2.2 Additional Materials 2. Pre- and Post-Exposure Subject Packet

	EXPOSURE VISITS	Comment	Change 10SEP2012	Change 17OCT2012	Change 02JAN2013	Change 20JAN2013	Change 25MAR2013
1	Before Pre-Exposure Visit Phone Questionnaire 08MAR2012						
	PRE						
	~~Pre-Exposure Day Check List 24MAY2012~~				deleted NTG procedure & added lines for repeating		
1	Pre-Exposure Day Check List 23DEC2012						
2	PES Return and Process 25MAY2012						
3	Randomization Packet Assignment 16May2012 (example)	sample; use originals sent to centers		file posted was dated 03APR and did not match actual file			
4	Pre-Exposure Health Questionnaire 01MAR2012						
5	Vital Signs and Blood Pressure – PRE and POST Data Form 07MAY2012						
	~~Pre- Exp- Post- Blood Tracking Form 23MAY2012~~				added space for comments		
6	Pre- Exp- Post- Blood Tracking Form v B 23MAY2012						
	~~Brachial Artery Ultrasound Case Report Form (CRF) 20JUL2012~~				clarified procedure and removed NTG	Added spaces to record HR on the BSL and the RH Doppler images	C5 and C6 switched; some sections were renumbered or relabeled
	~~Brachial Artery Ultrasound Case Report Form (CRF) 20DEC2012~~						
7	~~Brachial Artery Ultrasound Case Report Form (CRF) 20DEC2012~~						
	Brachial Artery Ultrasound Case Report Form (CRF) 14FEB2013						
8	BAU Tracking Form 30May2012					same as t11	
	EXP						
	~~Exposure Day Check List Centers Combined 24MAY2012~~	use timer checklist with same date			deleted NTG procedure & added lines for repeating the BAU, if needed		
	~~Exposure Day Check List Centers Combined 10SEP2012~~		Reconciled with Exposure Day Exercise Data Form. Timer checklist reconciled with word version				
1	Exposure Day Check List Centers Combined 23DEC2012						
2	Vital Signs and Blood Pressure Log – Exposure Day 07MAY2012	use same form for subsequent measures					
3	Symptom Questionnaire 05MAR2012						
4	Holter Card Tracking Form 25May2012						
5	Spirometry Data Form 16APR2012						
	~~Exposure Day Exercise Data Form 07MAY2012~~		Reconciled with checklist	Edits of column headers			
6	~~Exposure Day Exercise Data Form 10SEP2012~~						
	Exposure Day Exercise Data Form 10OCT2012						
7	Symptom Questionnaire 05MAR2012						
8	Spirometry Data Form 16APR2012						
	~~Pre- Exp- Post- Blood Tracking Form 23MAY2012~~				added space for comments		
9	Pre- Exp- Post- Blood Tracking Form v B 23MAY2012						
	~~Brachial Artery Ultrasound Case Report Form (CRF) 20JUL2012~~					Added spaces to record HR on the BSL and the RH Doppler images	C5 and C6 switched; some sections were renumbered or relabeled
	~~Brachial Artery Ultrasound Case Report Form (CRF) 20DEC2012~~				clarified procedure and removed NTG		
t10	~~Brachial Artery Ultrasound Case Report Form (CRF) 20JAN2013~~						
	Brachial Artery Ultrasound Case Report Form (CRF) 14FEB2013						
t11	BAU Tracking Form 30May2012						

	EXPOSURE VISITS	Comment	Change 10SEP2012	Change 17OCT2012	Change 02JAN2013	Change 20JAN2013	Change 25MAR2013
t12	Symptom Questionnaire 05MAR2012						
t13	~~Vital Signs and Blood Pressure Log – Exposure Day 07MAY2012~~					not needed	

	POST	Comment	Change 02JAN2013
1	Post-Exposure Day Checklist 24MAY2012		
2	Vital Signs and Blood Pressure – PRE and POST Data Form 07MAY2012		
3	Symptom Questionnaire 05MAR2012		
	~~Pre- Exp- Post- Blood Tracking Form 23MAY2012~~		added space for comments
4	Pre- Exp- Post- Blood Tracking Form v B 23MAY2012		
5	Spirometry Data Form 16APR2012		
6	Sputum Supernatant and Slide Tracking Form 25MAY2012		
7	Subject Instructions Before Exposure Visit 25MAY2012		
8	Subject instructions for use of PES 02MAR2012		
9	PES Tracking Form 04MAY2012		
o10	Subject Instruction for Filling Out the Activity Diary 23MAR2012		
o11	MOSES Activity Diary 20APR2012		

Before Pre-Exposure Visit Phone Questionnaire

(8 or 9 days before pre-exposure visit)

A1. Subject ID Label:

A2. Visit: ☐EXP1 ☐EXP2 ☐EXP3 A3. Today's date: __ __ - __ __ __ - __ __ __ __

A4. Time: __ __:__ __ A5. Initials of caller: ___ ___ ___

Hello. My name is < name> and I am the <title> for the MOSES study at <SITE>. I'd like to ask you a few questions and give you a few reminders about your upcoming visit. Do you have about 10 minutes now?

If subject does not have time: When would be a good time to call you back?

Date: __ __ - __ __ __ - __ __ __ __ A4. Time: __ __:__ __

If subject has time:

You were last here on __ __ - __ __ __ - __ __ __ __ and most of these questions will relate to the time since then.

B1. Have there been any changes in your health since <date>? If yes, describe:	☐ Yes	☐ No
B2. Have you visited a doctor since <date>?If yes, describe:	☐ Yes	☐ No
B3. Did you have a change in medication since <date>? If yes, describe:	☐ Yes	☐ No
B4. Have you received any shots (flu, pneumonia, others) since <date>? If yes, describe:	☐ Yes	☐ No
B5. Have you had any infection, skin rash, etc. since <date>? If yes, describe:	☐ Yes	☐ No
B6. Have you had any injury since <date>? If yes, describe:	☐ Yes	☐ No
B7. Have you had a cold or flu in the past 6 weeks? If yes, describe:	☐ Yes	☐ No

If any items above would warrant rescheduling: Thank you for your time today. Due to the changes you have described, we will need to have you come in at a different time that we originally planned. *Reschedule subject. Record Date*: __ __ - __ __ __ - __ __ __ __ I will give you a reminder call approximately one week before then.

If everything is fine to proceed: Thank you for your time today. Your upcoming visit is scheduled for: __ __ - __ __ __ - __ __ __ __ . I'd like to remind you of a few dos and don'ts as you prepare for your study visit.

Before Pre-Exposure Visit Phone Questionnaire

(8 or 9 days before pre-exposure visit)

A1. Subject ID Label:

A2. Visit: ☐EXP1 ☐EXP2 ☐EXP3 A3. Today's date: __ __ - __ __ __ - __ __ __ __

Starting 1 week before your visit on __ __ - __ __ __ - __ __ __ __ please avoid aspirin, ibuprofen, naproxen, multivitamins, vitamin C, vitamin E, antihistamines, antioxidants, decongestants, fish oil, niacin, arginine, Viagra, Cialis, and Levitra. You may not take these items for the entire week before coming in and while here for your exposure.

Three days before coming in, please put on the exposure monitor (starting on __ __ - __ __ __ - __ __:__ __ at 12:00 noon). We will take it off on the day that you come in for your study visit. While you are wearing the exposure monitor, please remember to fill out the activity diary.

Please remember to bring non-restrictive exercise clothing with you for the time you will be in the exercise chamber and the tests afterward.

Please remember, you are allowed caffeine on the morning that you come in for your study visit, but you will need to avoid any caffeinated beverage after that. You will also need to abstain from alcoholic beverages for three days beginning on the day that you come in for your visit. Finally, on the morning that you come in, you are to avoid strenuous exercise and heavy lifting.

Do you have any questions? YES NO

MOSES Study

Pre-Exposure Day Check List

A1. Subject ID Label: A2. Today's Date __ __ - __ __ __ - __ __ __ __

A3. Visit: ☐PRE1 ☐PRE2 ☐PRE3

Time				Done	SOP #
UCSF/ UR Target time	UNC Target time	Actual time			
			Subject was called at least 8 days before visit to remind about attaching PES and abstaining from prohibited medications. Subject was asked to respond to Before Pre-Exposure Visit Phone Questionnaire	☐ ☐	
11:30	12:00		Subject arrives at the clinic	☐	
			Collect personal monitor and put into labeled storage vial.	☐	
			Record Sampler ID label here:	☐	
			Refrigerate Sampler	☐	
11:45	12:15		Provide Low fat lunch	☐	
			If this is the first exposure, select next Randomization Envelope for the Subject and record envelope ID on the Randomization Packet Assignment Form. Follow randomization instructions. For all exposures, deliver sealed randomization envelope for the proper exposure to the chamber technician per your site's procedures.	☐	
			Date and time PES first put on (from activity diary) DD - MMM - Y Y Y Y H H:M M		
			Date and time put into storage vial at site DD - MMM - Y Y Y Y H H:M M		
			Fill out PES Return and Process (form) in ADEPT	☐	
			Disassemble sampler and unload filters (as soon as possible)	☐	PES #41
			Collect Activity diary	☐	
12:15	12:45		Review Activity Diary – clarify any questionable items.		
12:30	13:00		Administer Pre-Exposure Day Health Questionnaire Cleared to proceed? ☐Yes -- Proceed ☐No -- Re-schedule	☐	
12:45	13:15		Is pregnancy test indicated (Female and < 1 year since Last Menstrual Period)? ☐Yes ☐No -- Proceed If Yes, administer pregnancy test Is test positive? ☐Yes -- Discharge subject ☐ No -- Proceed	☐	

MOSES Study

Pre-Exposure Day Check List

A1. Subject ID Label: A2. Today's Date __ __ - __ __ __ - __ __ __ __

A3. Visit: ☐PRE1 ☐PRE2 ☐PRE3

Time				Done	SOP #
UCSF/ UR Target time	UNC Target time	Actual time			
12:50	13:20		Prepare subject for Vital Sign measurements	☐	VS/BP PRE, EXP, POS #3
12:55	13:25		Take Vital Signs and record on Vital Signs and Blood Pressure – Pre and Post Data Form	☐	
13:00	13:30		Physician exam and review Pre-Exposure Day Health Questionnaire	☐	
			Subject meets all criteria for continuing to exposure day MD signature:_____ Date: __ __ - __ __ __ - __ __ __ __	☐	
14:15	14:45		Perform phlebotomy (SOP) (left arm preferred)	☐	PHLEB #12
			Draw One Blue top tube (discard)	☐	
			Draw 4.5 mL Blue top tube for Flow Cytometry, MP-TF, vWF	☐	
			Draw 4.5 mL Blue top tube for AssayGate	☐	
			Draw 4.5 mL Blue top tube for archiving	☐	
			Draw 4.0 mL Lavender top tube for CBC and send to local clinical lab immediately	☐	
			Fill out Pre- Exp- Post- Blood Tracking Form	☐	
14:30	15:00		Start preparing subjects for BAU procedure (SOP). Begin filling out the Case Report Form.	☐	BAU #31
14:40	15:10		Subject rests in supine position in quiet room with rings, watch and phone off for 10 minutes.	☐	
14:50	15:20		Affix BP cuff on Left arm. Affix small BP cuff on lower Right arm	☐	
			Perform BAU (right arm occluded under the cuff): flow- mediated (SOP)	☐	
			Complete BAU Case Report Form	☐	
			If BAU needs to be repeated (i.e. if the RH Doppler image does not capture at least two full cardiac cycles demonstrating cuff release effects on blood flow velocity) have the <u>subject rest laying down for 20 minutes</u> and then repeat the procedure. Begin filling out a new Case Report Form	☐	BAU #31
			Affix BP cuff on Left arm. Affix small BP cuff on lower Right arm	☐	
			Perform BAU (right arm occluded under the cuff): flow- mediated	☐	

MOSES Study

Pre-Exposure Day Check List

A1. Subject ID Label: A2. Today's Date __ __ - __ __ __ - __ __ __ __

A3. Visit: ☐PRE1 ☐PRE2 ☐PRE3

Time				Done	SOP #
UCSF/ UR Target time	UNC Target time	Actual time			
			Complete BAU Case Report Form	☐	
15:25	15:55		Provide carry-out dinner and some snacks, and instructions for the evening including: no exercise, no alcohol, no prohibited medications, no caffeinated beverages or chocolate, eat only light snacks and avoid outdoor exposures.	☐	
15:30	**16:00**		Discharge subject to hotel/CRC	☐	

PES Return and Process

A1. Subject ID Label:

A2. Visit: ☐ PRE1

☐ PRE2

☐ PRE3

A3. Form Completion Date: __ __ - __ __ __ - __ __ __ __

A4. Initials of data collector: __ __ __

B1. Was the PES returned intact by the subject?

☐ Yes *(GO TO B2)*

☐ No *(GO TO B7)*

IF PES WAS RETURNED INTACT…

B2. PES ID number returned: {Site Abbreviation} MOSES __ __ __

B3. Exposure Start Date: __ __ - __ __ __ - __ __ __ __

a. Exposure Start Time: __ __ : __ __

B4. Exposure End Date: __ __ - __ __ __ - __ __ __ __

a. Exposure End Time: __ __ : __ __

B5. Total Minutes Sampled: _____ (from ADEPT)

B6. Comments for Analyzing Lab/Unusual Circumstances:

_____

_____

(GO TO B8)

IF PES WAS NOT RETURNED INTACT…

B7. Reason PES was not returned intact:

- □ PES Forgotten by Subject
- □ PES damaged
- □ Other: _____

B8. Other comments: _____

_____

_____

Randomization Assignment - Exposure Level

Randomization Assignment Number
«Envelope_»

Directions to the Chamber Operator – please set the chamber to deliver the Ozone Concentration listed below.

Ozone Concentration	**«Exposure_Level»**

Once exposure is complete, fill in information below. Return this form (and the envelope it came in) in the return envelope provided.

Date of Exposure __ __ -__ __ __ - __ __ __ __

Technician: _____

Start Time: __ __ : __ __ End Time: __ __ : __ __

Please enter the 3 hour average for the following

Relative Humidity	
Temperature	
Ozone Concentration	
UFPM# (optional)	

Explain any deviation from the randomized Ozone concentration amount:

MOSES Study

Pre-Exposure Health Questionnaire

A1. Subject ID Label: A2. Visit: □PRE1 □PRE2 □PRE3

A3. Today's Date: __ __ - __ __ __ - __ __ __ __ A4. Time: __ __ : __ __

A5. Initials of data collector: ___ ___ ___

Since your last visit to this facility on (date) __ __ - __ __ __ - __ __ __ __

B1. Have there been any changes in your health since your previous appointment? If yes, describe:	☐ Yes	☐ No
B2. Have you visited a doctor? If yes, describe:	☐ Yes	☐ No
B3. Did you have a change in medication? If yes, describe:	☐ Yes	☐ No
B4. Have you received any shots (flu, pneumonia, others)? If yes, describe:	☐ Yes	☐ No
B5. Have you had a cold or flu in the past 6 weeks? If yes, describe:	☐ Yes	☐ No
B6. Have you had any infection, skin rash, etc.? If yes, describe:	☐ Yes	☐ No
B7. Have you had any injury? If yes, describe:	☐ Yes	☐ No
B8. Did you avoid aspirin, ibuprofen, naproxen, multivitamins, vitamin C, vitamin E, antihistamines, antioxidants, decongestants, fish oil, niacin, arginine, Viagra, Cialis, and Levitra starting 1 week ago?	☐ Yes	☐ No
B9. Did you avoid strenuous exercise and heavy lifting this morning?	☐ Yes	☐ No
B10. Was your last caffeinated beverage (coffee, sodas, energy drink) at or before breakfast this morning?	☐ Yes	☐ No
B11. Did you wear the exposure monitor in the last three days?	☐ Yes	☐ No
B12. Did you fill out the activity diary?	☐ Yes	☐ No
B13. Were you excessively exposed to ambient or home air pollutants, chemicals, dust? If yes, describe:	☐ Yes	☐ No

Any shaded areas warrant investigation and discussion with physician. Decision must be made to continue with measures or re-schedule.

MOSES Study
Vital Signs and Blood Pressure – PRE and POST Data Form

A1. Subject ID Label: A2. Visit: ☐ PRE1 ☐POS1

A3. Initials of data collector: __ __ __ ☐ PRE2 ☐POS2

A4. Today's date: __ __ - __ __ __ - __ __ __ __ ☐ PRE3 ☐POS3

Vital Signs
Use right arm for BP. For procedure details see SOP.

B1. Time Seated: __ __ : __ __

B2. Temperature: __ __. __ °C (Normal range: 36.5 – 37.5°C) (Temperature is optional)

B3. Breathing Rate: __ __ __ bpm (Normal range: 12 - 20 bpm)

Blood Pressure

C1. Time	C2 a/b .B/P – mmHg	C3. Heart Rate - bpm	C4. Method
This first set of measurements are omitted from the Data base. DO NOT ENTER THEM			
__ __ : __ __	__ __ __ / __ __ __	__ __ __	☐ Automatic BP ☐ Manual BP
The above measurements are omitted from the Data base. DO NOT ENTER THEM			
The measurements below are entered into the database.			
__ __ : __ __	__ __ __ / __ __ __	__ __ __	☐ Automatic BP ☐ Manual BP
__ __ : __ __	__ __ __ / __ __ __	__ __ __	☐ Automatic BP ☐ Manual BP
Record the average BP from ADEPT			
Averages:	__ __ __ / __ __ __	__ __ __	

C5. Comments:_____

_____

PRE-EXPOSURE Only

C6. Has the physician cleared this subject to continue: ☐ Yes ☐ No

MOSES Study
Pre- Exp- Post- Blood Tracking Form

A1. Subject ID Label:

A2. Visit: ☐PRE1 ☐EXP1 ☐POS1
☐PRE2 ☐EXP2 ☐POS2
☐PRE3 ☐EXP3 ☐POS3

A3. Collection & Processing Date: __ __ - __ __ __ - __ __ __ __

B1. Details:

Collection					Processing
Tube	**Yes**	**No**	**Reason (if N) / Comments**	**Time**	
Discard					
Platelet Activation/MP-Tissue Factor and vWF multimers (Blue, #1)	☐	☐			
Soluble markers (Blue, #2)	☐	☐			
Archive (Blue, #3)	☐	☐			
CBC/differential/platelet (Lavender, #4)	☐	☐			

Tube #1	**Yes**	**No**	**Reason (if N) / Comments**
To Flow Cytometry Lab	☐	☐	
MP-TF tube #1	☐	☐	
MP-TF tube #2	☐	☐	
MP-TF tube #3	☐	☐	
MP-TF tube #4	☐	☐	
MP-TF tube #5	☐	☐	
vWFM tube #1	☐	☐	
vWFM tube #2	☐	☐	
vWFM tube #3	☐	☐	
vWFM tube #4	☐	☐	
vWFM tube #5	☐	☐	

Tube #2	**Yes**	**No**	**Reason (if N) / Comments**
For Soluble Markers	☐	☐	

Tube #3	**Yes**	**No**	**Reason (if N) / Comments**
Plasma microtube #1	☐	☐	
Plasma microtube #2	☐	☐	
Plasma microtube #3	☐	☐	

Tube #4	**Yes**	**No**	**Reason (if N) / Comments**
To Clinical Lab	☐	☐	

This form will be entered into the database

MOSES Study

Brachial Artery Ultrasound Case Report Form

Section A.

A1. Subject ID Label:_____ A2. Visit: □ PRE1 □EXP1

A3. Initials of Sonographer: __ __ __ □ PRE2 □ EXP 2

A4. Date: __ __ - __ __ __ - __ __ __ __ □ PRE3 □ EXP 3

Section B B1. DOB: __ __ - __ __ __ - __ __ __ __ B2. Gender: □Male □Female

B3. Arrival Time to FMD: __ __ __ __ B4. Tape/CD #_____

Section C - Assessment

C1. Distance from Antecubital Crease: (cm):_____

C2. Approach: ☐Medial ☐ Lateral ☐Perpendicular

C3. Angle to Skin (degree – measured with protractor):_____

C4. Vessel and focus depth (cm):_____ C5. TGC aligned at __ . __ cm from the left

C6. Anatomic landmarks: _____

Section D - Recording Times

D1.	**Time of recording (hr: min: sec)**
a. Baseline	___ ___:___ ___:___ ___
b. Cuff inflation	___ ___:___ ___:___ ___
c. @ 5 min	___ ___:___ ___:___ ___
d. @30 sec post CD	___ ___:___ ___:___ ___
e. @ 45 sec post CD	___ ___:___ ___:___ ___
f. @ 60 sec post CD	___ ___:___ ___:___ ___
g. @ 75 sec post CD	___ ___:___ ___:___ ___
h. @ 90 sec post CD	___ ___:___ ___:___ ___
i. @ 105 sec post CD	___ ___:___ ___:___ ___
j. @ 120 sec post CD	___ ___:___ ___:___ ___

Section E. Blood Pressure and Heart Rate

E1. a. BSL BP ___ ___ ___/___ ___ ___ b. Heart Rate ___ ___ ___

E2. HR on BSL Doppler Image ___ ___ ___ E3. HR on RE BSL Doppler Image ___ ___ ___

E4. HR on RH Doppler Image ___ ___ ___

E5. a. Post RH BP ___ ___ ___ /___ ___ ___ b. Heart Rate ___ ___ ___

E6. Comments:

BAU Tracking Form

A1. Subject ID Label:

A2. Visit: ☐ PRE1 ☐EXP1

☐ PRE2 ☐ EXP2

☐ PRE3 ☐ EXP3

A3. Date performed: __ __ - __ __ __ - __ __ __ __

B1. BAU Tape/CD # assigned: _____

MOSES Study

Exposure Day Check List (UNC, UR, UCSF)

A1. Subject ID Label A2. Date completed: _ _- _ _ _ - _ _ _ _

A3. Visit: ☐EXP1 ☐EXP2 ☐EXP3 Center_____

PRINT CHECKSLIST WITH TIMER WHEN READY TO START

Target Time		Actual time		Done	Following SOP #
UNC	UR/ UCSF				
07:30	**07:00**		Subject arrives at the laboratory/clinic. Provide breakfast.	☐	
07:50	7:20		Prepare subject for Vital Sign measurements.	☐	VS/BP PRE, EXP, POST #3
07:55	07:25		Take Vital Signs (SOP). Record on **Vital Sign and Blood Pressure Log – Exposure Day**	☐	
07:58	07:28		Symptom Questionnaire is filled out by the subject	☐	
08:00	07:30		Prepare Holter, battery, flash card. **Enter three-digit Serial Number here**_____ **Set date and time in synchrony with the central clock for the study.** Note that the time recorded on the checklist from now on must be the actual time that appears on the Holter Clock. Attach Holter Monitor leads (subject is laying down) (SOP) and check. Attach leads for 3-lead ECG telemetry monitoring (SOP)	☐ ☐ ☐ ☐	HOLTER #22
			Begin continuous Holter recording	☐	
			Print at least 6 second ECG	☐	
08:10	07:40		Subject lies quietly for 10 minutes for HRV measurement (SOP) –make sure time on Holter matches time on lab clock and on checklist	☐	HOLTER #22
08:20	07:50		Spirometry is measured (SOP). Record on **Spirometry Data Form**	☐	SPIR #6
08:27	07:57		Subject visits the restroom if needed		
			If symptoms or abnormal pattern is noted at any time during exposure, obtain print out from cardiac monitor.		
			Record all activities on the **Exposure Day Exercise Data Form**. Copy exact times from this data form to this check list when done.		
08:30	**08:00**		**Exposure begins (SOP). Exercise Period 1 begins.**	☐	EXP CHAMBER
08.30	08:00		Set treadmill/bicycle load settings obtained during training and/or previous exposure visits. Record treadmill/bicycle settings on **Exposure Day Exercise Data Form**	☐	
08:38	08:08		Begin measuring minute ventilation. Continue measuring for 2 minutes.	☐	MINVEN EXP #5
08:39	08:09		HR (and SpO2) measured (SOP). Record on **Exposure Day Exercise Data Form**	☐	VS/BP #3

Exposure Day Check List (UNC, UR, UCSF)

A1. Subject ID Label A2. Date completed: _ _- _ _ _ - _ _ _ _

A3. Visit: ☐EXP1 ☐EXP2 ☐EXP3 Center_____

Target Time		Actual time		Done	Following SOP #
UNC	UR/ UCSF				
08:40	08:10		Record average of 9-10 minute ventilation data on **Exposure Day Exercise Data Form** Adjust treadmill/bicycle load as needed to achieve target minute ventilation (_____ L/min – from Data Form) and record new settings on **Exposure Day Exercise Data Form**	☐ ☐	
08:43	08:13		Begin measuring minute ventilation. Continue measuring for 2 minutes.	☐	MINVEN #5
08:44	08:14		HR (and SpO2) measured (SOP). Record on **Exposure Day Exercise Data Form**	☐	VS/BP #3
08:45	08:15		Record average of 14-15 minute ventilation data on **Exposure Day Exercise Data Form** Adjust treadmill/bicycle load as needed to achieve target minute ventilation (_____ L/min – from Data Form) and record new settings on **Exposure Day Exercise Data Form**	☐ ☐	
			Rest period 1 begins	☐	
09:00	**08.30**		**Exercise Period 2 begins**.	☐	
09:13	08:43		Begin measuring minute ventilation. Continue measuring for 2 minutes.	☐	MINVEN #5
09:14	08:44		HR (and SpO2) measured (SOP). Record on **Exposure Day Exercise Data Form**	☐	VS/BP #3
09:15	08:45		Record average of 14-15 minute ventilation data on **Exposure Day Exercise Data Form** Adjust as needed and record treadmill/bicycle load settings on **Exposure Day Exercise Data Form**	☐ ☐	
			Rest Period 2 begins	☐	
09:25	08:55		Resting BP measured (SOP) –only one measurement (after 5 min rest period). Record on **Exposure Day Exercise Data Form**	☐	VS/BP #3
09:30	**09:00**		**Exercise Period 3 begins.**	☐	
09:44	9:14		HR (and SpO2) measured (SOP). Record on **Exposure Day Exercise Data Form** Adjust as needed and record treadmill/bicycle load settings on **Exposure Day Exercise Data Form**	☐ ☐	VS/BP #3
09:45	09:15		**Rest Period 3 begins.**	☐	

Exposure Day Check List (UNC, UR, UCSF)

A1. Subject ID Label A2. Date completed: _ _- _ _ _ - _ _ _ _

A3. Visit: ☐EXP1 ☐EXP2 ☐EXP3 Center_____

Target Time		Actual time		Done	Following SOP #
UNC	UR/ UCSF				
10:00	**09:30**		**Exercise Period 4 begins.**	☐	
10:13	09:43		Begin measuring minute ventilation. Continue measuring for 2 minutes.	☐	MINVEN #5
10:14	09:44		HR (and SpO2) measured (SOP). Record on **Exposure Day Exercise Data Form**	☐	VS/BP #3
10:15	09:45		Record average of 14-15 minute ventilation data on **Exposure Day Exercise Data Form** Adjust as needed and record treadmill/bicycle load settings on **Exposure Day Exercise Data Form**	☐ ☐	
			Rest Period 4 begins	☐	
10:25	09:55		Resting BP measured (SOP) - only one measurement (after 5 min rest period). Record on **Exposure Day Exercise Data Form**	☐	VS/BP #3
10:30	**10:00**		**Exercise Period 5 begins.**	☐	
10:44	10:14		HR (and SpO2) measured (SOP). Record on **Exposure Day Exercise Data Form** Adjust as needed and record treadmill/bicycle load settings on **Exposure Day Exercise Data Form**	☐ ☐	VS/BP #3
10:45	10:15		**Rest Period 5 begins**	☐	
11:00	**10:30**		**Exercise Period 6 begins**.	☐	
11:13	10:43		Begin measuring minute ventilation (SOP). Continue measuring for 2 minutes.	☐	MINVEN #5
11:14	10:44		HR (and SpO2) measured (SOP). Record on **Exposure Day Exercise Data Form**	☐	VS/BP #3
11:15	10:45		Record average of 14-15 minute ventilation data on **Exposure Day Exercise Data Form** Record treadmill/bicycle load settings on **Exposure Day Exercise Data Form**	☐ ☐	
			Rest Period 6 begins	☐	
11:20	10:50		Symptom Questionnaire filled out by Subject	☐	
11:25	10.55		Prepare subject for Vital Sign measurements	☐	VS/BP #3

Exposure Day Check List (UNC, UR, UCSF)

A1. Subject ID Label A2. Date completed: _ _- _ _ _ - _ _ _ _

A3. Visit: ☐EXP1 ☐EXP2 ☐EXP3 Center_____

Target Time		Actual time		Done	Following SOP #
UNC	UR/ UCSF				
11:30	**11:00**		**Exposure ends.** Take Vital Signs (SOP) and record on **Vital Sign and Blood Pressure Log – Exposure Day** **Subject exits the chamber**	☐ ☐	
11:35	11:05		Subject lies quietly for 10 minutes for HRV measurements-–indicate exact start time	☐	HOLTER # 22
11:45	11:15		Remove 3-lead ECG telemetry leads	☐	
11:50	11:15		Spirometry is measured (SOP). Record on **Spirometry Data Form**	☐	SPIR #6
12:15	**11:45**		Provide low fat lunch	☐	
			Subject sits in quiet room. Provide TV, radio, magazines or books		
14:30	14:00		Subject lies quietly for 10 minutes for HRV measurement–indicate exact start time	☐	HOLTER # 22
14:45	14:15		Perform phlebotomy (SOP) (left arm preferred)	☐	PHLEB #12
			Draw 4 mL in Blue top tube (discard)	☐	
			Draw 4.5 mL Blue top tube for Flow Cytometry, MP-TF, vWF	☐	
			Draw 4.5 mL Blue top tube for AssayGate	☐	
			Draw 4.5 mL Blue top tube for archiving	☐	
			Draw 4.0 mL in Lavender top tube for CBC and send to local clinical lab immediately	☐	
			Fill out **Pre- Exp- Post- Blood Tracking Form**	☐	
15:00	14:30		Start preparing subjects for BAU procedure. Begin filling out the **Case Report Form**. (SOP)	☐	BAU #31
			Subject rests in supine position in quiet room with rings, watch and phone off for 10 minutes.	☐	
			Affix BP cuff on Left Arm. Affix small BP cuff on lower Right arm	☐	
15:20	14:50		Perform BAU (right arm occluded under the cuff): flow- mediated	☐	
			Complete BAU **Case Report Form**	☐	

Exposure Day Check List (UNC, UR, UCSF)

A1. Subject ID Label A2. Date completed: _ _- _ _ _ - _ _ _ _

A3. Visit: ☐EXP1 ☐EXP2 ☐EXP3 Center_____

Target Time		Actual time		Done	Following SOP #
UNC	UR/ UCSF				
			If the BAU needs to be repeated (i.e. if the RH Doppler image does not capture at least two full cardiac cycles demonstrating cuff release effects on blood flow velocity) have the subject rest laying down for 20 minutes and then repeat the procedure. Begin filling out a new Case Report Form	☐	
			Affix BP cuff on Left arm. Affix small BP cuff on lower Right arm	☐	
			Perform BAU (right arm occluded under the cuff): flow- mediated	☐	
			Complete **BAU Case Report Form**	☐	
15:50	15:20		**Symptom questionnaire** is filled out by subject	☐	
15:55	15:25		Prepare subject for Vital Sign measurements	☐	VS/BP #3
16:00	15:30		Take Vital Signs and record on **Vital Sign and Blood Pressure Log – Exposure Day** Check Holter leads, keep on	☐ ☐	
16:10 **16:15**	15:40 **15:45**		Provide instructions for the evening and the next morning including: no exercise, no alcohol, no prohibited medications or supplements, no caffeinated beverages or chocolate, eat light dinner, no food after 7:30 AM tomorrow morning and avoid outdoor exposures. Do not shower or take a bath (to protect the Holter instrument from damage) and do not be close to microwave if it is in use. Discharge subject to home	☐ ☐	

MOSES Study

Vital Signs and Blood Pressure Log – Exposure Day

A1. Subject ID Label

A2. Date completed: __ __ - __ __ __ - __ __ __ __

A3. Visit: ☐EXP1 ☐EXP2 ☐EXP3

Time Point	Time Taken	Temperature (Optional)	Breathing Rate (Optional)	Heart Rate	Blood Pressure (mmHg)	Arm Used/ Method Used	Comments (and optional SpO2)	DC initials
Pre Exposure – Discard	__ __:__ __	__ __. __	__ __ __	__ __ __	__ __ __ / __ __ __	☐Right ☐Left ☐ Automatic ☐ Manual		__ __ __
Pre Exposure –	__ __:__ __	__ __. __	__ __ __	__ __ __	__ __ __ / __ __ __	☐Right ☐Left ☐ Automatic ☐ Manual		__ __ __
Pre Exposure –	__ __:__ __	__ __. __	__ __ __	__ __ __	__ __ __ / __ __ __	☐Right ☐Left ☐ Automatic ☐ Manual		__ __ __
Pre Exposure – Average				__ __ __	__ __ __ / __ __ __			
End of Exposure - Discard	__ __:__ __	__ __. __	__ __ __	__ __ __	__ __ __ / __ __ __	☐Right ☐Left ☐ Automatic ☐ Manual		__ __ __
End of Exposure -	__ __:__ __	__ __. __	__ __ __	__ __ __	__ __ __ / __ __ __	☐Right ☐Left ☐ Automatic ☐ Manual		__ __ __
End of Exposure -	__ __:__ __	__ __. __	__ __ __	__ __ __	__ __ __ / __ __ __	☐Right ☐Left ☐ Automatic ☐ Manual		__ __ __
End of Exposure - Average				__ __ __	__ __ __ / __ __ __			

This data will be entered into the database

MOSES Study

Vital Signs and Blood Pressure Log – Exposure Day

A1. Subject ID Label

A2. Date completed: __ __ - __ __ __ - __ __ __ __

A3. Visit: ☐EXP1 ☐EXP2 ☐EXP3

Time Point	Time Taken	Temperature (Optional)	Breathing Rate (Optional)	Heart Rate	Blood Pressure (mmHg)	Arm Used/ Method Used	Comments (and optional SpO2)	DC initials
Post Exposure - Discard	__ __:__ __	__ __. __	__ __ __	__ __ __	__ __ __ / __ __ __	☐Right ☐Left ☐ Automatic ☐ Manual		__ __ __
Post Exposure -	__ __:__ __	__ __. __	__ __ __	__ __ __	__ __ __ / __ __ __	☐Right ☐Left ☐ Automatic ☐ Manual		__ __ __
Post Exposure -	__ __:__ __	__ __. __	__ __ __	__ __ __	__ __ __ / __ __ __	☐Right ☐Left ☐ Automatic ☐ Manual		__ __ __
Post Exposure - Average				__ __ __	__ __ __ / __ __ __			

This data will be entered into the database

MOSES Study
Symptom Questionnaire

A1. Subject ID Label: A2. Today's date: __ __ - __ __ __ - __ __ __ __

Exposure 1	☐Pre-Exposure	☐In Chamber	☐After Exposure	☐ Post (day after) Exposure
Exposure 2	☐Pre-Exposure	☐ In Chamber	☐ After Exposure	☐ Post (day after) Exposure
Exposure 3	☐Pre-Exposure	☐ In Chamber	☐ After Exposure	☐ Post (day after) Exposure

Please rate the severity of your symptoms on a scale indicated below. Circle the number.

0 = NONE (not present)
1 = TRACE/NOTICED (barely detectable)
2 = MILD/LIGHT (present, but not annoying)
3 = MODERATE (present, but somewhat annoying)
4 = SEVERE/HEAVY (present and very annoying and painful)

Symptoms	**NONE**	**TRACE/ NOTICED**	**MILD/ LIGHT**	**MODER-ATE**	**SEVERE/ HEAVY**
1. Headache	0	1	2	3	4
2. Nasal congestion/ stuffy nose	0	1	2	3	4
3. Anxiety	0	1	2	3	4
4. Phlegm or sputum production	0	1	2	3	4
5. Nausea	0	1	2	3	4
6. Chest tightness/pain on deep inspiration	0	1	2	3	4
7. Unusual fatigue or tiredness	0	1	2	3	4
8. Eye irritation	0	1	2	3	4
9. Shortness of breath	0	1	2	3	4
10. Sneezing	0	1	2	3	4
11. Cough	0	1	2	3	4
12. Wheezing/whistling in chest	0	1	2	3	4
13. Throat irritation	0	1	2	3	4
14. Sweating	0	1	2	3	4
15. Fast heart beat or pounding heart	0	1	2	3	4
16. Irregular heartbeat, skipped beats	0	1	2	3	4
17. Other_____	0	1	2	3	4

After exposure: (In chamber only)

Did you smell or taste anything unusual? ☐Yes ☐No

Do you think you were exposed to ozone gas today? ☐Yes ☐No

Holter Card Tracking Form

A1. Subject ID Label:

A2. Visit: ☐ POS1

☐ POS2

☐ POS3

A3. Today's Date: __ __ - __ __ __ - __ __ __ __

B1. Date Holter monitoring started: __ __ - __ __ __ - __ __ __ __

B2. Date Holter monitoring ended: __ __ - __ __ __ - __ __ __ __

MOSES Study

Spirometry Data Form

A1. Subject ID Label: A2. Today's Date: __ __ - __ __ __ - __ __ __ __

A3. Visit: ☐SCRN ☐EXP1 - Before Exposure ☐EXP1 - After Exposure ☐POS1

☐EXP2 - Before Exposure ☐EXP2 - After Exposure ☐POS2

☐EXP3 - Before Exposure ☐EXP3 - After Exposure ☐POS3

A4. Initials of data collector: __ __ __ A5.Start time of first maneuver __ __ : __ __

B1. Spirometry Trials				
Trial	FVC In Liters	FEV_1 In Liters	FEF 25 – 75% In Liters per Second	Comments
1.	__ . __ __ L	__ . __ __ L	__ . __ __ LPS	
2.	__ . __ __ L	__ . __ __ L	__ . __ __ LPS	
3.	__ . __ __ L	__ . __ __ L	__ . __ __ LPS	
4.	__ . __ __ L	__ . __ __ L	__ . __ __ LPS	
5.	__ . __ __ L	__ . __ __ L	__ . __ __ LPS	
6.	__ . __ __ L	__ . __ __ L	__ . __ __ LPS	
7.	__ . __ __ L	__ . __ __ L	__ . __ __ LPS	
8.	__ . __ __ L	__ . __ __ L	__ . __ __ LPS	

Print output charts and enclose in subject's study folder.

AT SCREENING ONLY				
C1.	Predicted	Best (From ADEPT)	% of Predicted (From ADEPT)	% of Predicted must be ≥ 75 for inclusion (From ADEPT)
FVC	__ . __ __ L	__ . __ __ L	__ __ __%	≥ 75? ☐ Yes ☐No
FEV_1	__ . __ __ L	__ . __ __ L	__ __ __%	≥ 75? ☐ Yes ☐No
C2. Best FEV_1/FVC (From ADEPT) __ . __ __ > 0.65? (From ADEPT) ☐ Yes ☐No				

MOSES Study
Exposure Day Exercise Data Form

A1. Subject ID Label: A2. Today's date: __ __ - __ __ __ - __ __ __ __ A3. Initials of data collector: __ __ __

A4. Exposure: ☐EXP1 ☐EXP2 ☐EXP3 A5. ☐Facemask OR ☐Mouth piece

Target ventilation (BTPS) - Fill in targets from Training Day Exercise Form: Lower Target V_E_____L/min Upper Target V_E_____L/min

Target HR (80% max. pred) _____

			Treadmill		Bike					
Period	**Relative Time**	**Actual Time**	**KMPH/MPH**	**Slope %**	**WATTS**	**RPM**	**V_E Avg Last Min Ven (L/min)**	**HR (bpm)**	**BP (mmHg)**	**Comments (and optional SpO_2)**
EX1	0:0	__ __:__ __	Subject begins exercise. Set treadmill/bicycle load settings obtained during training and/or previous exposure visits. Record settings below.							
EX1	0:0									
EX 1	0:7:30		Instruct Subject to get on mouthpiece, nose clip ON							
EX 1	0:8	__ __:__ __	Begin recording minute ventilation							
EX 1	0:9	__ __:__ __								
EX 1	0:10	__ __:__ __								
EX 1	0:10		Instruct Subject to get off mouthpiece, nose clip OFF							
EX 1	0:12:30		Instruct Subject to get on mouthpiece, nose clip ON							
EX 1	0:13	__ __:__ __	Begin recording minute ventilation							
EX 1	0:14	__ __:__ __								
EX 1	0:15	__ __:__ __								
EX 1	0:15		Instruct Subject to get off mouthpiece, nose clip OFF							
RE1	0:15	__ __:__ __	STOP AND REST							

MOSES Study
Exposure Day Exercise Data Form

A1. Subject ID Label:

A2. Today's date: __ __ - __ __ __ - __ __ __ __

			Treadmill		Bike					
Period	**Relative Time**	**Actual Time**	**KMPH/MPH**	**Slope %**	**WATTS**	**RPM**	**V_E Avg Last Min Ven (L/min)**	**HR (bpm)**	**BP (mmHg)**	**Comments (and optional SpO_2)**
EX2	0:30	__ __:__ __	Subject begins exercise							
EX2	0:42:30		Instruct Subject to get on mouthpiece, nose clip ON							
EX2	0:43	__ __:__ __	Begin recording minute ventilation							
EX2	0:44	__ __:__ __								
EX2	0:45	__ __:__ __								
EX2	0:45		Instruct Subject to get off mouthpiece, nose clip OFF							
RE2	0:45	__ __:__ __	STOP AND REST							
RE2	0:55	__ __:__ __	Measure blood pressure						__ __ __ / __ __ __	
EX3	1:00	__ __:__ __	Subject begins exercise							
EX3	1:14	__ __:__ __								
RE3	1:15	__ __:__ __	STOP AND REST							
EX4	1:30	__ __:__ __	Subject begins exercise							
EX4	1:42:30		Instruct Subject to get on mouthpiece, nose clip ON							
EX4	1:43	__ __:__ __	Begin recording minute ventilation							
EX4	1:44	__ __:__ __								
EX4	1:45	__ __:__ __								

This data will be entered into the database

MOSES Study
Exposure Day Exercise Data Form

A1. Subject ID Label: A2. Today's date: __ __ - __ __ __ - __ __ __ __

			Treadmill		Bike					
Period	**Relative Time**	**Actual Time**	**KMPH/MPH**	**Slope %**	**WATTS**	**RPM**	**V_E Avg Last Min Ven (L/min)**	**HR (bpm)**	**BP (mmHg)**	**Comments (and optional SpO_2)**
EX4	1:45		Instruct Subject to get off mouthpiece, nose clip OFF							
RE4	1:45	__ __:__ __	STOP AND REST							
RE4	1:55	__ __:__ __	Measure blood pressure						__ __ __ / __ __ __	
EX5	2:00	__ __:__ __	Subject begins exercise							
EX5	2:14	__ __:__ __								
RE5	2:15	__ __:__ __	STOP AND REST							
EX6	2:30	__ __:__ __	Subject begins exercise							
EX6	2:42:30		Instruct Subject to get on mouthpiece, nose clip ON							
EX6	2:43	__ __:__ __	Begin recording minute ventilation							
EX6	2:44	__ __:__ __								
EX6	2:45	__ __:__ __								
EX6	2:45		Instruct Subject to get off mouthpiece, nose clip OFF							
RE6	2:45	__ __:__ __	STOP AND REST							
RE6	2:50	__ __:__ __	Symptom Questionnaire							
RE6	3:00	__ __:__ __	Exposure ends – Measure Vital Signs							

MOSES Study
Symptom Questionnaire

A1. Subject ID Label: A2. Today's date: __ __ - __ __ __ - __ __ __ __

Exposure 1	☐Pre-Exposure	☐In Chamber	☐After Exposure	☐ Post (day after) Exposure
Exposure 2	☐Pre-Exposure	☐ In Chamber	☐ After Exposure	☐ Post (day after) Exposure
Exposure 3	☐Pre-Exposure	☐ In Chamber	☐ After Exposure	☐ Post (day after) Exposure

Please rate the severity of your symptoms on a scale indicated below. Circle the number.

0 = NONE (not present)
1 = TRACE/NOTICED (barely detectable)
2 = MILD/LIGHT (present, but not annoying)
3 = MODERATE (present, but somewhat annoying)
4 = SEVERE/HEAVY (present and very annoying and painful)

Symptoms	**NONE**	**TRACE/ NOTICED**	**MILD/ LIGHT**	**MODER-ATE**	**SEVERE/ HEAVY**
1. Headache	0	1	2	3	4
2. Nasal congestion/ stuffy nose	0	1	2	3	4
3. Anxiety	0	1	2	3	4
4. Phlegm or sputum production	0	1	2	3	4
5. Nausea	0	1	2	3	4
6. Chest tightness/pain on deep inspiration	0	1	2	3	4
7. Unusual fatigue or tiredness	0	1	2	3	4
8. Eye irritation	0	1	2	3	4
9. Shortness of breath	0	1	2	3	4
10. Sneezing	0	1	2	3	4
11. Cough	0	1	2	3	4
12. Wheezing/whistling in chest	0	1	2	3	4
13. Throat irritation	0	1	2	3	4
14. Sweating	0	1	2	3	4
15. Fast heart beat or pounding heart	0	1	2	3	4
16. Irregular heartbeat, skipped beats	0	1	2	3	4
17. Other_____	0	1	2	3	4

After exposure: (In chamber only)

Did you smell or taste anything unusual? ☐Yes ☐No

Do you think you were exposed to ozone gas today? ☐Yes ☐No

MOSES Study
Pre- Exp- Post- Blood Tracking Form

A1. Subject ID Label:

A2. Visit: ☐PRE1 ☐EXP1 ☐POS1
☐PRE2 ☐EXP2 ☐POS2
☐PRE3 ☐EXP3 ☐POS3

A3. Collection & Processing Date: __ __ - __ __ __ - __ __ __ __

B1. Details:

Collection					Processing
Tube	**Yes**	**No**	**Reason (if N) / Comments**	**Time**	
Discard					
Platelet Activation/MP-Tissue Factor and vWF multimers (Blue, #1)	☐	☐			
Soluble markers (Blue, #2)	☐	☐			
Archive (Blue, #3)	☐	☐			
CBC/differential/platelet (Lavender, #4)	☐	☐			

Tube #1	**Yes**	**No**	**Reason (if N) / Comments**
To Flow Cytometry Lab	☐	☐	
MP-TF tube #1	☐	☐	
MP-TF tube #2	☐	☐	
MP-TF tube #3	☐	☐	
MP-TF tube #4	☐	☐	
MP-TF tube #5	☐	☐	
vWFM tube #1	☐	☐	
vWFM tube #2	☐	☐	
vWFM tube #3	☐	☐	
vWFM tube #4	☐	☐	
vWFM tube #5	☐	☐	

Tube #2	**Yes**	**No**	**Reason (if N) / Comments**
For Soluble Markers	☐	☐	

Tube #3	**Yes**	**No**	**Reason (if N) / Comments**
Plasma microtube #1	☐	☐	
Plasma microtube #2	☐	☐	
Plasma microtube #3	☐	☐	

Tube #4	**Yes**	**No**	**Reason (if N) / Comments**
To Clinical Lab	☐	☐	

This form will be entered into the database

MOSES Study

Brachial Artery Ultrasound Case Report Form

Section A.

A1. Subject ID Label:_____ A2. Visit: □ PRE1 □EXP1

A3. Initials of Sonographer: __ __ __ □ PRE2 □ EXP 2

A4. Date: __ __ - __ __ __ - __ __ __ __ □ PRE3 □ EXP 3

Section B B1. DOB: __ __ - __ __ __ - __ __ __ __ B2. Gender: □Male □Female

B3. Arrival Time to FMD: __ __ __ __ B4. Tape/CD #_____

Section C - Assessment

C1. Distance from Antecubital Crease: (cm):_____

C2. Approach: ☐Medial ☐ Lateral ☐Perpendicular

C3. Angle to Skin (degree – measured with protractor):_____

C4. Vessel and focus depth (cm):_____ C5. TGC aligned at __ . __ cm from the left

C6. Anatomic landmarks: _____

Section D - Recording Times

D1.	**Time of recording (hr: min: sec)**
a. Baseline	___ ___:___ ___:___ ___
b. Cuff inflation	___ ___:___ ___:___ ___
c. @ 5 min	___ ___:___ ___:___ ___
d. @30 sec post CD	___ ___:___ ___:___ ___
e. @ 45 sec post CD	___ ___:___ ___:___ ___
f. @ 60 sec post CD	___ ___:___ ___:___ ___
g. @ 75 sec post CD	___ ___:___ ___:___ ___
h. @ 90 sec post CD	___ ___:___ ___:___ ___
i. @ 105 sec post CD	___ ___:___ ___:___ ___
j. @ 120 sec post CD	___ ___:___ ___:___ ___

Section E. Blood Pressure and Heart Rate

E1. a. BSL BP ___ ___ ___/___ ___ ___ b. Heart Rate ___ ___ ___

E2. HR on BSL Doppler Image ___ ___ ___ E3. HR on RE BSL Doppler Image ___ ___ ___

E4. HR on RH Doppler Image ___ ___ ___

E5. a. Post RH BP ___ ___ ___ /___ ___ ___ b. Heart Rate ___ ___ ___

E6. Comments:

BAU Tracking Form

A1. Subject ID Label:

A2. Visit: ☐ PRE1 ☐EXP1

☐ PRE2 ☐ EXP2

☐ PRE3 ☐ EXP3

A3. Date performed: __ __ - __ __ __ - __ __ __ __

B1. BAU Tape/CD # assigned: _____

MOSES Study
Symptom Questionnaire

A1. Subject ID Label: A2. Today's date: __ __ - __ __ __ - __ __ __ __

Exposure 1	☐Pre-Exposure	☐In Chamber	☐After Exposure	☐ Post (day after) Exposure
Exposure 2	☐Pre-Exposure	☐ In Chamber	☐ After Exposure	☐ Post (day after) Exposure
Exposure 3	☐Pre-Exposure	☐ In Chamber	☐ After Exposure	☐ Post (day after) Exposure

Please rate the severity of your symptoms on a scale indicated below. Circle the number.

0 = NONE (not present)
1 = TRACE/NOTICED (barely detectable)
2 = MILD/LIGHT (present, but not annoying)
3 = MODERATE (present, but somewhat annoying)
4 = SEVERE/HEAVY (present and very annoying and painful)

Symptoms	**NONE**	**TRACE/ NOTICED**	**MILD/ LIGHT**	**MODER-ATE**	**SEVERE/ HEAVY**
1. Headache	0	1	2	3	4
2. Nasal congestion/ stuffy nose	0	1	2	3	4
3. Anxiety	0	1	2	3	4
4. Phlegm or sputum production	0	1	2	3	4
5. Nausea	0	1	2	3	4
6. Chest tightness/pain on deep inspiration	0	1	2	3	4
7. Unusual fatigue or tiredness	0	1	2	3	4
8. Eye irritation	0	1	2	3	4
9. Shortness of breath	0	1	2	3	4
10. Sneezing	0	1	2	3	4
11. Cough	0	1	2	3	4
12. Wheezing/whistling in chest	0	1	2	3	4
13. Throat irritation	0	1	2	3	4
14. Sweating	0	1	2	3	4
15. Fast heart beat or pounding heart	0	1	2	3	4
16. Irregular heartbeat, skipped beats	0	1	2	3	4
17. Other_____	0	1	2	3	4

After exposure: (In chamber only)

Did you smell or taste anything unusual? ☐Yes ☐No

Do you think you were exposed to ozone gas today? ☐Yes ☐No

MOSES Study

Post-Exposure Day Check List

A1. Subject ID Label A2. Date completed: __ __ - __ __ __ - __ __ __ __

A3. Visit: ☐POS1 ☐POS2 ☐POS3

Time			Done	Following SOP #
Target	Actual			
08:00		Subject arrives at the clinic. Make sure that the time on the Holter Clock matches the time on the lab clock. The time recorded on the checklist must be the actual time that appears on the Holter Clock.	☐	
08:05		Ask Subject what time they last ate. Record __ __ : __ __	☐	
08:10		Prepare subject for Vital Signs	☐	VS/BP PRE, EXP, POS #3
08:15		Take Vital Signs. (SOP) Record on Vital Signs and Blood Pressure – Pre and Post Data Form	☐	
08:20		Symptom questionnaire is filled out by subject	☐	
08:30		Subject lies quietly for 10 minutes -–indicate exact start time	☐	HOLTER # 22
		Remove Holter Monitor leads. Fill out Holter Card Tracking Form	☐	
08:50		Phlebotomy (left arm preferred)	☐	PHLEB #12
		Draw One Blue top tube (discard)	☐	
		Draw 4.5 mL Blue top tube for Flow Cytometry, MP-TF, vWF	☐	
		Draw 4.5 mL Blue top tube for AssayGate	☐	
		Draw 4.5 mL Blue top tube for archiving	☐	
		Draw 4.0 mL in Lavender top tube for CBC and send to local clinical lab immediately	☐	
		Fill out Pre- Exp- Post- Blood Tracking Form		
09:10		Do spirometry - Record spirometry on Spirometry Data Form	☐	SPIR #6
09:30		Start sputum induction procedure (SOP)	☐	SPUTUM #7
		May provide snack		
10:15		Physician evaluates and approves discharge (can be done at any time during the visit)	☐	
		Have PES ready and fill out PES Tracking Form in ADEPT	☐	
		Make next exposure visit appointment (if this is POS 1 or POS 2). Date: __ __ - __ __ __ - __ __ __ __	☐	
10:30		Discharge subject to home (unless this is the last visit) • PES and Subject Instruction for Use of PES • Subject Instructions Before Pre-Exposure Visit • MOSES Activity Diary and Subject Instruction for Activity Diary.	☐	

MOSES Study

Post-Exposure Day Check List

A1. Subject ID Label A2. Date completed: __ __ - __ __ __ - __ __ __ __

A3. Visit: ☐POS1 ☐POS2 ☐POS3

Time			Done	Following SOP #
Target	Actual			
		Ship Holter card to U Rochester core laboratory Ship BAU images to UCSF core laboratory	☐ ☐	

MOSES Study
Vital Signs and Blood Pressure – PRE and POST Data Form

A1. Subject ID Label: A2. Visit: ☐ PRE1 ☐POS1

A3. Initials of data collector: __ __ __ ☐ PRE2 ☐POS2

A4. Today's date: __ __ - __ __ __ - __ __ __ __ ☐ PRE3 ☐POS3

Vital Signs
Use right arm for BP. For procedure details see SOP.

B1. Time Seated: __ __ : __ __

B2. Temperature: __ __. __ °C (Normal range: 36.5 – 37.5°C) (Temperature is optional)

B3. Breathing Rate: __ __ __ bpm (Normal range: 12 - 20 bpm)

Blood Pressure

C1. Time	C2 a/b .B/P – mmHg	C3. Heart Rate - bpm	C4. Method
This first set of measurements are omitted from the Data base. DO NOT ENTER THEM			
__ __ : __ __	__ __ __ / __ __ __	__ __ __	☐ Automatic BP ☐ Manual BP
The above measurements are omitted from the Data base. DO NOT ENTER THEM			
The measurements below are entered into the database.			
__ __ : __ __	__ __ __ / __ __ __	__ __ __	☐ Automatic BP ☐ Manual BP
__ __ : __ __	__ __ __ / __ __ __	__ __ __	☐ Automatic BP ☐ Manual BP
Record the average BP from ADEPT			
Averages:	__ __ __ / __ __ __	__ __ __	

C5. Comments:_____

_____

PRE-EXPOSURE Only

C6. Has the physician cleared this subject to continue: ☐ Yes ☐ No

MOSES Study
Symptom Questionnaire

A1. Subject ID Label: A2. Today's date: __ __ - __ __ __ - __ __ __ __

Exposure 1	☐Pre-Exposure	☐In Chamber	☐After Exposure	☐ Post (day after) Exposure
Exposure 2	☐Pre-Exposure	☐ In Chamber	☐ After Exposure	☐ Post (day after) Exposure
Exposure 3	☐Pre-Exposure	☐ In Chamber	☐ After Exposure	☐ Post (day after) Exposure

Please rate the severity of your symptoms on a scale indicated below. Circle the number.

0 = NONE (not present)
1 = TRACE/NOTICED (barely detectable)
2 = MILD/LIGHT (present, but not annoying)
3 = MODERATE (present, but somewhat annoying)
4 = SEVERE/HEAVY (present and very annoying and painful)

Symptoms	**NONE**	**TRACE/ NOTICED**	**MILD/ LIGHT**	**MODER-ATE**	**SEVERE/ HEAVY**
1. Headache	0	1	2	3	4
2. Nasal congestion/ stuffy nose	0	1	2	3	4
3. Anxiety	0	1	2	3	4
4. Phlegm or sputum production	0	1	2	3	4
5. Nausea	0	1	2	3	4
6. Chest tightness/pain on deep inspiration	0	1	2	3	4
7. Unusual fatigue or tiredness	0	1	2	3	4
8. Eye irritation	0	1	2	3	4
9. Shortness of breath	0	1	2	3	4
10. Sneezing	0	1	2	3	4
11. Cough	0	1	2	3	4
12. Wheezing/whistling in chest	0	1	2	3	4
13. Throat irritation	0	1	2	3	4
14. Sweating	0	1	2	3	4
15. Fast heart beat or pounding heart	0	1	2	3	4
16. Irregular heartbeat, skipped beats	0	1	2	3	4
17. Other_____	0	1	2	3	4

After exposure: (In chamber only)

Did you smell or taste anything unusual? ☐Yes ☐No

Do you think you were exposed to ozone gas today? ☐Yes ☐No

MOSES Study
Pre- Exp- Post- Blood Tracking Form

A1. Subject ID Label:

A2. Visit: ☐PRE1 ☐EXP1 ☐POS1
☐PRE2 ☐EXP2 ☐POS2
☐PRE3 ☐EXP3 ☐POS3

A3. Collection & Processing Date: __ __ - __ __ __ - __ __ __ __

B1. Details:

Collection					Processing
Tube	**Yes**	**No**	**Reason (if N) / Comments**	**Time**	
Discard					
Platelet Activation/MP-Tissue Factor and vWF multimers (Blue, #1)	☐	☐			
Soluble markers (Blue, #2)	☐	☐			
Archive (Blue, #3)	☐	☐			
CBC/differential/platelet (Lavender, #4)	☐	☐			

Tube #1	**Yes**	**No**	**Reason (if N) / Comments**
To Flow Cytometry Lab	☐	☐	
MP-TF tube #1	☐	☐	
MP-TF tube #2	☐	☐	
MP-TF tube #3	☐	☐	
MP-TF tube #4	☐	☐	
MP-TF tube #5	☐	☐	
vWFM tube #1	☐	☐	
vWFM tube #2	☐	☐	
vWFM tube #3	☐	☐	
vWFM tube #4	☐	☐	
vWFM tube #5	☐	☐	

Tube #2	**Yes**	**No**	**Reason (if N) / Comments**
For Soluble Markers	☐	☐	

Tube #3	**Yes**	**No**	**Reason (if N) / Comments**
Plasma microtube #1	☐	☐	
Plasma microtube #2	☐	☐	
Plasma microtube #3	☐	☐	

Tube #4	**Yes**	**No**	**Reason (if N) / Comments**
To Clinical Lab	☐	☐	

This form will be entered into the database

MOSES Study

Spirometry Data Form

A1. Subject ID Label: A2. Today's Date: __ __ - __ __ __ - __ __ __ __

A3. Visit: ☐SCRN ☐EXP1 - Before Exposure ☐EXP1 - After Exposure ☐POS1

☐EXP2 - Before Exposure ☐EXP2 - After Exposure ☐POS2

☐EXP3 - Before Exposure ☐EXP3 - After Exposure ☐POS3

A4. Initials of data collector: __ __ __ A5.Start time of first maneuver __ __ : __ __

B1. Spirometry Trials				
Trial	FVC In Liters	FEV_1 In Liters	FEF 25 – 75% In Liters per Second	Comments
1.	__ . __ __ L	__ . __ __ L	__ . __ __ LPS	
2.	__ . __ __ L	__ . __ __ L	__ . __ __ LPS	
3.	__ . __ __ L	__ . __ __ L	__ . __ __ LPS	
4.	__ . __ __ L	__ . __ __ L	__ . __ __ LPS	
5.	__ . __ __ L	__ . __ __ L	__ . __ __ LPS	
6.	__ . __ __ L	__ . __ __ L	__ . __ __ LPS	
7.	__ . __ __ L	__ . __ __ L	__ . __ __ LPS	
8.	__ . __ __ L	__ . __ __ L	__ . __ __ LPS	

Print output charts and enclose in subject's study folder.

AT SCREENING ONLY				
C1.	Predicted	Best (From ADEPT)	% of Predicted (From ADEPT)	% of Predicted must be ≥ 75 for inclusion (From ADEPT)
FVC	__ . __ __ L	__ . __ __ L	__ __ __%	≥ 75? ☐ Yes ☐No
FEV_1	__ . __ __ L	__ . __ __ L	__ __ __%	≥ 75? ☐ Yes ☐No
C2. Best FEV_1/FVC (From ADEPT) __ . __ __ > 0.65? (From ADEPT) ☐ Yes ☐No				

Sputum Supernatant and Slide Tracking Form

A1. Subject ID Label:

A2. Visit: ☐ POST 1

☐ POST 2

☐ POST 3

A3. Today's Date: __ __ - __ __ __ - __ __ __ __

B1. Enter if the Supernatant Aliquot Tube # 1 was obtained ☐ Yes ☐ No

a. Supernatant Aliquot Tube 1 Volume: _____

B2. Enter if the Supernatant Aliquot Tube # 2 was obtained ☐ Yes ☐ No

a. Supernatant Aliquot Tube 2 Volume: _____

B3. Enter if the Supernatant Aliquot Tube # 3 was obtained ☐ Yes ☐ No

a. Supernatant Aliquot Tube 3 Volume: _____

B4. Enter if the Cytospin Stained Slide # 1 was obtained ☐ Yes ☐ No

B5. Enter if the Cytospin Stained Slide # 2 was obtained ☐ Yes ☐ No

B6. Enter if the Cytospin UnStained Slide # 1 was obtained ☐ Yes ☐ No

B7. Enter if the Cytospin UnStained Slide # 2 was obtained ☐ Yes ☐ No

B8. Record any information that may be pertinent to the processing of the sputum specimens. Enter -1 if none.

_____

Your next visit is on __ __ / __ __ / __ __ __ __ at __ __ : __ __

Please do the following in preparation:

Starting on __ __ / __ __ / __ __ __ __ (one week before your visit) please avoid aspirin, ibuprofen, naproxen, multivitamins, vitamin C, vitamin E, antihistamines, antioxidants, decongestants, fish oil, niacin, arginine, Viagra, Cialis, and Levitra.

Three days before coming in on __ __ / __ __ / __ __ __ __, please put on the Personal Exposure Monitor (PES) at 12:00 noon. We will take it off on the day that you come in for your study visit. The attached set of instructions describes the specific instructions for the PES.

While you are wearing the exposure monitor, please remember to fill out the activity diary. Please refer to the attached instructions for completing the diary.

Please call us with any changes in your health or medication. This includes receiving shots, getting a cold or the flu or seeing a doctor for anything but a routine visit.

Please remember, you are allowed caffeine on the morning that you come in for your study visit, but you will need to avoid any caffeinated beverage after that. You will also need to abstain from alcoholic beverages for three days beginning on the day that you come in for your visit. Finally, on the morning that you come in, you are to avoid strenuous exercise and heavy lifting.

You will receive a reminder call 4 – 5 days before your scheduled visit.

If you have any questions, call _____

MOSES

Subject instructions for use of the personal exposure sampler (PES)

You will be given a zip-lock bag containing:

(1) a plastic backing with a clip,

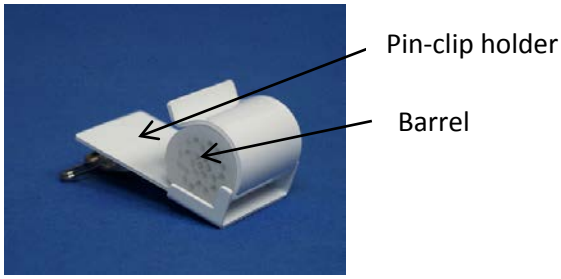
(2) a plastic vial that contains a resealable bag and the PES (and a small gel packet) inside of it. The PES consists of a pin-clip holder that holds a barrel (or body of the sampler).

(3) Time Activity Diary daily forms (see separate instruction sheet).

Put the zip-lock bag (with its content) in the refrigerator as soon as possible after leaving the clinic and leave it there until the 3rd day before your exposure visit. You will receive a call to remind you.

START WEARING THE PES at 12:00 noon of the 3rd day before the exposure visit

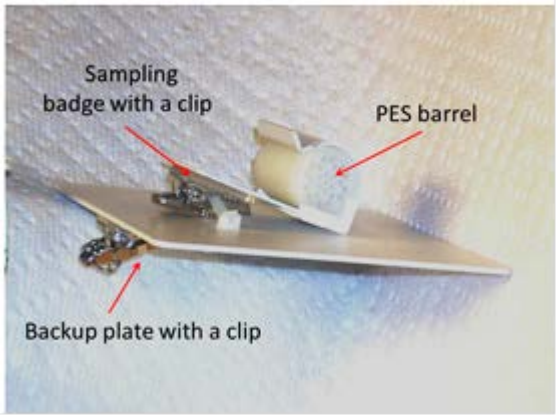
1. When it is time for you to start wearing the PES, open the zip lock bag and empty its content.
2. Open the vial and remove the PES from the resealable bag. Do not touch the ends of the PES barrel. Only touch the pin-clip holder.



Brown vial with PES inside resealable bag

PES consisting of a badge that holds the barrel

3. Replace the re-sealable bag (with the gel packet still inside) in the brown storage vial and tighten cap securely.
4. Put the vial in the zip lock bag. Keep the bag in a safe place as you will need to bring it to the clinic.
5. Secure the PES to the plastic backing as follows (see picture below): clip the pin-clip holder onto the wire tie loop of the backing so that the PES barrel (with little round holes on two ends) is in the middle of the backing. The air diffuses through the holes to the coated filters inside, so placing the PES barrel in the center of the backing (as shown in the picture below) minimizes losses on clothing.
6. Attach the backing to your clothes: If there is a pocket on the clothing at the height of your chest, use the clip to attach the backing. If not, use the safety pin on the clip to attach it.



7. On the Time Activity Diary, indicate the date and time you start wearing the PES; check off each hour you wear it in the Monitor column. If you do not wear it for a time period, please record where the device was and why you did not wear it in the NOTES column. Keep the diary with you or near you at all times.
8. You should not wear the PES, or bring it in the bathroom, if you take a shower (or bath). You should not wear the PES while in bed (i.e., at night), taking a nap, or participating in an activity where the monitor could break. When not worn, place the backing plate with the sampler facing up on a table outside the bathroom or near the bed, or close to where you are doing the activity.
9. Do not allow the PES to get wet outside in the rain, snow or heavy fog. Also do not allow the PES to be at temperatures below freezing. In all these instances wear the PES under a jacket or a coat.
10. Continue wearing the PES until you arrive at the clinic for the pre-exposure visit. Bring (1) the Activity Diary forms and (2) the plastic bag with the brown vial with the resealable bag inside to the clinic. It will be needed to store the PES until it is sent to the lab for analysis.

PES Tracking Form

A1. Subject ID Label:

A4. Visit assigned at:

☐ Training

☐ POST 1

☐ POST2

A2. Date assigned: __ __ - __ __ __ - __ __ __ __

A3. PES ID assigned: {Site Abbreviation} MOSES __ __ __

MOSES

Subject Instruction for Filling Out the Activity Diary

Please carry the diary with you during the day and fill out the times when you change from one of these locations to another and from one activity to another.

1. TIME column.

The time column shows the time breakdown into 1 hour increments. On the first day, start filling the diary at 12:00 noon, the time when you should put on the personal sampler. Please note the exact date/time when you first wear it. On the other 3 days start filling the diary at 6:00 AM.

2. MONITOR column

Mark the boxes corresponding to the times when you are wearing the personal exposure sampler. If you are only wearing it for any portion of that hour, check the box for that hour. Explain in the NOTES section all the way to the right of the Diary where the sampler is at a given time if it is not being worn. Make sure it is as near you as possible. (See also instructions for wearing the Personal Exposure Sampler)

3. LOCATION columns

Here you are asked to record where you are during each hour.

3.1 If you are <u>traveling</u> check whether it is by foot, bicycle/bike, motorcycle, car/taxi, bus, or train/subway. If you are traveling by a method (e.g. foot, bike, etc.) any portion of that hour check the box for that hour. You might have to check off multiple "traveling by" boxes for that hour if you use different means of transportation. If you are in transit for less than one hour, indicate the transit period in the NOTES column.

3.2 If you are <u>currently at home, at work, or other places</u> specify the location and whether you are indoor or outdoor. If you are in a location for any portion of an hour, you should check that box for the whole hour. You might have to check off multiple "I am currently at" boxes for the same hour.

a) "Home - Indoors" should be checked whenever you are inside the home, (including the garage or basement) or anywhere inside an apartment building (including the laundry room).

b) "Work – Indoors" should be checked when you are at work

c) "Other place" refers to the time spent in other indoor or outdoor locations (a friend's house, a park, a restaurant, a shopping mall, a church, a grocery store, a gym, a movie theater, a stadium, a rink, a church.

d) "Outside" should be checked whenever you are outside of your own home ("Home – Outside") or a neighbor's home ("Other place – Outside"). This column would also refer to time spent on a porch, patio, or balcony. If you

travel to a neighbor's house and walk outside to do so, then "traveled, by foot" should also be checked.

4. ACTIVITIES columns

4.1 Here you are asked to indicate what you are doing in a location during each hour. If you do more than one activity in a 1-hour period, check all the appropriate boxes. Examples of which activities should be noted include sleeping, eating, watching TV, exercising, sweeping/dusting/vacuuming, painting/welding (and also sawing wood and sanding), and cooking.

4.2 Information about cooking and cleaning activities is strongly desired. We are particularly interested in the *type* of cooking, such as frying, grilling, broiling, toasting, barbecuing, etc., which should be noted in the NOTES column.

4.3. Please identify the person doing the cooking or cleaning activity for each entry in the NOTES column.

5. SMOKING column. Fill out this column if someone is smoking the room you are in during any portion of that hour.

6. HEATING AND COOLING columns

You should fill this column if you are in a room with a kerosene heater or a wood stove on or with a live fire. Please abstain from lighting a fire while you are wearing the personal exposure sampler to avoid exposure to smoke.

Multicenter Ozone Study in Elderly Subjects
ACTIVITY DIARY

Subject ID: _____

Date of this report: _____

Date/Time **directed by Technician to start wearing personal sampler** __ __ / __ __ / __ __ (MM / DD / YY) __ __ : __ __ (HH : MM) AM / PM Circle One

Date/Time **you First put on the personal sampler:** __ __ / __ __ / __ __ (MM / DD / YY) __ __ : __ __ (HH : MM) AM / PM Circle One

Please check ***all*** the circles in the table that apply to you. If during any portion of the indicated time period, the item/activity occurred, please check the box.

	MONITOR	LOCATION												ACTIVITIES								HEATING		COOLING	
		I am travelling by…						I am currently at…						I am…							Someone is smoking in the same room				
TIME	I am wearing my ***personal*** sampler*	foot	bike	motor-cycle	car/ taxi	bus	train or sub-way	home		work		other place		cooking or near cooking	sleeping	exercising, or other type of exertion	sweeping, dusting, vacuuming (at work or home)*	painting, welding, (at work or home)	watching TV, reading, sitting at desk	eating a meal or snack		I am in a room being heated by a kerosene heater	I am in a room being heated by a woodstove or fireplace	I am in a room being cooled by an air conditioner	NOTES
								inside	outside	inside	outside	inside	outside												
AM 6:00-6:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
AM 7:00-7:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
AM 8:00-8:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
AM 9:00-9:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
AM 10:00-10:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
AM 11:00-11:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
PM 12:00-12:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
PM 1:00 - 1:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
PM 2:00 - 2:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
PM 3:00 - 3:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
PM 4:00 - 4:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
PM 5:00 - 5:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
PM 6:00 - 6:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
PM 7:00 - 7:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
PM 8:00 - 8:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
PM 9:00 - 9:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
PM 10:00 - 10:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
PM 11:00 - 11:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
AM 0:00-0:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
AM 1:00-1:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
AM 2:00-2:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
AM 3:00-3:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
AM 4:00-4:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	
AM 5:00-5:59	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	

* If you are not wearing the sampler, please explain in the NOTES column where you put the sampler.

Explanatory notes:
"I am traveling" column - include time spent waiting for bus, etc.
"Home, inside" column - include garage, basement, laundry room
"Home, outside" column - include yard, garden, patio, porch
"Other place, inside" column - include shopping mall, supermarket, restaurant, neighbor's home, movie theater, indoor stadium, rink, church
"I am, cooking" column - include outside barbecue (BBQ)
"I am, exercising" column - include playing sports (baseball, soccer, etc.)
"I am, painting, welding" column - include working on a hobby, e.g., sawing wood, sanding, etc.

For more information see the Subject Instructions for Flling Out the Activity Diary