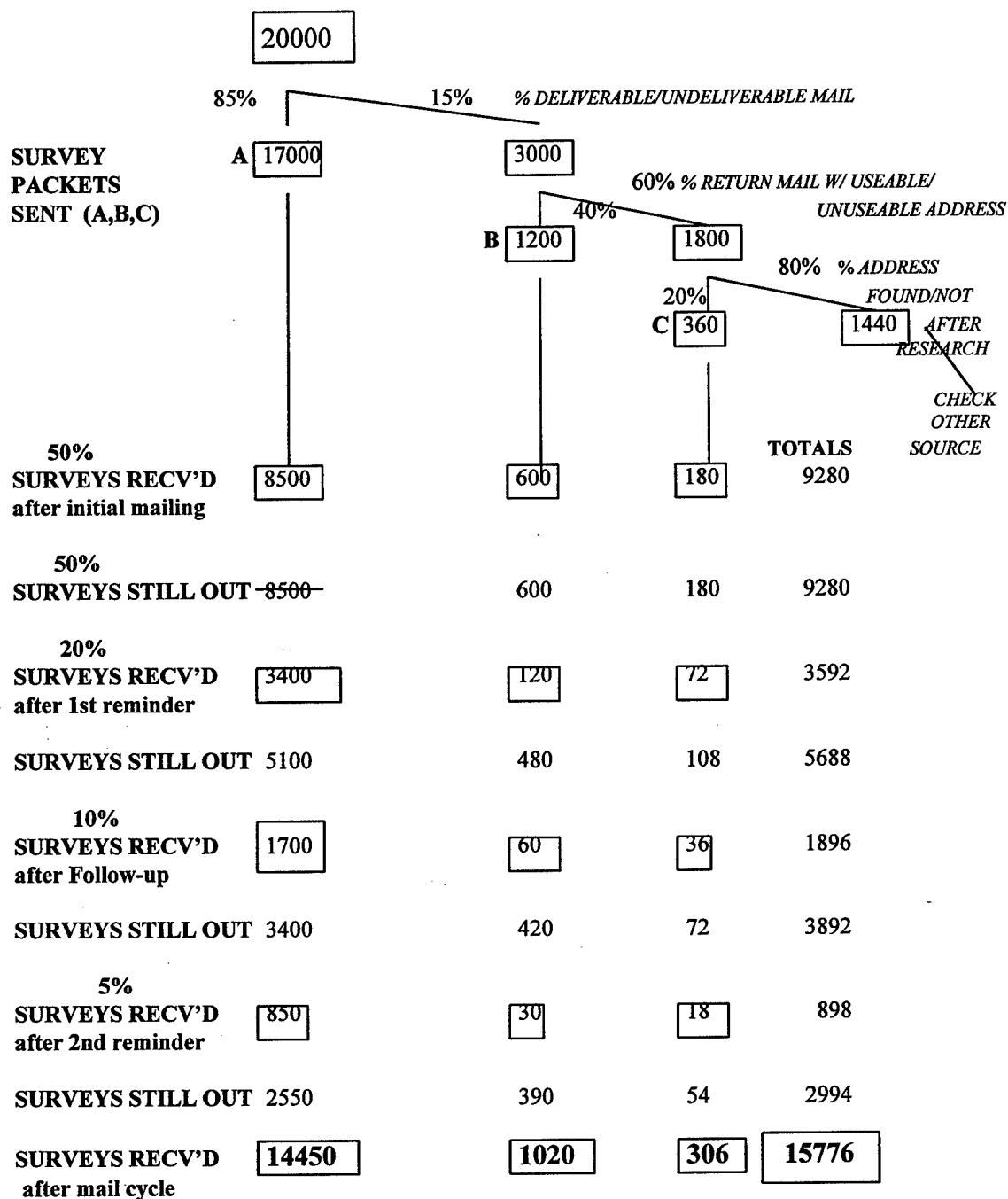
- A. Mail Status Report - to determine the "where-in-the-mail" process for each female vet
- B. Non-Receipt Follow-Up List- to document vets requiring phone or secondary mail followup and summary receipt stats
- C. Secondary Source Follow-Up List - to document vets that have been unreachable by mail or phone for secondary source follow-up
- D. Questionnaire Receipt Report- to report summary statistics for questionnaires received in house by select strata (military branch, military status, age ?)
- E. Participant Outcome Report- to document post-mailing status of the selected female veteran sample.

PRODUCTION REPORTS ENVISIONED FROM EDITING EVENTS

- A. Edit Status Report - to determine the "where-in-process" for each questionnaire
- B. Failed Edit Report- to segment by edit task the questionnaires requiring resolution prior to final data entry.
- C. Data Entry Summary Report- to report summary statistics for the questionnaires received in-house and data entered.

ESTIMATED SURVEY RESPONSE¹

ADVANCE LETTER SENT



¹ Estimated survey response total includes mailed surveys. Surveys downloaded from the WEBSITE or from call-ins are not included in the total.

PERSIAN GULF SURVEY COMMUNICATION MATERIALS

<u>MAILING</u>	<u>COMPONENTS</u>	<u>ITEM NO.</u>	<u>EST. VOLUME²</u>	<u>EST.COST</u>
ADVANCE	Advance Letter	A	21000	\$630.
	Window Env	B	21000	
SURVEY PKT.	Cover Letter	C	21000	\$1378.
	8 pg. Survey	D	21000	\$6225.
	Postage Pd. Env.	E	21000	\$1891.
	Survey Pkt. Env	F	21000	\$2031.
FIRST REMINDER	Postcard	G	10000	\$510.
SURVEY FOLLOWUP ³	Followup Letter	H	6500	\$308.
	8 pg. Survey	D	5000	see "D" above
	Postage Pd. Env.	E	5000	see "E" above
	Survey Pkt. Env	F	6500	see "F" above
SECOND REMINDER	Postcard	I	4200	\$316.
PROXY SURVEY	4 pg. Survey	J	500	\$314.
	Postage Pd. Env.	E	500	See "E" above
	Survey Pkt. Env	F	500	See "F" above
CALL-INS ⁴	Cover Letter	C	5000	See "C" above
	8 pg. Survey	D	5000	See "D" above
	Postage Pd. Env.	E	5000	See "E" above
	Survey Pkt. Env	F	5000	See "F" above

² Communication material volumes based on the following assumptions:

- 15% Return on initial mailing due to undeliverable mail or changed address
- 40% Returned mail with forwarding or new useable address
- 20% Returned mail with no new address available from Post Office, but found through other source
- 85% Overall survey return rate 85% (50% initial, 20% following first postcard, 10% following mailing of second questionnaire, 5% following second reminder postcard or phone call)
- 25% Call-ins as volunteer participants or selected participants that misplaced surveys
- 5% Communication material "cushion" for extraneous use

³ Materials will be sent to non-receipts and returns with new addresses. Non-receipts will be mailed a new survey package. Returns with corrected addresses will be resent their original materials.

⁴ Call-in estimated configured prior to development of WEBSITE, see alternative % next page

<u>MAILING</u>	<u>COMPONENTS</u>	<u>ITEM NO.</u>	<u>EST. VOL⁵</u>	<u>EST. COST</u>
MED REC REQUEST	Participant Cover Letter	K	6000	Not est.
	Mom Med Rec Release	L	6000	\$1763.
	Child Med Rec Release	M	6000	Include. w/L
	Postage Pd. Envelope II	N	6000	\$560.
	Med. Record Admin. Ltr.	O	6000	Not est.
	Postage Pd. Envelope II	N	6000	See "N"
	Std. Window Envelope	B	6000	See "B"

TOTAL VOLUME BY ITEM

			20% Call-in	10% Call-in
A	Advance Letter	21000		
B	Std. Window Envelope	33000		
C	Cover Letter	26000		
D	8 pg. Survey	31000	30000	28000
E	Survey Return Env.	31500	30500	28500
F	Survey Pkt. Envelope	33000	32000	29000
G	1st Postcard	10000		
H	Followup Letter	6500		
I	2nd Postcard	4200		
J	Proxy Questionnaire	500		
K	Med Release Cover Ltr.	6000		
L	Mom Med Release	6000	5000	4000
M	Child Med Release	6000	5000	4000
N	Postage Paid Envelope	12000		

⁵ Communication material volumes based on the following assumptions:

- 15% Return on initial mailing due to undeliverable mail or changed address
- 40% Returned mail with forwarding or new useable address
- 20% Returned mail with no new address available from Post Office, but found through other source
- 85% Overall survey return rate 85% (50% initial, 20% following first postcard, 10% following mailing of second questionnaire, 5% following second reminder postcard or phone call)
- 25% Call-ins as volunteer participants or selected participants that misplaced surveys
- 5% Communication material "cushion" for extraneous use

COMMUNICATION ITEMS for PERSIAN GULF STUDY

A	Advance Letter	1-sided, 8.5 x 11, used in mail merge	21000
B	Std. Window Envelope	#10	33000
C	Cover Letter	2-sided, 8.5 x 11	26000
D	8 pg. Survey	11 x17 flat, fold to 8.5 x 11	31000
E	Survey Postage Pd. Env.	9 x 12	31500
F	Survey Pkt. Envelope	10 x 13	33000
G	1st Postcard	4 x 6	10000
I	2nd Postcard	4 x 6	4200
J	Proxy Questionnaire	11 x 17	500
N	Med Rel Postage Pd Env	#10	12000

PERSIAN GULF MAIL/TRACK TASK & RESOURCE PLAN

PROJECT TASKS	MANPOWER SOURCE/ LOCATION	EST. WORK VOL.	EST. TIME FRAME FOR TASK	COMMENT
Print Survey Materials	Outsource to printer	Surveys, Postcards Envelopes ¹	2-3 wks w/ blueline review	3 Bids Solicited 1/2/97
Pre-Pack Materials for mailing	Outsource	Survey packets excl. custom letters		To expedite internal mailings,
Format Mail/Track System to accomodate Dod, VA data	Internal using automated process ATL Office	All DoD/VA records - 20,000	5 - 10 days	Contingent on concidental receipt of data from mult. sources
Conduct mini-test of Mail/Track Process	Internal ATL Office	2 Batch or 400 ltr	5 days	Includes set-up & training in DC
Production of ADVANCE Ltr. & envelope mailing labels (T1)	Internal using automated PG mail/track applic.	800 ltrs. & labels/day	Start prod. 1 day ahead of mail dt, 25 days	Task includes QC prior to mail release
Stuff, label & mail ADVANCE Letter (T2)	Internal manual process	800/day	25 business days	Mail dt here will start the cycle
Return Mail Sort (T3) - separate ADVANCE Letter returns by new addr rcv'd from no available addr	Internal using manual process	120/day	Ongoing starting 10-14 days after 1st ADV Ltr mail	Anticipate 15% return for new or undeliverable addresses
Return Mail Batch Entry (T4) - update address for SURVEY mailing	Internal using automated PG mail/track applic.	120/ day	Ongoing starting 10-14 days after 1st ADV Ltr mail	Same volume as above, 2nd step in process
Research (mail) undeliverables (T5)	Internal using manual process	70/ day	Ongoing starting 10-14 days after ADV ltr mail	Daily volume here is part of research volume
Produce COVER ltr & mail labels for SURVEY mailing (T6)	Internal using automated PG mail/track applic.	800/ day	Ongoing for 25 days starting 29 days after 1st mail day of ADV Letter	Letter production will precede actual mailing dt by one day

¹ See memo entitled "PERSIAN GULF SURVEY COMMUNICATION MATERIALS" for breakdown of communication items

PERSIAN GULF MAIL/TRACK TASK & RESOURCE PLAN

PROJECT TASKS	MANPOWER SOURCE/ LOCATION	EST. WORK VOL.	EST. TIME FRAME FOR TASK	COMMENT
Stuff COVER ltr, apply label and mail SURVEY Packets (T7)	Internal using manual process	800/ day	Ongoing for 25 business days starting 30 days after 1st mail day of ADV Letter	Daily volume will be slightly less due undeliverables
Return Mail Sort (T8) - separate survey returns from resends, addr research, surveys missing forms & proxy requests	Internal using manual process	375/ day	Ongoing starting 10-14 days after 1st survey mail dt	See Below
Determine if Med Rel form(s) needed for completed surveys (T9)	Internal using manual process	375/day	Ongoing starting 10-14 days after 1st survey mail dt	
Return Mail Batch Entry (T10) - update addresses - update survey receipt status - enter med rec req dt	Internal using automated PG mail/track applic.	375/ day	Ongoing starting 10-14 days after 1st survey mail dt	Sort & Entry is 2- step process for the same daily volume
Produce Med Rel Ltr, Med Rel forms (T11)	Internal using automated PG mail/track applic.	100/day	Ongoing starting 10-14 days after 1st survey mail dt	
Stuff, label & send Med Rel ltr to study participant (T12)	Internal using manual process	100/day	Same as above	
Return Mail Research (T13) - no addr available	Internal using manual process	60/ day undel.	Ongoing starting 10-14 days after 1st survey mail dt	See below
Remail Batch Entry (T14) - update research addr, accumulate in batch - generate new labels	Internal using automated PG mail/track applic.	40/ day	Ongoing starting 10-14 days after 1st survey mail dt	Day volume is part of daily research volume
Survey Remail Mail Prep (T15) - label and post	Internal using manual process	40/ day	Ongoing starting 10-14 days after 1st survey mail dt	Entry & mail prep is 2-step process same volume
Prepare Completed Surveys for Data Entry Edit Process <i>Included here, but part of EDIT TASKS, not MAIL TASKS</i>	Internal using manual process	200/ day	Ongoing starting 10-14 days after 1st survey mail	Day volume is part of return mail volume - med release not needed
Mail Proxy Survey Requests (T25)	Internal using manual process	Minimal	Ongoing	Anticipate less than 500 requests total
Mail call-in requests (T16) - lost surveys - volunteers	Internal using manual process	40/ day ? higher at onset	Ongoing after first mail hits the streets	Volume may be dependent on WEBSITE use

PERSIAN GULF MAIL/TRACK TASK & RESOURCE PLAN

PROJECT TASKS	MANPOWER SOURCE/ LOCATION	EST. WORK VOL.	EST. TIME FRAME FOR TASK	COMMENT
Produce Mail labels for First Reminder Postcards (T17)	Internal using automated PG mail/track applic.	350/ day	Ongoing starting 20 days after 1st survey mail	See Below
Send First Reminder Postcards (T18)	Internal using manual process	350/ day	Ongoing starting 20 days after 1st survey mail	Label production & send mail is 2-step process same volume
Produce Followup Ltrs & Mail labels for Followup Survey Pkt. mailing (T19)	Internal using automated PG mail/track applic.	200/ day	Ongoing starting 39 days after 1st survey mail day	This volume may be less due to selection of non-receipts for phone call
Send Followup Survey Pkt. (T20)	Internal using manual process	200/ day	Ongoing starting 40 days after 1st survey mail	This volume may be less due to selection of non-receipts for p. call
Produce Mail labels for 2nd Reminder Postcards (T21)	Internal using automated PG mail/track applic.	150/ day	Ongoing starting 60 days after 1st survey mail	See below
Send Second Reminder Postcards (T22)	Internal using manual process	150/ day	Ongoing starting 60 days after 1st survey mail	Label production & mail is 2-step process for same volume
Generate Med Rec Rel Provider Ltrs (T23)	Internal using Automated process	100/day ?	Ongoing starting after receipt of release forms	Difficult to pinpoint exact start date
Send Med Rec Release to Providers (T24)	Internal using Manual process	100/day	Ongoing starting after receipt of release forms	See above
Archive (mail) undeliverables ² (T5)	Internal using manual process	50/ day	Ongoing starting 2 wks after 1st mail	Consider add'l research of other dbase sources

² Task completion not critical to future tasks. Archive task can be accomplished over a longer timeframe throughout the mailing cycle.

Persian Gulf Women's Study Database Design

