

OMB# 0925-0626 EXP. 04/30/2017

A health study for oil spill clean-up workers and volunteers

Clinical Exam Questionnaire

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: NIH, Project Clearance Branch, 6705 Rockledge Drive, MSC 7974, Bethesda, MD 20892-7974, ATTN: PRA (0925-0626). Do not return the completed form to this address.

Table of Contents

Section A: Clinical Exam Check-In	3
Section B: Informed Consent	4
Section C: Background Questions	5
Sections D-H: Physiological and Anthropometric Measurements	22
Section I: Hair Collection	23
Section J: Toenail Collection	24
Section K: Urine Collection	26
Section L: Saliva Practice and Instruction	28
Section M: Blood Collection	31
Section N: Quality Control and Expanded Lymphocyte Isolation Blood Collection	34
Section O: Finger Stick	36
Section P: Visual Acuity and Contrast Sensitivity	37
Section Q: Grip Strength Dynamometry	42
Section R: Vibrotactile Threshold Measurement	44
Section S: Accusway (Postural Stability)	46
Section T: Single Leg Stance	47
Section U: Long Distance Corridor Walk	49
Section V: Trail Making Test (TMT) Parts A & B	51
Section W: Computer Based Neurobehavioral Testing	53
Section X: Exhaled Nitric Oxide (eNO)	54
Section Y: Pulmonary Function Testing (PFT)	56
Section Z: Medical Referrals	60
Section AA: Check-Out, Review and Remuneration	65

Section A: Clinical Exam Check-In

[PROGRAMMER NOTE: AUTO-POPULATE CONTACT INFORMATION AND DISPLAY= PID, FIRST, MIDDLE AND LAST NAME, SUFFIXES OR SURNAMES DEMOGRAPHIC INFORMATION=AGE, DATE OF BIRTH, RACE AND GENDER/SEX, STREET ADDRESS AND ELIGIBILITY (QA OR SALIVA, IF APPLICABLE) ON SCREEN]

[EXAMINER NOTE: CONFIRM PARTICIPANT'S CONTACT AND DEMOGRAPHIC INFORMATION AND MAKE CHANGES, UPDATES AND CORRECTIONS AS NECESSARY; REFER TO MANUAL FOR ADDITIONAL CHECK-IN INSTRUCTIONS]

A1. PARTICIPANT'S EXAM START DATE [PROGRAMMER NOTE: AUTO-FILL DATE]

____/___/____ [MM/DD/YYYY]

A2. PARTICIPANT'S EXAM START TIME [PROGRAMMER NOTE: AUTO-FILL TIME USING 24 HOUR CLOCK]

____:___ [HH:MM AM/PM]

PROGRAMMER NOTE: AUTO-POPULATE PARTICIPANT ID/GULF ID. ID CONVENTION= SITE#-PID/GULF ID-CHECK SUM DIGIT.

Section B: Informed Consent

[PROGRAMMER NOTE: AUTO TIME STAMP]
B1. CONSENT DATE [PROGRAMMER NOTE: AUTO-FILL DATE]/[MM/DD/YYYY]
[PROGRAMMER NOTE: ADD LOGIC CHECK FOR DATA ENTRY OF CONSENT VERSION #]
B2. RECORD CONSENT VERSION # V1.0 (Practice)
B2a. DID THE PARTICIPANT CONSENT TO THE FULL CLINICAL EXAM? YES1 [GO TO B3] NO2
B2b. REASON FOR FULL EXAM CONSENT REFUSAL [FREE TEXT FIELD]
B2c. DID THE PARTICIPANT CONSENT TO THE MINI CLINICAL EXAM? YES1 [GO TO B3] NO2
B2d. REASON FOR MINI EXAM CONSENT REFUSAL [FREE TEXT FIELD]
[PROGRAMMER NOTE: IF NO, DISPLAY MESSAGE= END CLINICAL EXAM. BLOCKFURTHER DATA ENTRY]
B3. SCAN CONSENT FORM BARCODE
_ _ _ _ - _D _O _C
[PROGRAMMER NOTE: CHECK THAT BARCODE MATCHES CURRENT PARTICIPANT ID]

Section C: Background Questions

C1. What is the highest grade or level of school you have completed or the	highest
degree you have received?	
NEVER ATTENDED/KINDERGARTEN ONLY	1
1 ST GRADE	2
2 ND GRADE	3
3 RD GRADE	4
4 TH GRADE	5
5 ¹ GRADE	6
6 TH GRADE	7
7 TH GRADE	8
8 TH GRADE	9
9 TH GRADE	10
10 TH GRADE	11
11 TH GRADE	 12
12 TH GRADE, NO DIPLOMA	13
HIGH SCHOOL GRADUATE	1/1
GED OR EQUIVALENT	1 . 15
SOME COLLEGE, NO DEGREE	15 16
ASSOCIATE DEGREE: OCCUPATIONAL, TECHNICAL	10
·	47
OR VOCATIONAL PROGRAM	
ASSOCIATE DEGREE: ACADEMIC PROGRAM	
BACHELOR'S DEGREE (EXAMPLE: BA, AB, BS, BBA)	
MASTER'S DEGREE (EXAMPLE: MA, MS, MEng, MEd, MBA)	20
PROFESSIONAL SCHOOL DEGREE	
(EXAMPLE: MD, DDS, DVM, JD)	
DOCTORAL DEGREE (EXAMPLE: PhD, EdD)	
DON'T KNOW	88
REFUSED	99
C2. What language do you speak at home?	
English1	
Spanish2	
Vietnamese3	
Creole4	
Other, SPECIFY [FREE TEXT FIELD] 5	
DON'T KNOW8	
REFUSED9	
KEFUSED9	
C2. Are you currently prognant? [DDCCDAMMED NOTE: ONLY ACK IT	
C3. Are you currently pregnant? [PROGRAMMER NOTE: ONLY ASK IF	
GENDER=FEMALE]	
YES1	
NO2	
DON'T KNOW8	
REFLISED 9	

C4. During the past 24 hours, have you used a short-term or long-acting bronchodilator?
YES1
NO2
DON'T KNOW8
REFUSED9
C5. In the past 3 months, have you had heart surgery?
YES1
NO2
DON'T KNOW8
REFUSED9
C6. In the past 3 months, have you had an angioplasty or stent placement?
YES1
NO2
DON'T KNOW8
REFUSED9
C7. In the past 3 months, have you had any (other) surgery to your chest or
abdomen?
YES1
NO2
DON'T KNOW8
REFUSED9
C8. In the past 3 months, have you had a heart attack or myocardial infarction?
YES1
NO2
DON'T KNOW8
REFUSED9
C9. In the past 3 months, have you had a stroke?
YES1
NO2
DON'T KNOW8
REFUSED9
C9a. Over the past 3 months, have you had new or worsening chest pain or pressure?
YES1
NO2
DON'T KNOW8
REFUSED9

C9b. Over the past 3 months, have you had new or worsening symptoms of angina or
been diagnosed with angina?
YES1
NO2
DON'T KNOW8
REFUSED9
C9c. Over the past 3 months, have you had new or worsening shortness of breath at
rest or low exertion?
YES1
NO2
DON'T KNOW8
REFUSED9
C10. In the past 3 months, have you been hospitalized for any other heart problem?
YES1
NO2
DON'T KNOW8
REFUSED9
C11. In the past 3 months, have you had a detached retina or eye surgery?
YES1
NO2
DON'T KNOW8
REFUSED9
C12. Are you currently taking medication for tuberculosis?
YES
NO2
DON'T KNOW8
REFUSED9
C13. In the past 12 months, has a doctor told you that you had an ear infection?
YES1
NO2 [GO TO QUESTION C14]
DON'T KNOW8 [GO TO QUESTION C14]
REFUSED9 [GO TO QUESTION C14]
C13a. What was the month and year of your diagnosis?
/ [MM/YYYY]
DON'T KNOW8
REFUSED9

C13b. Was the ear infection treated with antibiotics?
YES1
NO2
DON'T KNOW8
REFUSED9
C14. Have you ever had inner ear surgery?
YES1
NO2 [GO TO C15]
DON'T KNOW8 [GO TO C15]
REFUSED9 [GO TO C15]
C14a. What was the month and year of your surgery?
DON'T KNOW8
REFUSED9

C15. Has a doctor **ever** told you that you have any of the following conditions or diseases or have you had any of the following procedures...?

Condition or Procedure	1. Have Condition/had Procedure?	2. What was the you were diagr cond [MM] /	3. Comments/Notes	
C15a. Brain Tumor	(SELECT ONE) ✓ YES GO TO 2 ✓ NO ✓ DON'T KNOW TO b ✓ REFUSED	(ENTER MONTH AND YEAR) [MM] [YYYY]	(SELECT ONE) ✓ DON'T KNOW ✓ REFUSED	[free text field]
C15b. Polio	(SELECT ONE) ✓ YES GO TO 2 ✓ NO ✓ DON'T KNOW TO c ✓ REFUSED	(ENTER MONTH AND YEAR) [MM] [YYYY]	(SELECT ONE) ✓ DON'T KNOW ✓ REFUSED	[free text field]
C15c. Amyotrophic lateral sclerosis	(SELECT ONE) ✓ YES GO TO 2 ✓ NO ✓ DON'T KNOW TO d ✓ REFUSED	(ENTER MONTH AND YEAR) [MM] [YYYY]	(SELECT ONE) ✓ DON'T KNOW ✓ REFUSED	[free text field]
C15d. Multiple sclerosis	(SELECT ONE) ✓ YES GO TO 2 ✓ NO ✓ DON'T KNOW TO e ✓ REFUSED	(ENTER MONTH AND YEAR) [MM] [YYYY]	(SELECT ONE) ✓ DON'T KNOW ✓ REFUSED	[free text field]
C15e. Parkinson's disease	(SELECT ONE) ✓ YES GO TO 2 ✓ NO ✓ DON'T KNOW TO f ✓ REFUSED	(ENTER MONTH AND YEAR) [MM] [YYYY]	(SELECT ONE) ✓ DON'T KNOW ✓ REFUSED	[free text field]
C15f. Stroke	(SELECT ONE) ✓ YES GO TO 2 ✓ NO ✓ DON'T KNOW TO g ✓ REFUSED	(ENTER MONTH AND YEAR) [MM] [YYYY]	(SELECT ONE) ✓ DON'T KNOW ✓ REFUSED	[free text field]
C15g. Low thyroid gland function	(SELECT ONE) ✓ YES GO TO 2 ✓ NO ✓ DON'T KNOW TO h ✓ REFUSED	(ENTER MONTH AND YEAR) [MM] [YYYY]	(SELECT ONE) ✓ DON'T KNOW ✓ REFUSED	[free text field]

Condition or Procedure	1. Have Condition/had Procedure?	2. What was the month and year you were diagnosed with this condition [MM] / [YYYY]		3. Comments/Notes
C15h. Diabetes	(SELECT ONE) ✓ YES GO TO 2 ✓ NO ✓ DON'T KNOW TO i ✓ REFUSED	(ENTER MONTH AND YEAR) [MM] [YYYY]	(SELECT ONE) ✓ DON'T KNOW ✓ REFUSED	[free text field]
C15i. Retinal or macular degeneration	(SELECT ONE) ✓ YES GO TO 2 ✓ NO ✓ DON'T KNOW TO C16 ✓ REFUSED	(ENTER MONTH AND YEAR) [MM] [YYYY]	(SELECT ONE) ✓ DON'T KNOW ✓ REFUSED	[free text field]

illness (es) or conditions not listed above?
YES1
NO2 [GO TO QUESTION C17]
DON'T KNOW8 GO TO QUESTION C17
REFUSED9 [GO TO QUESTION C17]
C16a. What illnesses or conditions do you have? RECORD FIRST ILLNESS OR CONDITION [PROGRAMMER NOTE: LOOP THESE QUESTIONS SO THAT IF YES IS SELECTED, FREE TEXT FIELD IS DISPLAYED FOR DATA ENTRY OF ILLNESS OR CONDITION. DO NOT ALLOW NEW ROWS TO BE ADDED IF PRIOR ROWS ARE BLANK.] [FREE TEXT FIELD]
C17. Have you experienced any illness, injury or condition affecting the use of your arms or legs?
YES1
NO2 [GO TO C18]
DON'T KNOW8 [GO TO C18]
REFUSED9 [GO TO C18]
C17a. What are these illnesses, injuries or conditions? RECORD FIRST

C16. Are you **currently** under a doctor's care for any other short-term or long-term

ILLNESS OR CONDITION [PROGRAMMER NOTE: LOOP THESE QUESTIONS SO THAT IF YES IS SELECTED, FREE TEXT FIELD IS DISPLAYED FOR DATA ENTRY OF ILLNESS OR CONDITION. DO NOT ALLOW NEW ROWS TO BE ADDED IF PRIOR ROWS ARE BLANK.] [FREE TEXT FIELD]_____

C18. Have you <u>ever</u> had a head injury?
YES1
NO2 [GO TO QUESTION C20]
DON'T KNOW8 [GO TO QUESTION C20]
REFUSED9 [GO TO QUESTION C20]
C18a. In what month and year was your most recent head injury?/ [MM/YYYY]
DON'T KNOW8
REFUSED9
C19. Have you <u>ever</u> had a head injury where you lost consciousness?
YES1 NO2 [GO TO QUESTION C20]
DON'T KNOW8 [GO TO QUESTION C20]
REFUSED9 [GO TO QUESTION C20]
THE GOLD [GO TO GOLOTION G20]
C19a. How many times in your life have you had a head injury that resulted in loss of consciousness?
TIMES
DON'T KNOW888
REFUSED999
C19b. How many of these were seen or treated by a health care provider?
[FREE TEXT FIELD] OF THEM
ALL OF THEM1
SOME OF THEM2
JUST ONE3
NONE OF THEM4
DON'T KNOW8
REFUSED9

[PROGRAMMER: REPEAT THE FOLLOWING QUESTIONS FOR UP TO FIVE HEAD INJURIES WITH LOSS OF CONSCIOUSNESS.]

	Head Injury with loss of consciousness				
	1	2	3	4	5
C19c. When did your [first/next] head injury with loss of consciousness occur?	 / [MM/YYYY] AGE DON'T KNOW REFUSED 	SAME AS 1	SAME AS 1	SAME AS 1	SAME AS 1
C19d. Approximately how long were you unconscious?	 Less than 30 minutes 30 or more minutes DON'T KNOW REFUSED 	SAME AS 1	SAME AS 1	SAME AS 1	SAME AS 1
C19e. Did you seek medical treatment for your head injury?	YESNODON'T KNOWREFUSED	SAME AS 1	SAME AS 1	SAME AS 1	SAME AS 1
C19f. Were you hospitalized overnight as a result of your head injury?	 YES NO [GO TO C19h] DON'T KNOW [GO TO C19h] REFUSED [GO TO C19h] 	SAME AS 1	SAME AS 1	SAME AS 1	SAME AS 1
C19g. What was the total number of days you spent in the hospital?	ODAYS O DON'T KNOW O REFUSED	SAME AS 1	SAME AS 1	SAME AS 1	SAME AS 1
C19h. Did your head injury occur on the job?	O YES O NO O DON'T KNOW O REFUSED	SAME AS 1	SAME AS 1	SAME AS 1	SAME AS 1
C19i. Did your head injury occur in a motor vehicle accident?	YESNODON'T KNOWREFUSED	SAME AS 1	SAME AS 1	SAME AS 1	SAME AS 1
C19j. Did your head injury occur at work on a farm?	YESNODON'T KNOWREFUSED	SAME AS 1	SAME AS 1	SAME AS 1	SAME AS 1
C19k. Did your head injury occur in another way?	YES [FREE TEXT FIELD] NO DON'T KNOW REFUSED	SAME AS 1	SAME AS 1	SAME AS 1	SAME AS 1

C20. Have you ever	nad a concussion?	
YES	1	
NO	2 [GO TO QUESTION C21]	
DON'T KNOW	8 [GO TO QUESTION C21]	
REFUSED	9 [GO TO QUESTION C21]	
C20a. How m	any times in your life have you had a concussion	า?
	888	
	999	

C20b. How many of these were diagnosed by a health care provider? [FREE TEXT FIELD] OF THEM

ALL OF THEM	1
SOME OF THEM	2
JUST ONE	3
NONE OF THEM	4
DON'T KNOW	8
REFUSED	9

C21. Do you take <u>any</u> prescription or over-the-counter medications regularly? This includes any minerals, vitamins and herbal supplements and those medications that are taken in forms other than a pill or capsule, such as a daily shot, inhalers, liquids, gels, creams, sprays, patches or suppositories, etc.

YES	1
NO	2 [GO TO C22]
DON'T KNOW	8 [GO TO C22]
REFUSED	9 [GO TO C22]

[PROGRAMMER NOTE: DO NOT ALLOW NEW ROWS TO BE ADDED IF PRIOR ROWS ARE BLANK.]

[EXAMINER NOTE: IF YES, ASK THE STUDY PARTICIPANT IF THEY HAVE THEIR MEDICATION WITH THEM. IF SO, RECORD THE INFORMATION DIRECTLY FROM THE LABEL BELOW. IF NOT, THEN ASK THEM TO TELL YOU ABOUT EACH MEDICATION THEY TAKE REGULARLY (BOTH PRESCRIPTION AND OVER-THE COUNTER) AND RECORD THE INFORMATION BELOW.]

What is the [first/next] prescription or over-the-counter medication you take regularly?

	C21a What is the name of the	C21b What is the reason you take this?	C21c What is the dosage?	C21d Enter dosage	C21e If "other" dosage unit,	C21f How often do you take this?	C21g On days when you	C21h When did you start taking this?	
Drug	prescription or over-the- counter medication?	take this?	RECORD FROM LABEL	units	specify here	tnis?	take it, how many times do you take it?	[MM]	[YYYY]
	RECORD FROM LABEL		2,022	RECORD FROM LABEL	RECORD FROM LABEL				
1	(ENTER RESPONSE) [Free text field]	(ENTER RESPONSE) [Free text field]	(ENTER RESPONSE) I_I_I_I DON'T KNOW 8888 REFUSED 9999	(SELECT ONE) mg IU Mcg mL g tbsp tsp other DON'T KNOW REFUSED	(ENTER RESPONSE) [Free text field] [SKIP IF C21d ≠ OTHER]	(SELECT ONE) Once a month or less Less than once a week Once a week 2-3 days a week 4-5 days a week 6-7 days a week DON'T KNOW REFUSED	(SELECT ONE) 1 time per day 2 times per day 3 times per day 4 times per day 5 or more times per day DON'T KNOW REFUSED	(ENTER RESPON SE) DON'T KNOW 88 REFUSE D 99	(ENTER RESPON SE) DON'T KNOW 8888 REFUSE D 9999
2	ss ss	и и	ec ec	66 66	66 66	ec ec	u u	u u	ee ee
3	ec ec	66 66	ec es	ec ec	ec ec	u u	ec ec		u u
4	ec ec	и и	ee ee	ee ee	ee ee	u u	u u		uu
5	ec ec	66 66	66 66	и и	и и		66 66		и и
6	ec ec	ee ee	ee ee	и и	u u	u u	ec ec		и и
7	uu	66 66	шш	и и	и и	ш ш	66 66		и и
8	uu	es ee	шш	и и	и и	ш ш			и и
9	u u	64 66	шш	и и	и и	ш ш	66 66		и и
10	u u	es es	и и	и и	и и	u u	uu		и и

C22. Do you usually drink 1 or more beverages containing caffeine a day? Include
coffee, energy drinks, regular tea, cola beverages and other sodas such as Mountair
Dew that have caffeine

YES	1
NO	2
DON'T KNOW	8
REFUSED	9

C23. How long has it been since you last drank a caffeinated beverage? I_I_I_I UNITS MINUTES
C24. Have you ever smoked cigarettes or used other tobacco products on a daily basis? No, never
C24a. How long has it been since you last smoked or used tobacco products? IIII UNITS MINUTES
C24b. Have you ever used an electronic cigarette or e-cigarette, such as NJOY, Blu, o Smoking Everywhere, even one or two times? YES
C24c. Do you now use e-cigarettes Every day

GuLF STUDY

C24d. What brand of e-cigarette do/did you use? [PROBE: "What company makes the e-cigarette that you usually use/used?" [FREE TEXT]
DON'T KNOW8 REFUSED9
REFUSED9
C24e. About how many disposable e-cigarettes or e-cigarette cartridges have you used in the past year?
NONE1 1 OR MORE <i>PUFFS</i> , BUT NEVER A WHOLE ONE 2
1-103
11-204 21-505
51-996
100 OR MORE7
DON'T KNOW8
REFUSED9
C25. How long has it been since you last drank alcohol?
HOURS2
DAYS3
VEEKS4
MONTHS5 /EARS6 [GO TO QUESTION C30]
DON'T DRINK7 [GO TO QUESTION C30]
OON'T KNOW8
REFUSED9
C26. During the past 12 months , about how many drinks containing alcohol did you
nave on a typical <u>weekend</u> ? (A typical weekend is Friday evening through Sunday evening. One can of beer, one glass of wine, or one shot of liquor counts as one drink)
I_I_I_I # drinks DON'T KNOW888
REFUSED999
C27. During the past 12 months , about how many drinks containing alcohol did you have during a typical week ? (A typical week is Monday through Friday afternoon. One can of beer, one glass of wine, or one shot of liquor counts as one drink). _I_I_I # drinks
DON'T KNOW

C28. During the **past 12 months**, about how many times did you have **5 or more** drinks containing alcohol on one occasion?

I_I_I_I # times	
DON'T KNOW	888
REFUSED	999

C29. Now, please think about your use of alcohol throughout your life. Have you **ever** sought help to cut back or stop drinking?

YES	1
NO	2
DON'T KNOW	8
REFUSED	9

C30. Have you <u>ever</u> worked with or been exposed to any of the following chemicals for 8 hours a week or more in a past job, your present job, at home (i.e. hobbies), or any other locations where you spend time?

Chemical	1. Exposed? Y/N	-	ear did yo	3. Comments/ Notes	
C30a. Gasoline	(SELECT ONE) ✓ YES → GO TO 2 ✓ NO ✓ DON'T KNOW ✓ REFUSED GO TO b	(ENTER YEAR) [YYYY]	(ENTER YEAR) [YYYY]	(SELECT ONE) ✓ DON'T KNOW ✓ REFUSED	[Free text field]
C30b. Paint Lacquer/ Thinner	(SELECT ONE) ✓ YES → GO TO 2 ✓ NO ✓ DON'T KNOW GO TO b ✓ REFUSED	(ENTER YEAR) [YYYY]	(ENTER YEAR) [YYYY]	(SELECT ONE) ✓ DON'T KNOW ✓ REFUSED	[Free text field]
C30c. Turpentine	(SELECT ONE) ✓ YES → GO TO 2 ✓ NO ✓ DON'T KNOW GO TO b ✓ REFUSED	(ENTER YEAR) [YYYY]	(ENTER YEAR) [YYYY]	(SELECT ONE) ✓ DON'T KNOW ✓ REFUSED	[Free text field]
C30d. Benzene	(SELECT ONE) ✓ YES → GO TO 2 ✓ NO ✓ DON'T KNOW ✓ REFUSED GO TO b	(ENTER YEAR) [YYYY]	(ENTER YEAR) [YYYY]	(SELECT ONE) ✓ DON'T KNOW ✓ REFUSED	[Free text field]
C30e. Toluene	(SELECT ONE) ✓ YES → GO TO 2 ✓ NO ✓ DON'T KNOW GO TO b ✓ REFUSED	(ENTER YEAR) [YYYY]	((ENTER YEAR) [YYYY]]	(SELECT ONE) ✓ DON'T KNOW ✓ REFUSED	[Free text field]
C30f. Petroleum Distillates	(SELECT ONE) ✓ YES → GO TO 2 ✓ NO ✓ DON'T KNOW GO TO b ✓ REFUSED	(ENTER YEAR) [YYYY]	(ENTER YEAR) [YYYY]	(SELECT ONE) ✓ DON'T KNOW ✓ REFUSED	[Free text field]

Chemical	1. Exposed? Y/N	2. What year did you start and stop being exposed to this?		3. Comments/ Notes
C30g. Welding Fumes	(SELECT ONE) ✓ YES → GO TO 2 ✓ NO ✓ DON'T KNOW GO TO b ✓ REFUSED	(ENTER YEAR) [YYYY] (ENTER YEAR) [YYYY]	(SELECT ONE) ✓ DON'T KNOW ✓ REFUSED	[Free text field]
C30h. Soldering Products	(SELECT ONE) ✓ YES → GO TO 2 ✓ NO ✓ DON'T KNOW ✓ REFUSED	(ENTER YEAR) [YYYY] [YYYY]	(SELECT ONE) ✓ DON'T KNOW ✓ REFUSED	[Free text field]
C30i. Pesticides	(SELECT ONE) ✓ YES → GO TO 2 ✓ NO ✓ DON'T KNOW ✓ REFUSED	(ENTER YEAR) [YYYY] [YYYY]	(SELECT ONE) ✓ DON'T KNOW ✓ REFUSED	[Free text field]

C31. Around what time did you fall asleep last night?:: [HH:MM]
AM1
PM2
DON'T KNOW8
REFUSED9
C32. What time do you usually wake up?
: [HH:MM]
ĀM1
PM2
DON'T KNOW8
REFUSED9
C33. What time did you wake up today?:: [HH:MM]
AM1
PM2
DON'T KNOW8
REFUSED9
C34. How many times did you wake up last night?
DON'T KNOW88
REFUSED99

C35. How much sleep did you get last night? Would you say? About the usual amount1 Less than usual
C36. How many hours and minutes of sleep did you get last night? : [HH:MM] DON'T KNOW8 REFUSED9
C37. How many hours and minutes of sleep do you usually get a night?: [HH:MM] DON'T KNOW8 REFUSED9
C38. Since 2010, have you used hair dye to color your hair? NO
C39. In what years did you do this? (SELECT ALL THAT APPLY) 2010
C40. In what month and year did you last dye your hair?/ [MM/YYYY] (01-12, 88, 99/2010 – 2015, 8888, 9999) DON'T KNOW88/8888 REFUSED99/9999

Gulf STUDY

National Institute of Environmental Health Science (NIEHS)

DON'T KNOW 8 [GO TO D1] REFUSED 9 [GO TO D1]

National Institute of Environmental Health Science	(NIEHS)
Version 6.0 (09/11/2015)	

Gulf Study

C44. How long has it been since you last used an anti-dandruff shampoo, conditioner, or other hair or scalp treatment?

[PROGRAMMER NOTE: REQUIRE INTERVIEWER TO VERIFY OR RE-ENTER IF C44 > 14 DAYS/2 WEEKS. IF HOURS, DAYS, OR WEEKS IS SELECTED, A VALID UNIT MUST BE ENTERED.]

C45. In the past two weeks, what brands have you used? [PROBE: "What company makes the products that you use/used? Any others?"] [FREE TEXT FIELD]

Sections D-H: Physiological and Anthropometric Measurements

TAKE EACH MEASUREMENT THREE TIMES AND RECORD BELOW.

[PROGRAMMER NOTE: COMPUTE AVERAGE OF LAST TWO MEASUREMENTS RECORDED]

Vital Signs	Measurement 1	Measurement 2	Measurement 3	Average	Mark if any measurement not collected	
Systolic Blood Pressure	D1a	D1b	D1c	D1d. [FILL XXX]	□Refused	
Diastolic Blood Pressure	D2a	D2b	D2c	D2d. [FILL XXX]	□Equipment malfunction □Other, specify	
Heart Rate (BPM)	D3a	D3b	D3c	D3d. [FILL XXX]	[NOTE ICON]	

Anthropometric Measurements	Measurement 1	Measurement 2	Measurement 3	Average	Mark if any measurement not collected	
Height (cm)	E1a	E1b	E1c	E1d. [FILL XXX.X]	□Refused □Equipment malfunction	
Height (in)	E2a. [FILL XXX.X]	E2b. [FILL XXX.X]	E2c. [FILL XXX.X]	E2d. [FILL XXX.X]	□Other, specify [NOTE ICON]	
Weight (kg)	F1a	F1b	F1c	F1d. [FILL XXX.X]	□Refused □Equipment malfunction	
Weight (lb)	F2a. [FILL XXX.X]	F2b. [FILL XXX.X]	F2c. [FILL XXX.X]	F2d. [FILL XXX.X]	□Other, specify [NOTE ICON]	
ВМІ	F3a. [FILL XXX.X]	F3b. [FILL XXX.X]	F3c. [FILL XXX.X]	F3d. [FILL XXX.X]		
Waist Circumference (cm)	G1a	G1b	G1c	G1d. [FILL XXX.X]	□Refused □Equipment malfunction □Other, specify [NOTE ICON]	
Hip Circumference (cm)	H1a	H1b	H1c	H1d. [FILL XXX.X]	□Refused □Equipment malfunction □Other, specify [NOTE ICON]	

[PROGRAMMER NOTE: IF THE AVERAGE OF THE LAST TWO SYSTOLIC BP \geq 180 OR DIASTOLIC BP \geq 110 OR HEART RATE \leq 40 OR \geq 120, SKIP PFT AND LONG-DISTANCE CORRIDOR WALK]

Section I: Hair Collection

I1. WAS A HAIR SAMPLE COLLECTED? YES 1 [GO TO QUESTION I2] NO 2	
I1a. IF NO, PROVIDE A REASON NOT ENOUGH HAIR	
I2. WERE THE PROXIMAL AND DISTAL ENDS OF THE HAIR DESIGNATED/MARKED? YES	
I2a. IF NO, PROVIDE A REASON OTHER, SPECIFY [FREE TEXT FIELD] 1 DON'T KNOW8 REFUSED 9	

Section J: Toenail Collection

J1. Are you currently wearing false toenails, nail tips, acrylic and or gel on your toenails? YES 1 [GO TO QUESTION J4]
NO2
[PROGRAMMER NOTE: IF YES, DISPLAY MESSAGE = DO NOT ATTEMPT TOENAIL COLLECTION; RECORD REASON FOR NOT COLLECTING SAMPLE AND GIVE PARTICIPANT INSTRUCTIONS AND MAILING MATERIALS FOR TOENAIL COLLECTION AT A LATER DATE]
J2. Are you currently wearing nail polish, nail hardener or any other nail product on your toenails? YES 1 NO
NO 2 [GO TO QUESTION 33]
[PROGRAMMER NOTE: IF YES, DISPLAY MESSAGE = ASK PARTICIPANT IF THEY ARE WILLING TO REMOVE NAIL PRODUCT(S) FROM TOENAILS; PROVIDE NAIL POLISH REMOVER AND COTTON WIPE. IF PARTICIPANT SAYS NO; DO NOT COLLECT TOENAILS.]
J2a. DID PARTICIPANT REMOVE NAIL POLISH, NAIL HARDENER OR ANY OTHER NAIL PRODUCT USING NAIL POLISH REMOVER OR ACETONE? YES
J3. WERE TOENAIL SAMPLES COLLECTED? YES 1 [GO TO SECTION K] NO 2
J3a. IF NO, PROVIDE A REASON NAILS NOT LONG ENOUGH
[PROGRAMMER: SHOW ADDITIONAL FOLLOW UP QUESTIONS BELOW IF TOENAIL SAMPLES WERE NOT COLLECTED AT EXAM AND REASON GIVEN]
J4. PARTICIPANT AGREED TO COLLECT AND SEND TOENAIL SAMPLES AT A LATER DATE? YES 1 NO

J5. SCAN BARCODE OF TOENAIL SAMPLE ENVELOPE I_ I_ I_ I_ I_ I_ I_ I_ O| E| 1| 0| 1|

Section K: Urine Collection

K1. WAS A MID-STREAM URINE SAMPLE COLLECTED DURING THE CLINICAL EXAM?
YES 1 [GO TO QUESTION K2] NO 2
[PROGRAMMER NOTE: SHOW MESSAGE=IF THE PARTICIPANT IS UNABLE TO PROVIDE A URINE SPECIMEN, HAVE THEM DRINK A LARGE GLASS OF WATER, SKIP THIS QUESTION FOR NOW AND RETURN TO IT LATER IN THE CLINICAL EXAM WHEN THE PARTICIPANT IS ABLE TO PROVIDE A URINE SAMPLE.]
K1a. IF NO, PROVIDE A REASON UNABLE TO COLLECT
[PROGRAMMER NOTE: SKIP OR SUPPRESS ADDITIONAL URINE SAMPLE QUESTIONS IF NO URINE WAS COLLECTED AND A REASON IS PROVIDED]
K2. VOLUME OF THE RANDOM URINE SAMPLE COLLECTED// ML
K3. DATE OF RANDOM URINE SAMPLE [PROGRAMMER NOTE: AUTO-FILL DATE] // [MM/DD/YYYY]
K4. ENTER TIME THE RANDOM URINE SPECIMEN WAS COLLECTED: [HH:MM] AM

K5. RECORD URINE DIPSTICK RESULTS:

K5a. Leukocy te	K5b. Nitrite	K5c. Urobilin ogen	K5d. Protein	K5e. pH	K5f. Blood	K5g. Specific Gravity	K5h. Ketones	K5i. Billrubin	K5j. Glucose
(SELECT ONE) - +- 1+ 2+ 3+ NOT OBTAINED	(SELECT ONE) - + NOT OBTAINED	(SELECT ONE) - +- 1+ 2+ 3+ NOT OBTAINED	(SELECT ONE) - +- 1+ 2+ 3+ NOT OBTAINED	(SELECT ONE) 5.0 5.5 6.0 6.5 7.0 7.5 8.0 8.5 9.0 NOT OBTAINED	(SELECT ONE) - +- 1+ 2+ 3+ NOT OBTAINED	(SELECT ONE) 1.000 1.005 1.010 1.015 1.020 1.025 1.030 NOT OBTAINED	(SELECT ONE) - +- 1+ 2+ 3+ NOT OBTAINED	(SELECT ONE) - +- 1+ 2+ 3+ NOT OBTAINED	(SELECT ONE) - +- 1+ 2+ 3+ NOT OBTAINED

National Institute of Environmental Health Science (NIEHS) Version 6.0 (09/11/2015)	GuLF STUDY
K5a. SCAN BARCODE FOR PARTICIPANT POCT RESULTS FORM	
_ _ _ - _D _O _C	
[PROGRAMMER NOTE: CHECK THAT BARCODE MATCHES CURRENT PARTICIPANT ID]	Γ
K6. WAS REMAINING URINE SAMPLE SENT TO LAB TO BE ALIQUOTT LONG TERM STORAGE AND FUTURE ANALYSIS? YES	ED FOR
K6a. IF NO, PROVIDE A REASON	

Section L: Saliva Practice and Instruction

[PROGRAMMER NOTE: ONLY DISPLAY IF PARTICIPANT IS FLAGGED FOR AT HOME SALIVA SAMPLE COLLECTION]

FOR M YES	OGRAMMING CHECK, DO NOT DISPLAY: WAS PARTICIPANT SELECTED MAIN AT-HOME SALIVA SAMPLE COLLECTION?
FOR Q YES	ROGRAMMING CHECK, DO NOT DISPLAY: WAS PARTICIPANT SELECTED OC AT-HOME SALIVA SAMPLE COLLECTION? 1 2 [GO TO SECTION M]
DID PA	RTICIPANT WAS SELECTED FOR AT-HOME SALIVA SAMPLE COLLECTION ARTICIPANT AGREE TO COMPLETE AT-HOME SALIVA SAMPLE ECTION? 1
NO	
	AS A PRACTICE SALIVA SAMPLE OBTAINED?
NO	2 [GO TO QUESTION L3c]
	L3a.DATE OF PRACTICE SALIVA SAMPLE COLLECTION [PROGRAMMER NOTE: AUTO-FILL DATE]/[MM/DD/YYYY]
	L3b. ENTER TIME OF PRACTICE SALIVA SAMPLE COLLECTION: [HH:MM] [GO TO QUESTION L4a] AM 1 PM 2
	L3c.IF NO, PROVIDE A REASON MEDICAL REASON1[GO TO M1] OTHER, SPECIFY [FREE TEXT FIELD] 2[GO TO M1] DON'T KNOW8[GO TO M1] REFUSED9[GO TO M1]

L4a. In the past 20 minutes, have you done any of the following?

Brushed teeth?
YES1
NO2
OON'T KNOW8
REFUSED9
_4b. (In the past 20 minutes, have you done any of the following?)
Eaten anything?
YES1
NO2
DON'T KNOW8
REFUSED9
_4c. (In the past 20 minutes, have you done any of the following?)
Orunk anything?
YES1
NO2
OON'T KNOW8
REFUSED9
_4d. (In the past 20 minutes, have you done any of the following?)
Exercised?
YES1
NO2
DON'T KNOW8
REFUSED9
5 D
_5. Do you feel happy, excited, or content right now?
Not at all1
Somewhat2
Very much3
Extremely4
DON'T KNOW8
REFUSED9
_6. Do you feel worried, anxious, or fearful right now?
Not at all1
Somewhat2
Very much3
Extremely4
DON'T KNOW8
REFUSED9
(L. 00LD

National Institute of Environmental Health Science (NIEHS) Version 6.0 (09/11/2015)	GuLF STUDY
L7. Do you have any problems or concerns right now? SPECIFY [FREE TEXT FIELD]	
L8. SCAN SALIVA LOG BARCODE	
_ _ _ _ - _ <u>S _L _V _ Q _X </u>	
[PROGRAMMER NOTE: CHECK THAT BARCODE MATCHES CURRENT PARTICIPANT ID]	Γ
[PROGRAMMER'S NOTE: REMIND CLINICIAN TO REVIEW AT-HOME S COLLECTION INSTRUCTIONS]	SALIVA

Section M: Blood Collection

M1. WAS BLOOD DRAW ATTEMPTED? YES 1 NO 2 [GO TO M1f]
M1a. DATE OF BLOOD COLLECTION ATTEMPT [PROGRAMMER NOTE: AUTO-FILL DATE]/[MM/DD/YYYY]
M1b. ENTER TIME OF BLOOD COLLECTION ATTEMPT: [HH:MM] [GO TO QUESTION M2] AM1 PM2
M1c. RECORD SITE FOR BLOOD COLLECTION ATTEMPTS (SELECT AL THAT APPLY) RIGHT ARM
M1d. RECORD NUMBER OF BLOOD DRAW ATTEMPTS ONE1 TWO2 THREE3
M1e. WAS ANY BLOOD COLLECTED? YES1 [GO TO M3] NO 2 [GO TO M1f]
M1f. IF NOT COLLECTED, PROVIDE A REASON UNABLE TO COLLECT

M3. DID YOU COLLECT THE FOLLOWING TUBES?

Tube	M3a. Collected?	M3b. If no, why?	M3c. If "other",
Color	Concotcu.	ii 110, Wily .	specify
1. Red RED100	(SELECT ONE) ✓ YES [GO TO 2] ✓ NO [GO TO B]	(SELECT ONE) ✓ UNABLE TO COLLECT ✓ MEDICAL REASON ✓ SPILLED ✓ REFUSED ✓ OTHER → GO TO c	[FREE TEXT FIELD] NOTE FIELD
2. Red RED200	(SELECT ONE) ✓ YES [GO TO 3] ✓ NO [GO TO B]	(SELECT ONE) ✓ UNABLE TO COLLECT ✓ MEDICAL REASON ✓ SPILLED ✓ REFUSED ✓ OTHER → GO TO c	[FREE TEXT FIELD] NOTE FIELD
3. Lavender LAV100	(SELECT ONE) ✓ YES [GO TO 4] ✓ NO [GO TO B]	(SELECT ONE) ✓ UNABLE TO COLLECT ✓ MEDICAL REASON ✓ SPILLED ✓ REFUSED ✓ OTHER → GO TO 6	[FREE TEXT FIELD] NOTE FIELD
4. Lavender LAV200	(SELECT ONE) ✓ YES [GO TO 4a] ✓ NO [GO TO B]	(SELECT ONE) ✓ UNABLE TO COLLECT ✓ MEDICAL REASON ✓ SPILLED ✓ REFUSED ✓ OTHER → GO TO c	[FREE TEXT FIELD] NOTE FIELD
4a. Lavender LAV300 [LSU ONLY]	(SELECT ONE) ✓ YES [GO TO 5] NO [GO TO B]	(SELECT ONE) ✓ UNABLE TO COLLECT ✓ MEDICAL REASON ✓ SPILLED ✓ REFUSED OTHER → GO TO c	[FREE TEXT FIELD] NOTE FIELD
5. Yellow ACD100	(SELECT ONE) ✓ YES [GO TO 6] ✓ NO [GO TO B]	(SELECT ONE) ✓ UNABLE TO COLLECT ✓ MEDICAL REASON ✓ SPILLED ✓ REFUSED ✓ OTHER → GO TO 6	[FREE TEXT FIELD] NOTE FIELD
6. Yellow ACD200 [LSU ONLY]	(SELECT ONE) ✓ YES [GO TO 7] ✓ NO [GO TO B]	(SELECT ONE) ✓ UNABLE TO COLLECT ✓ MEDICAL REASON ✓ SPILLED ✓ REFUSED ✓ OTHER → GO TO c	[FREE TEXT FIELD] NOTE FIELD
7. Royal Blue BLU101	(SELECT ONE) ✓ YES [GO TO 8] ✓ NO [GO TO B]	(SELECT ONE) ✓ UNABLE TO COLLECT ✓ MEDICAL REASON ✓ SPILLED ✓ REFUSED ✓ OTHER → GO TO 6	[FREE TEXT FIELD] NOTE FIELD

Tube Color	M3a. Collected?	M3b. If no, why?	M3c. If "other", specify
8. Paxgene PAX101	(SELECT ONE) ✓ YES [GO TO N1] ✓ NO [GO TO B]	(SELECT ONE) ✓ UNABLE TO COLLECT ✓ MEDICAL REASON ✓ SPILLED ✓ REFUSED ✓ OTHER → GO TO c	[FREE TEXT FIELD] NOTE FIELD

Section N: Quality Control and Expanded Lymphocyte Isolation Blood Collection

[PROGRAMMER NOTE: ONLY DISPLAY IF PARTICIPANT IS FLAGGED FOR QUALITY CONTROL/QUALITY ASSURANCE SAMPLES]

N2. PARTICIPANT SELECTED FOR QUALITY CONTROL BLOOD DRAW. DID THE PARTICIPANT AGREE TO THE COLLECTION OF ADDITIONAL QUALITY CONTROL BLOOD TUBES?

YES.....1

NO...... 2 [GO TO N4]

QC SUB QUESTIONS

N3. DID YOU COLLECT THE FOLLOWING QUALITY CONTROL TUBES?

Tube Color	N3a.	N3b.	N3c.
	Collected?	If not, why?	If "other", specify
1.	(SELECT ONE)	(SELECT ONE) ✓ UNABLE TO COLLECT ✓ MEDICAL REASON ✓ SPILLED ✓ REFUSED ✓ OTHER → GO TO c	[FREE TEXT
Red	✓ YES [GO TO 2]		FIELD]NOTE
QRED	✓ NO [GO TO B]		FIELD
2. Lavender QLAV	(SELECT ONE) ✓ YES [GO TO 3] ✓ NO [GO TO B]	(SELECT ONE) ✓ UNABLE TO COLLECT ✓ MEDICAL REASON ✓ SPILLED ✓ REFUSED ✓ OTHER → GO TO C	[FREE TEXT FIELD] NOTE FIELD
3.	(SELECT ONE)	(SELECT ONE) ✓ UNABLE TO COLLECT ✓ MEDICAL REASON ✓ SPILLED ✓ REFUSED ✓ OTHER → GO TO c	[FREE TEXT
Yellow	✓ YES [GO TO 4]		FIELD]NOTE
QACD	✓ NO [GO TO B]		FIELD
4. Royal Blue QBLU01	(SELECT ONE) ✓ YES [GO TO O1] ✓ NO [GO TO B]	(SELECT ONE) ✓ UNABLE TO COLLECT ✓ MEDICAL REASON ✓ SPILLED ✓ REFUSED ✓ OTHER → GO TO C	[FREE TEXT FIELD]NOTE FIELD

Gulf Study

N5. PARTICIPANT SELECTED FOR EXPANDED LYMPHOCYTE ISOLATION BLOOD COLLECTION. DID THE PARTICIPANT AGREE TO THE COLLECTION OF ADDITIONAL EXPANDED LYMPHOCYTE ISOLATION BLOOD TUBES?

YES......1

NO......2 [GO TO SECTION O]

ELI QUESTIONS

N6. DID YOU COLLECT THE FOLLOWING EXPANDED LYMPHOCYTE ISOLATION TUBES?

Tube Color	N6a. Collected?	N6b. If not, why?	N6c. If "other", specify
1. Yellow ACD300	(SELECT ONE) ✓ YES [GO TO 2] ✓ NO [GO TO B]	(SELECT ONE) ✓ UNABLE TO COLLECT ✓ MEDICAL REASON ✓ SPILLED ✓ REFUSED ✓ OTHER → GO TO c	[FREE TEXT FIELD] NOTE FIELD
2. Yellow ACD400	(SELECT ONE) ✓ YES [GO TO 3] ✓ NO [GO TO B]	(SELECT ONE) ✓ UNABLE TO COLLECT ✓ MEDICAL REASON ✓ SPILLED ✓ REFUSED ✓ OTHER → GO TO c	[FREE TEXT FIELD] NOTE FIELD
3. Yellow ACD500	(SELECT ONE) ✓ YES [GO TO 01] ✓ NO [GO TO B]	(SELECT ONE) ✓ UNABLE TO COLLECT ✓ MEDICAL REASON ✓ SPILLED ✓ REFUSED ✓ OTHER → GO TO c	[FREE TEXT FIELD]NOTE FIELD
4. Yellow ACD600	(SELECT ONE) ✓ YES [GO TO O1] NO [GO TO B]	(SELECT ONE) ✓ UNABLE TO COLLECT ✓ MEDICAL REASON ✓ SPILLED ✓ REFUSED OTHER → GO TO C	[FREE TEXT FIELD]NOTE FIELD

Section O: Finger Stick

YES	/AS A FINGER STICK CAPILLARY BLOOD SAMPLE COLLECTED? 1
	O1a. DATE OF CAPILLARY BLOOD SAMPLE [PROGRAMMER NOTE: AUTO-FILL DATE]/[MM/DD/YYYY]
	O1b. ENTER TIME OF CAPILLARY BLOOD SAMPLE: [HH:MM] [GO TO QUESTION O2] AM1 PM2
	O1c. IF NO, PROVIDE A REASON UNABLE TO COLLECT

O2. RECORD HEMOGLOBIN A1C RESULT

<2.5%

ENTER VALUE BETWEEN 2.5 AND 14% [FREE TEXT FIELD] >14.0%

O3. RECORD BLOOD LIPIDS RESULTS

Lipid Panel	Value
O3a.Total Cholesterol (mg/dL)	
O3b. HDL Cholesterol (mg/dL)	
O3c. Triglycerides (mg/dL)	
O3d. LDL Cholesterol (mg/dL)	

at

Section P: Visual Acuity and Contrast Sensitivity

P1. Do you normally wear or use glasses, contacts or something else to help you see a distance (for example, while driving a car)? YES
P1a. Are you wearing them or do you have them with you today? YES
[EXAMINER NOTE: IF PARTICIPANT BROUGHT GLASSES OR CONTACTS MAKE SURE THEY ARE WORN FOR TESTING]
VISUAL ACUITY TEST
P2. WAS VISUAL ACUITY TEST ATTEMPTED? YES
P2a. IF NO, PROVIDE A REASON EQUIPMENT MALFUNCTION1[GO TO P7] PARTICIPANT UNABLE TO UNDERSTAND/FOLLOW DIRECTIONS
2[GO TO P7] OTHER, SPECIFY [FREE TEXT FIELD]
P3. DATE OF VISUAL ACUITY TEST [PROGRAMMER NOTE: AUTO-FILL DATE]/[MM/DD/YYYY]
P4. RECORD START TIME: [HH:MM] AM

VISUAL ACUITY TEST GUIDE: SELECT THE HIGHEST ROW WITHOUT ANY **ERRORS**

LINE	LEFT	вотн	RIGHT	Select One
1	ZN	RO	нк	O PASSED
2	RKS	HNC	ZOD	O PASSED
3	HCDV	SKZO	RNDS	O PASSED
4	ZROD	NSCH	VZKN	O PASSED
5	KHSC	OZNR	DNVC	O PASSED
6	ONRZV	DKHCS	KDSON	O PASSED
7	SDCHN	VRZKO	HSNRD	O PASSED
RESULTS NOT	O N/A			

TS NOT

[PROGRAMMER NOTE: IF ROW 1-7 IS CHECKED, GO TO P5. IF RESU OBTAINED, GO TO P6]	JL
P5. WAS PARTICIPANT WEARING CORRECTIVE LENSES? YES 1 NO 2 [BOTH RESPONSES GO TO QUESTION P7]	
P6. IF RESULT NOT OBTAINED, PROVIDE A REASON EQUIPMENT MALFUNCTION PARTICIPANT UNABLE TO UNDERSTAND/FOLLOW DIRECTIONS OTHER, SPECIFY [FREE TEXT FIELD] DON'T KNOW REFUSED	2 3
P6a. RECORD STOP TIME: [HH:MM] AM 1 PM 2	

CONTRAST SENSITIVITY TEST

P7. WAS CONTRAST SENSITIVITY TEST ATT YES 1 [GO TO QUESTION P8] NO 2	EMPTED?
P7a. IF NO, PROVIDE A REASON EQUIPMENT MALFUNCTIONPARTICIPANT UNABLE TO UNDERSTA	AND/FOLLOW DIRECTIONS
OTHER, SPECIFY [FREE TEXT FIELD] DON'T KNOW REFUSED	3[GO TO Q1] 8[GO TO Q1]
P8. DATE OF CONTRAST SENSITIVITY TEST DATE] // [MM/DD/YYYY]	PROGRAMMER NOTE: AUTO-FILL
P9. RECORD START TIME OF CONTRAST SI : [HH:MM] AM 1 PM 2	ENSITIVITY TEST

P10. [PROGRAMMER NOTE: DISPLAY THE BELOW TABLE ON THE SCREEN FOR EXAMINER DURING CONTRAST SENSITIVITY TESTING]

CONTRAST SENSITIVITY TEST GUIDE

DEMONSTRATION GUIDE						
U	U	U				
L	L	L				
R	R	R				

RECORD DATA FOR CONTRAST SENSITIVITY TEST

Test A Guide								
1	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	9
U	U	L	R	U	L	L	L	

P10a. ENT								
<u> </u>	_	/ALUE 1-9 T UNABI I	-	FRSTAN	D/FOLLO\	W INSTRI	UCTIONS	10
REF	USED							11
OTH	HER, SPE	CIFY [FRI	EE TEXT I	FIELD]				12
			Te	est B Guid	de			
1	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
U	L	R	U	R	L	U	U	
 PAF REF	P10b. ENTER TEST B RESULT VALUE TEST VALUE 1-9 PARTICIPANT UNABLE TO UNDERSTAND/FOLLOW INSTRUCTIONS10 REFUSED							
			Te	est C Guid	de		<u> </u>	
1	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
U	L	U	R	L	R	U	R	
P10c. ENTER TEST C RESULT VALUE TEST VALUE 1-9 PARTICIPANT UNABLE TO UNDERSTAND/FOLLOW INSTRUCTIONS10 REFUSED								
			Te	est D Guid	de			
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
U	U	U	R	R	L	U	L	
REF	TEST \ RTICIPAN FUSED	/ALUE 1-9 T UNABLI	9 E TO UND	ERSTAN			UCTIONS	11

			Te	est E Guid	de			
1	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	9
U	R	U	L	R	U	R	R	

P10e. ENTER TEST E RESULT VALUE TEST VALUE 1-9	
PARTICIPANT UNABLE TO UNDERSTAND/FOLLOW INSTRUCTIONS 10 REFUSED11	İ
OTHER, SPECIFY [FREE TEXT FIELD]12	
P11. RECORD STOP TIME OF CONTRAST SENSITIVITY TEST: [HH:MM]	
<u></u>	
PM 2	

Section Q: Grip Strength Dynamometry

YES	
Q1a. IF NO, PROVIDE A REASON EQUIPMENT MALFUNCTION	TO R1] TO R1] TO R1]
Q2. DATE OF HAND/GRIP STRENGTH TEST [PROGRAMMER NOTE: AUT DATE]// [MM/DD/YYYY]	O-FILL
Q3. Are you right handed, left handed, or do you use both hands equally to w and complete most other tasks? RIGHT HANDED	rite with
Q4. RECORD START TIME: [HH:MM] AM 1 PM 2	

Q5. RECORD DYNAMOMETER (HAND/GRIP STRENGTH) RESULTS

Hand	Q5a. Trial 1	Q5b. Trial 2	Q5c. Trial 3	Q5d. All Trials Done?	Q5e. Reason	Q5e1. Reason Free Text Field
1. Right Hand Grip (lb)	(ENTER LBS)	(ENTER LBS)	(ENTER LBS)	(SELECT ONE) YES [GO TO Q5a2] NO [GO TO Q5e1]	(SELECT ONE) REFUSED OTHER:	[FREE TEXT FIELD] NOTE FIELD
2. Right Hand Grip (lb)	(ENTER LBS)	(ENTER LBS)	(ENTER LBS)	(SELECT ONE) YES [GO TO Q6] NO [GO TO Q5e2]	(SELECT ONE) REFUSED OTHER:	[FREE TEXT FIELD] NOTE FIELD

Q6. REC	ORD STOP TIME
:	[HH:MM]
AM	1
PM	2

Section R: Vibrotactile Threshold Measurement

[PROGRAMMER NOTE: DISPLAY R1 - R3 ON ONE SCREEN] R1. WAS VIBROTACTILE THRESHOLD TEST ATTEMPTED? YES...... 1 [GO TO R2] NO......2 R1a. IF NO, PROVIDE A REASON PARTICIPANT UNABLE TO UNDERSTAND/FOLLOW DIRECTIONS OTHER, SPECIFY [FREE TEXT FIELD]......3[GO TO S1] DON'T KNOW 8[GO TO S1] REFUSED 9[GO TO S1] R2. DATE OF VIBROTACTILE THRESHOLD TEST [PROGRAMMER NOTE: AUTO-FILL DATE __ _/_ _⁻/_ _ _ _ _ [MM/DD/YYYY] R3. RECORD START TIME ___ _: ___ [HH:MM] AM..... 1 PM......2

R4. RECORD RESULTS FOR VIBROTACTILE THRESHOLD TEST

Toe	1 Down	2 Up	3 Down	4 Up	5 Down	6 All Trials Done?	7 Reason	7a Reason Free Text
R4a. Right	(ENTER VALUE)	(ENTER VALUE)	(ENTER VALUE)	(ENTER VALUE)	(ENTER VALUE)	(SELECT ONE) YES [GO TO R4b1] NO [GO TO R4a7]	(SELECT ONE) EQUIPMENT MALFUNCTI ON PARTICIPANT UNABLE TO UNDERSTAN D/ FOLLOW DIRECTIONS REFUSED OTHER	[FREE TEXT FIELD]

	1	2	3	4	5	6	7	7a Reason
Toe	Down	Up	Down	Up	Down	All Trials	Reason	Free Text
						Done?		
R4b. Left	(ENTER VALUE)	(ENTER VALUE)	(ENTER VALUE)	(ENTER VALUE)	(ENTER VALUE)	(SELECT ONE) YES [GO TO R5] NO [GO TO R4b7]	(SELECT ONE) EQUIPMENT MALFUNCTI ON PARTICIPANT UNABLE TO UNDERSTAN D/ FOLLOW DIRECTIONS REFUSED OTHER	[FREE TEXT FIELD]

R5. REC	ORD STOP TIME
:	[HH:MM]
AM	
PM	2

Section S: Accusway (Postural Stability)

S1. WAS POSTURAL STABILITY/STANDING STEADINESS TEST (SWAY) PERFORMED?
YES 1 [GO TO S2] NO 2
S1a. IF NO, PROVIDE A REASON EQUIPMENT MALFUNCTION
S2. DATE OF POSTURAL STABILITY/STANDING STEADINESS TEST (SWAY) [PROGRAMMER NOTE: AUTO-FILL DATE]// [MM/DD/YYYY]
S3. RECORD START TIME OF POSTURAL STABILITY/STANDING STEADINESS TEST (SWAY): [HH:MM] AM 1 PM 2
S3a. ENTER PROBLEMS ENCOUNTERED DURING ACCUSWAY TEST NONE
S4. RECORD STOP TIME OF POSTURAL STABILITY/STANDING STEADINESS TEST (SWAY): [HH:MM] AM

Section T: Single Leg Stance

ONE LEG STAND TRIAL 1 T1. WAS ONE LEG STAND TRIAL 1 ATTEMPTED? YES
T1a. IF NO, PROVIDE A REASON PARTICIPANT UNABLE TO UNDERSTAND/FOLLOW DIRECTIONS
T1b. RECORD START TIME OF SINGLE LEG STANCE TEST: [HH:MM] AM 1 PM 2
T2. RECORD RESULT OF ONE LEG STAND TRIAL 1 UNABLE TO ATTAIN POSITION
[PROGRAMMER NOTE: IF "HOLDS FOR 1 SECOND, BUT < 30 SECONDS" DISPLAY INTERVIEWER NOTE = GO TO LEG STAND TRIAL 2, GO TO T3. ELSE DISPLAY INTERVIEWER NOTE = GO TO LONG DISTANCE CORRIDOR WALK, GO TO T6a]
ONE LEG STAND TRIAL 2
T3. WAS ONE LEG STAND TRIAL 2 PERFORMED? YES 1 [GO TO T4] NO
T3a. IF NO, PROVIDE A REASON PARTICIPANT UNABLE TO UNDERSTAND/FOLLOW DIRECTIONS1[GO TO T6a] OTHER, SPECIFY [FREE TEXT FIELD]2[GO TO T6a] DON'T KNOW8[GO TO T6a]
REFUSED9[GO TO T6a]

Version 6.0 (09/11/2015) Gulf STUDY
T4. RECORD RESULT OF ONE LEG STAND TRIAL 2 UNABLE TO ATTAIN POSITION 1 UNABLE TO HOLD FOR 1 SEC 2 HOLDS FOR 1 SEC BUT < 30 SEC, RECORD TIME IN SECONDS
[PROGRAMMER NOTE: IF "HOLDS FOR 1 SECOND, BUT < 30 SECONDS" DISPLAY INTERVIEWER NOTE = GO TO ONE LEG STAND TRIAL 3, GO TO T5. ELSE DISPLAY INTERVIEWER NOTE = GO TO LONG DISTANCE CORRIDOR WALK, GO TO T6a]
ONE LEG STAND TRIAL 3
T5. WAS ONE LEG STAND TRIAL 3 PERFORMED? YES
T5a. IF NO, PROVIDE A REASON PARTICIPANT UNABLE TO UNDERSTAND/FOLLOW DIRECTIONS1[GO TO T6a] OTHER, SPECIFY [FREE TEXT FIELD]2[GO TO T6a] DON'T KNOW8[GO TO T6a]
REFUSED9[GO TO T6a]
T6. RECORD RESULT OF ONE LEG STAND TRIAL 3 UNABLE TO ATTAIN POSITION
T6a. RECORD STOP TIME OF SINGLE LEG STANCE TEST:: [HH:MM] AM
[GO TO U1]

Section U: Long Distance Corridor Walk

U1. Is there any reason you would feel unsafe or unable to complete the walking tests? YES, SPECIFY [FREE TEXT FIELD] 1 [GO TO V1] NO
[PROGRAMMER NOTE: IF YES, SKIP REMAINDER OF SECTION U; DO NOT ALLOW FOR FURTHER DATA ENTRY]
[EXAMINER NOTE: THE FOLLOWING ARE EXCLUSION QUESTIONS FOR THE LONG DISTANCE CORRIDOR WALK]
[PROGRAMMER NOTE: THE FOLLOWING ARE EXCLUSION QUESTIONS FOR THE LONG DISTANCE CORRIDOR WALK. SKIP LONG DISTANCE CORRIDOR WALK IF ANY OF i) YES, "DON'T KNOW" OR "REFUSED" TO QUESTIONS C5, C6, OR C8, ii) BP \geq 180 SYSTOLIC OR \geq 110 DIASTOLIC, iii) HR \leq 40 BPM OR \geq 120, iv) YES TO U2 OR U3.]
U2. Will you need any walking aids or assistive devices such as crutches, a cane or walker to help you complete the walking tests today? YES
U3. Are you wearing shoes that make it difficult for you to walk? YES1[GO TO V1] NO2 DON'T KNOW8 REFUSED9
U4. DATE OF LONG DISTANCE CORRIDOR WALK [PROGRAMMER NOTE: AUTOFILL DATE]// [MM/DD/YYYY]

U5. RECORD LAP TIMES FOR LONG DISTANCE CORRIDOR WALK (400M)

	Record Laps	U5a. Lap Start Time	U5b. Lap Time	U5c. Total Time Elapsed
0	Start – click here	[auto-record HH:MM:SS:MS]	00:00:00	00:00:00
1	Lap 1 – click here	[auto-record HH:MM:SS:MS]	=LAP1 – START	=LAP1 – START
2	Lap 2 – click here	[auto-record HH:MM:SS:MS]	=LAP2 – LAP1	=LAP2 – START
3	Lap 3 – click here	[auto-record HH:MM:SS:MS]	=LAP3 – LAP2	=LAP3 – START
4	Lap 4 – click here	[auto-record HH:MM:SS:MS]	=LAP4 – LAP3	=LAP4 – START
5	Lap 5 – click here	[auto-record HH:MM:SS:MS]	=LAP5 – LAP4	=LAP5 – START
6	Lap 6 – click here	[auto-record HH:MM:SS:MS]	=LAP6 – LAP5	=LAP6 – START
7	Lap 7 – click here	[auto-record HH:MM:SS:MS]	=LAP7 – LAP6	=LAP7 – START
8	Lap 8 – click here	[auto-record HH:MM:SS:MS]	=LAP8 – LAP7	=LAP8 – START
9	Lap 9 – click here	[auto-record HH:MM:SS:MS]	=LAP9 – LAP8	=LAP9 – START
10	End – click here	[auto-record HH:MM:SS:MS]	=END – LAP9	=END - START
11	TEST ENDED PREMATURELY – click here	[auto-record HH:MM:SS:MS]		=END - START
12	Reset – click here			

[PROGRAMMER NOTE: IF ROWS 1-10 ARE COMPLETE, GO TO V1. IF TEST ENDED PREMATURELY, GO TO U6]

U6. ENTER REASON LONG DISTANCE CORRIDOR	R WALK WAS NOT COMPLETED
PARTICIPANT UNABLE TO WALK FULL DIST	TANCE 1 [GO TO V1]
OTHER, SPECIFY [FREE TEXT FIELD]	2 [GO TO V1]
DON'T KNOW	8 [GO TO V1]
REFUSED	

Section V: Trail Making Test (TMT) Parts A & B

YES	AS TRAILMAKING TEST ATTEMPTED? 1 [GO TO V2] 2	
	V1a. IF NO, PROVIDE A REASON PARTICIPANT UNABLE TO UNDERSTAND/FOLLOW DIF OTHER, SPECIFY [FREE TEXT FIELD] DON'T KNOW REFUSED	1[GO TO W1] 4[GO TO W1] 8[GO TO W1]
	GRAMMER NOTE: IF NO OR REFUSED, SKIP OR SUPPR MAKING TEST QUESTIONS]	RESS ADDITIONAL
	ATE OF TRAILMAKING TEST [PROGRAMMER NOTE: AU / [MM/DD/YYYY]	TO-FILL DATE]
: AM	ECORD START TIME [HH:MM] 1 2	

V4. RECORD RESULTS FOR TRAILMAKING

Test	V4a. Score obtained?	V4b. Score (in seconds)	V4c. Describe reason no score obtained	V4c1. Reason Free Text
1. Trail Making Test A	(SELECT ONE) YES [GO TO V4b1] NO [GO TO V4c1]	(ENTER TIME) MM:SS:MS [GO TO V4d1]	(SELECT ONE) EQUIPMENT MALFUNCTION PARTICIPANT UNABLE TO UNDERSTAND/FOLLOW INSTRUCTIONS OTHER	[FREE TEXT FIELD]
2. Trail Making Test B	(SELECT ONE) YES [GO TO V4b2] NO [GO TO V4c2]	(ENTER TIME) MM:SS:MS [GO TO V4d2]	(SELECT ONE) EQUIPMENT MALFUNCTION PARTICIPANT UNABLE TO UNDERSTAND/FOLLOW INSTRUCTIONS OTHER	[FREE TEXT FIELD]

V5. REC	ORD STOP TIME
:	[HH:MM]
AM	
PM	2

National Institute of Environmental Health Science (NIEHS) Version 6.0 (09/11/2015)	GuLF STUDY
V6. SCAN BARCODE FOR TRAILMAKING FORM A	
_ _ _ - _D _O _C	
[PROGRAMMER NOTE: CHECK THAT BARCODE MATCHES CURRENT PARTICIPANT ID]	Г
V7. SCAN BARCODE FOR TRAILMAKING FORM B	
_ _ _ _ _ - _D _O _C	

[PROGRAMMER NOTE: CHECK THAT BARCODE MATCHES CURRENT PARTICIPANT ID]

52

Section W: Computer Based Neurobehavioral Testing

W1. WAS ANY OF THE NEUROBEHAVIORAL TEST BATTERY (BARS COMPUTER TESTS) COMPLETED? YES
W1a. IF NO, PROVIDE A REASON EQUIPMENT MALFUNCTION
[PROGRAMMER NOTE: IF NO OR REFUSED, SKIP NEUROBEHAVIORAL TEST QUESTIONS]
W2. DATE OF NEUROBEHAVIORAL TEST BATTERY [PROGRAMMER NOTE: AUTO-FILL DATE]// [MM/DD/YYYY]
W3. RECORD START TIME: [HH:MM] AM 1 PM 2
W3a. ENTER PROBLEMS ENCOUNTERED DURING BARS TESTS NONE
W4. RECORD STOP TIME: [HH:MM] AM 1 PM 2

Section X: Exhaled Nitric Oxide (eNO)

X1. Within the last hour, have you smoked a cigarette, cigar, pipe, or used any other
tobacco product?
YES1
NO2
DON'T KNOW8
REFUSED9
X2. Within the last hour, have you done any vigorous or strenuous exercise? Vigorous or strenuous exercise requires hard physical effort and often times leads to heavy breathing and a faster heartbeat. YES
X3. Within the last hour, have you had anything to eat or drink?
YES1
NO2
DON'T KNOW8
REFUSED9
X4. <u>Within the last 3 hours</u> have you eaten beets, broccoli, cabbage, celery, lettuce, spinach, radishes or root vegetables?
YES1
NO2
DON'T KNOW8
REFUSED9
X5. Within the last 3 hours have you eaten bacon, ham, hot dogs, or smoked fish?
YES1
NO2
DON'T KNOW8
REFUSED9
NET 00ED
X6. Within the past 2 days have you used any oral or inhaled steroids? (I.e. inhaled
glucocorticoids and montelukast)?
YES1
NO2
DON'T KNOW8
REFUSED9

X7. <u>In the past 7 days</u> , have you had a cough, cold, airway infection, respiratory illness, phlegm or runny nose? Do not count allergies or hay fever.
YES1
NO2
DON'T KNOW8
REFUSED9
X8. WAS TEST FOR EXHALED NITRIC OXIDE COMPLETED? YES
V6
X8a. IF NO, PROVIDE A REASON EQUIPMENT MALFUNCTION1[GO TO Y1]
PARTICIPANT UNABLE TO UNDERSTAND/FOLLOW DIRECTIONS
2[GO TO Y1] OTHER, SPECIFY [FREE TEXT FIELD]3[GO TO Y1]
DON'T KNOW8[GO TO Y1]
REFUSED9[GO TO Y1]
X9. DATE EXHALED NITRIC OXIDE TEST PERFORMED [PROGRAMMER NOTE: AUTO-FILL DATE]//[MM/DD/YYYY]
X10. RECORD START TIME
: [HH:MM]
AM
V44 LIOW MANY TOTAL MANIEUVEDS/ATTEMPTS WEDE DEDEODMEDS
X11. HOW MANY TOTAL MANEUVERS/ATTEMPTS WERE PERFORMED? [EXAMINER NOTE: NO MORE THAN 8 TOTAL MANEUVERS/ATTEMPTS SHOULD BE PERFORMED] I_I
X12. RECORD STOP TIME
: [HH:MM]
AM1
PM 2

Section Y: Pulmonary Function Testing (PFT)

[PROGRAMMER NOTE: IF THE AVERAGE SYSTOLIC BP \geq 180 OR DIASTOLIC BP \geq 110 OR HEART RATE < 40 OR > 120, OR INDICATED THAT PARTICIPANT IS FEMALE AND PREGNANT, SKIP PULMONARY FUNCTION TEST.]

[PROGRAMMER NOTE: QUESTIONS C3 – C12 ARE EXCLUSION CRITERIA FOR PULMONARY FUNCTION TESTING. IF "YES", "DON'T KNOW" OR "REFUSED" TO ANY OF THESE QUESTIONS. SKIP PULMONARY FUNCTION TEST.]

ANY OF THESE QUESTIONS, SKIP PULMONARY FUNCTION TEST.]
Y1. Do you consider yourself to be Hispanic or Latino? [INTERVIEWER READ IF PARTICIPANT IS UNSURE OF DEFINITION OF HISPANIC OR LATINO: Where do your ancestors come from? Puerto Rico, Cuba, Dominican Republic, Mexico, Central or South America or another Latin American country?] YES
Y2. What race do you consider yourself to be? Please select one or more of these categories: [NOTE TO INTERVIEWER: READ CHOICES 1-5, PROBE AND RECORD OTHER IF NECESSARY, SELECT ALL THAT APPLY] American Indian or Alaskan Native
[PROGRAMMER NOTE: UPDATE DATA WITH CORRECTED RACE/ETHNICITY]
Y3. Do you consider your (biological) mother to be Hispanic or Latino? [INTERVIEWER READ IF PARTICIPANT IS UNSURE OF DEFINITION OF HISPANIC OR LATINO: Where do your ancestors come from? Puerto Rico, Cuba, Dominican Republic, Mexico, Central or South America or another Latin American country?] YES

Gulf STUDY

Y4. What race do you consider your (biological) mother to be? Please select one or more of these categories:

[NOTE TO INTERVIEWER: READ CHOICES 1-5, PROBE AND RECORD OTHER IF NECESSARY, SELECT ALL THAT APPLY]

American Indian or Alaskan Native	1
Asian	2
Black or African American	3
Native Hawaiian or Pacific Islander	4
White	5
OTHER, SPECIFY [FREE TEXT FIELD]	6
DON'T KNOW	8
REFUSED	9

Y5. Do you consider your biological) father to be Hispanic or Latino? [INTERVIEWER READ IF PARTICIPANT IS UNSURE OF DEFINITION OF HISPANIC OR LATINO: Where do your ancestors come from? Puerto Rico, Cuba, Dominican Republic, Mexico, Central or South America or another Latin American country?]

YES	. 1
NO	2
DON'T KNOW	8
REFUSED	9

Y6. What race do you consider your (biological) father to be? Please select one or more of these categories:

[NOTE TO INTERVIEWER: READ CHOICES 1-5, PROBE AND RECORD OTHER IF NECESSARY, SELECT ALL THAT APPLY]

American Indian or Alaskan Native	1
Asian	2
Black or African American	3
Native Hawaiian or Pacific Islander	4
White	5
OTHER, SPECIFY [FREE TEXT FIELD]	6
DON'T KNOW	8
REFUSED	9

[PROGRAMMER NOTE: CALCULATE EACH PARENT'S PFT RACE/ETHNICITY:

IF HISPANIC = YES, PFT RACE/ETHNICITY = HISPANIC, ELSE IF RACE = BLACK OR AFRICAN AMERICAN, PFT RACE/ETHNICITY = AFRICAN AMERICAN, ELSE PFT RACE/ETHNICITY = CAUCASIAN]

[PROGRAMMER NOTE: CALCULATE PARTICIPANT'S PFT RACE/ETHNICITY:

IF MOTHER **OR** FATHER = HISPANIC, PARTICIPANT PFT RACE/ETHNICITY = HISPANIC, ELSE
IF MOTHER **AND** FATHER = AFRICAN AMERICAN, PARTICIPANT PFT RACE/ETHNICITY = AFRICAN AMERICAN, ELSE PARTICIPANT PFT RACE/ETHNICITY = CAUCASIAN]

Y7. DID PARTICIPANT COMPLETE PULMONARY FUNCTION TESTI YES	NG (PFT)?
Y7a. IF NO, PROVIDE A REASON EQUIPMENT MALFUNCTION MEDICAL REASON OTHER, SPECIFY [FREE TEXT FIELD] DON'T KNOW REFUSED	2[GO TO Z1] 3[GO TO Z1] 8[GO TO Z1]
Y8. DATE OF PFT PROCEDURE [PROGRAMMER NOTE: AUTO-FILL // [MM/DD/YYYY]	DATE]

Y9. ENTER THE FOLLOWING PARTICIPANT	INFORMATION IN PET SOFTWARE.

DATE OF BIRTH:	[FILL DOB]
SEX:	[FILL SEX]
HEIGHT IN INCHES:	[FILL AVERAGE HEIGHT (E2d)]
WEIGHT IN POUNDS:	[FILL AVERAGE WEIGHT (F2d)]
MOTHER'S	[FILL MOTHER'S CALCULATED PFT
RACE/ETHNICITY FOR PFT:	RACE/ETHNICITY]
FATHER'S	[FILL FATHER'S CALCULATED PFT
RACE/ETHNICITY FOR PFT:	RACE/ETHNICITY]
PARTICIPANT'S	[FILL PARTICIPANT'S CALCULATED PFT
RACE/ETHNICITY FOR PFT:	RACE/ETHNICITY]

'10. RECORD START TIME OF PRE- BRONCHODILATOR (ALBUTEROL) SPIROMETRY
: [HH:MM]
۸M1
PM2
10a. DID PARTICIPANT AGREE TO ALBUTEROL ADMINISTRATION?
'ES1 [GO TO QUESTION Y11]
IO 2 [GO TO QUESTION Y10b]

Y10b. IF NO, PROVIDE A REASON MEDICAL REASON
Y11. RECORD START TIME OF BRONCHODILATOR (ALBUTEROL) ADMINISTRATION: [HH:MM] AM
Y12. BRONCHODILATOR (ALBUTEROL) PUFFS ADMINISTERED ONE 1 TWO 2 THREE 3 FOUR 4
Y13. RECORD START TIME OF POST-BRONCHODILATOR (ALBUTEROL) SPIROMETRY: [HH:MM] AM
Y14. RECORD STOP TIME OF SPIROMETRY TEST: [HH:MM] AM 1 PM 2

Section Z: Medical Referrals

Z1. [DISPLAY INTERVIEWER NOTE – PRINT RESULTS FORM AND PROVIDE TO PARTICIPANT]

PROGRAMMING CHECKS FOR MEDICAL REFERRALS NEEDED

BLOOD PRESSURE:

IF SYSTOLIC BP ≥ 140 OR DIASTOLIC ≥ 90 THEN BLOOD PRESSURE REFERRAL = YES ELSE BLOOD PRESSURE REFERRAL = NO

HEART RATE:

IF HEART RATE > 100 BPM OR HEART RATE < 60 BPM THEN HEART RATE REFERRAL = YES ELSE HEART RATE REFERRAL = NO

TOTAL CHOLESTEROL:

IF TOTAL CHOLESTEROL ≥ 200 mg/dL THEN TOTAL CHOLESTEROL REFERRAL = YES ELSE TOTAL CHOLESTEROL REFERRAL = NO

HDL CHOLESTEROL:

IF HDL CHOLESTEROL < 60 mg/dL
THEN HDL CHOLESTEROL REFERRAL = YES
ELSE HDL CHOLESTEROL REFERRAL = NO

LDL CHOLESTEROL:

IF LDL CHOLESTEROL ≥ 130 mg/dL THEN LDL CHOLESTEROL REFERRAL = YES ELSE LDL CHOLESTEROL REFERRAL = NO

TRIGLYCERIDES:

IF TRIGLYCERIDES ≥ 150 mg/dL
THEN TRIGLYCERIDES REFERRAL = YES
ELSE TRIGLYCERIDES REFERRAL = NO

BLOOD A1C:

IF BLOOD A1C > 5.7% THEN BLOOD A1C REFERRAL = YES ELSE BLOOD A1C REFERRAL = NO

IF NO TO ALL, GO TO MENTAL HEALTH PROGRAMMING CHECKS, ELSE CONTINUE

[DISPLAY INTERVIEWER NOTE – ONE OR MORE MEDICAL REFERRALS SHOULD BE OFFERED]

REFER TO PARTICIPANT'S REPORT OF FINDINGS TO DETERMINE IF ANY MEDICAL REFERRALS SHOULD BE OFFERED

Z2. WAS A MEDICAL REFERRAL PROVIDED BASED ON EXAM RESULTS (PAGES 1-3 OF THE RESULTS FORM)? YES..... 1 NO...... 2 [GO TO Z3] Z2a. ENTER REASON(S) MEDICAL REFERRAL WAS PROVIDED (SELECT ALL THAT APPLY) BMI01 BLOOD PRESSURE02 HEART RATE......03 TOTAL CHOLESTEROL......04 HDL CHOLESTEROL......05 LDL CHOLESTEROL......06 TRIGLYCERIDES......07 LUNG FUNCTION TEST09 OTHER, SPECIFY [FREE TEXT FIELD]10 Z2b. ENTER NAME, LOCATION OF PRIMARY MEDICAL REFERRAL GIVEN [PRACTICE NAME] [ADDRESS1] [CITY] [ST] [ZIP] PROGRAMMING CHECKS FOR MENTAL HEALTH REFERRALS NEEDED ANXIETY: IF GAD-7 SCORE ≥ 10 (MODERATE – SEVERE) THEN ANXIETY REFERRAL = YES ELSE ANXIETY REFERRAL = NO PTSD: IF YES TO ANY QUESTIONS IN PC-PTSD SCALE THEN PTSD REFERRAL = YES ELSE PTSD REFERRAL = NO **DEPRESSION:** IF PHQ SCORE ≥ 10 (MODERATE – SEVERE)

THEN DEPRESSION REFERRAL = YES

ELSE DEPRESSION REFERRAL = NO

IF NO TO ALL, GO TO Z4, ELSE CONTINUE

[DISPLAY INTERVIEWER NOTE – ONE OR MORE MENTAL HEALTH REFERRALS SHOULD BE OFFERED]
REFER TO PARTICIPANT'S REPORT OF FINDINGS TO DETERMINE IF ANY MENTAL HEALTH REFERRALS SHOULD BE OFFERED

Z3. WAS A MENTAL HEALTH REFERRAL PROVIDED BASED ON SURVEY QUESTIONS (PAGE 4 OF THE RESULTS FORM)? YES 1 NO	
Z3a. ENTER REASON(S) MENTAL HEALTH REFERRAL WAS PROVIDED (SELECT ALL THAT APPLY) ANXIETY	
Z3b. ENTER NAME AND LOCATION OF PRIMARY MENTAL HEALTH REFERRAL GIVEN [NAME] [ADDRESS1] [CITY] [ST] [ZIP]	
Z4. WERE ANY OTHER REFERRALS PROVIDED? YES 1 NO	
Z4a. HOW MANY ADDITIONAL REFERRALS WERE PROVIDED? _ _ NUMBER OF REFERRALS	
[PROGRAMMER NOTE: LOOP THROUGH Z4b-Z4c FOR EACH REFERRAI PROVIDED/INDICATED]	
Z4b. REASON FOR REFERRAL #1: MENTAL HEALTH PROBLEMS	
Z4c. NAME, LOCATION OF REFERRAL #1	

```
[NAME]
    [ADDRESS1]
    [CITY]
    [ST]
    [ZIP]
Z4d. REASON FOR REFERRAL #2:
MENTAL HEALTH PROBLEMS......1
MEDICAL PROBLEMS......2
SOCIAL PROBLEMS (HOMELESSNESS, ALCOHOL/DRUGS, ETC.) ......3
OTHER, SPECIFY [FREE TEXT FIELD]......4
Z4e. NAME, LOCATION OF REFERRAL #2
    [NAME]
    [ADDRESS1]
    [CITY]
    [ST]
    [ZIP]
    []
Z4f. REASON FOR REFERRAL #3:
MENTAL HEALTH PROBLEMS......1
MEDICAL PROBLEMS......2
SOCIAL PROBLEMS (HOMELESSNESS, ALCOHOL/DRUGS, ETC.) ......3
OTHER, SPECIFY [FREE TEXT FIELD]......4
Z4g. NAME, LOCATION OF REFERRAL #3
    [NAME]
    [ADDRESS1]
    [CITY]
    [ST]
    [ZIP]
```

Z4h. REASON FOR REFERRAL #4: MENTAL HEALTH PROBLEMS
Z4i. NAME, LOCATION OF REFERRAL #4 [NAME] [ADDRESS1] [CITY] [ST] [ZIP]
Z4j. REASON FOR REFERRAL #5: MENTAL HEALTH PROBLEMS
Z4k. NAME, LOCATION OF REFERRAL #5 [NAME] [ADDRESS1] [CITY] [ST] [ZIP]

Section AA: Check-Out, Review and Remuneration

AA1. GIFT CARD AMOUNT PARTICIPANT RECEIVED FOR VISIT REMUNERATION \$100 (FULL EXAM)1[GO TO AA2] \$50 (MINI EXAM)2[GO TO AA2] NONE3
AA1a. PROVIDE REASON: [FREE TEXT FIELD] [GO TO AA4]
AA2. ENTER VISIT GIFT CARD SERIAL NUMBER #1 SERIAL NUMBER: [FREE TEXT FIELD] [IF \$50 SELECTED AT AA1, GO TO AA4]
AA3. ENTER VISIT GIFT CARD SERIAL NUMBER #2 SERIAL NUMBER: [FREE TEXT FIELD]
AA4. GIFT CARD AMOUNT PARTICIPANT RECEIVED FOR TRAVEL \$50 (61 MILES OR MORE ROUND TRIP)1[GO TO AA5] \$25 (60 MILES OR LESS ROUND TRIP)2[GO TO AA5] NONE
AA4a. PROVIDE REASON: [FREE TEXT FIELD] [GO TO AA6]
AA5. ENTER TRAVEL GIFT CARD SERIAL NUMBER SERIAL NUMBER: [FREE TEXT FIELD]
AA6. GIFT CARD AMOUNT PARTICIPANT RECEIVED FOR MEALS \$25 (OVERNIGHT STAY)
AA7. ENTER MEALS GIFT CARD SERIAL NUMBER SERIAL NUMBER: [FREE TEXT FIELD]
AA8. SCAN RECEIPT BARCODE
_ _ _ - _D _O _C
[PROGRAMMER NOTE: CHECK THAT BARCODE MATCHES CURRENT PARTICIPANT ID]
[PROGRAMMER NOTE: ALLOW ENTRY AT AA9 ONLY IF L3 = YES (PRACTICE SALIVA SAMPLE OBTAINED)]

National Institute of Environmental Health Science (NIEHS) Version 6.0 (09/11/2015)	GuLF STUDY
AA9. SCAN BARCODE OF AT-HOME SALIVA COLLECTION KIT ID IIIII- _S _L _V _B _O _X	
[DISPLAY EXAMINER MESSAGE: DISTRIBUTE TAKE-HOME SALIVA CONTROLOGICAL CONTROLOGICA CONTROLOG	OLLECTION
[END OF EXAM]	