**PHYSICAL EXAMINATION FORM**

<table>
<thead>
<tr>
<th>NAME</th>
<th>INITIALS</th>
</tr>
</thead>
</table>

Public reporting burden for this collection of information is estimated to average 7 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to Reports Clearance Officer, PHS, 721-H Hubert H. Humphrey Bldg., 200 Independence Ave. SW, Washington, D.C. 20201, Attn. PRA; and to the Office of Management and Budget, Paperwork Reduction Project (OMB 0925-0281), Washington, D.C. 20503.

**INSTRUCTIONS:** This form should be completed during the participant's visit. ID Number, Contact Year and Name must be entered above. Whenever numerical responses are required, enter the number so that the last digit appears in the rightmost box. Enter leading zeroes where necessary to fill all boxes. If a number is entered incorrectly, mark through the incorrect entry with an "X". Code the correct entry clearly above the incorrect entry. For "multiple choice" and "yes/no" type questions, circle the letter corresponding to the most appropriate response. If a letter is circled incorrectly, mark through it with an "X" and circle the correct response.

---

**AFU CHEST PAIN CONFIRMATION**

Did the participant report positive Rose angina in the Annual Follow-up call preceding this visit? Yes Y No N

Go to Item 4 Screen 2

---

2. In the ARIC telephone call you mentioned having some pain or discomfort in your chest in the past year. Could you tell me where it was? Yes No-pain not recalled

Go to Item 4 Screen 2

No-location not recalled

Go to Item 3 Screen 2

a. Sternum (upper or middle) Y
b. Sternum (lower) Y
c. Left anterior chest Y
d. Left arm Y
e. Other Y

Go to Item 3 Screen 2

Specify: ___________________________
In the past two months has your chest discomfort either occurred more often, lasted longer when it occurs, or come on at rest? Yes Y No N

INVASIVE PROCEDURES

Have you ever had surgery on your heart, or the arteries of your neck or legs, excluding surgery for varicose veins? Yes Y No N

Go to Item 6 Screen 3

5. [Probe for type of invasive procedure]
   a. Coronary bypass: Yes
      No
   b. Other heart procedure: Yes
      Go to Item c
      Specify: 
      
      Go to Item e
   c. Carotid endarterectomy: Yes
      Go to Item e
      No
   d. Site: Right
      Left
      Both
   e. Other arterial revascularization: Yes
      Go to Item f
      No
      If yes specify: 
      
      Go to Item f
   f. Other: Yes
      No
### PHYSICAL RUMINATION (PHEB screen 3 of 9)

1. Have you ever had a balloon angioplasty on the arteries of your heart or legs?.................Yes Y  
   No N
   [Probe for type of procedure]
2. Angioplasty of coronary artery(ies):.....Yes Y  
   No N
3. Angioplasty of lower extremity arteries:..Yes Y  
   No N

### PHYSICAL EXAMINATION (PHEB screen 4 of 9)

#### DIAGNOSTIC PROCEDURES

9. Since your last visit to the ARIC clinic, have you had any of the following procedures performed? (Yes No)

   - a. Echocardiogram: Y N
   - b. Electrocardiogram: Y N
   - c. Treadmill or cardiac stress test: Y N
   - d. Carotid ultrasound studies: Y N
   - e. Heart catheterization: Y N

#### D. WALKING/STANDING

10. Does the participant use a wheelchair, crutches or walker? .................Yes Y  
    No N
    Go to item 13 Screen 5

11. Does the participant walk with a cane? .................Yes Y  
    No N
<table>
<thead>
<tr>
<th>PHYSICAL EXAMINATION (PHEX screen 5 of 9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The participant's gait is............. Normal N</td>
</tr>
<tr>
<td>Abnormal A</td>
</tr>
<tr>
<td>Go to Item 13</td>
</tr>
<tr>
<td>a. Dystaxic......................... Yes Y</td>
</tr>
<tr>
<td>b. Hemiplegic or hemiparetic........ No N</td>
</tr>
<tr>
<td>Right R</td>
</tr>
<tr>
<td>Left L</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PHYSICAL EXAMINATION (PHEX screen 6 of 9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NECK</td>
</tr>
<tr>
<td>Carotid Bruits?......................... No N</td>
</tr>
<tr>
<td>Right R</td>
</tr>
<tr>
<td>Left L</td>
</tr>
<tr>
<td>Both B</td>
</tr>
<tr>
<td>Other head or neck findings?........ Yes Y</td>
</tr>
<tr>
<td>No N</td>
</tr>
<tr>
<td>Go to Item 17</td>
</tr>
<tr>
<td>a.</td>
</tr>
</tbody>
</table>
PHYSICAL EXAMINATION (PHEA screen 7 of 9)

Other chest findings? .................Yes Y

Go to Item 20 — No N

a. ________________________________

Systolic murmur? ......................Yes Y

Go to Item 21 — No N

— Don't Know D

Grade: 1 2 3 4 5 6

Location:
Apex A
Left lower sternal border S
2nd left interspace L
2nd right interspace R
Other O


Go to Item 22 — No N

— Don't Know D

a. Grade: 1 2 3 4 5 6

b. Location:
Apex A
Left lower sternal border S
2nd left interspace L
2nd right interspace R
Other O

22. Other heart findings? .............Yes Y

Go to Item 23 Screen 8 — No N

a. ________________________________

PHYSICAL EXAMINATION (PHEB screen 8 of 9)

LOWER EXTREMITIES

Ankle edema? .........................Yes Y

Go to Item 24 — No N

a. Right ankle edema: ...............No N

— Mild L

— Marked R

b. Left ankle edema: ................No N

— Mild L

— Marked R

24. Posterior tibial pulse? Absent bilaterally I

Present right only I

Present left only I

Present bilaterally I

25. Other extremity findings? ...........Yes

Go to Item 26 — No :

a. ________________________________

26. Babinski? ......................... No

Right

Left

Both
PHYSICAL EXAMINATION (PHEB screen 9 of 9)

GENERAL

1. Other significant physical findings? ......Yes Y No N

Go to Item 28

a. 

I. ADMINISTRATIVE INFORMATION

28. Date of data collection:

month / day / year

29. Method of data collection: .... Computer C Paper Form P

30. Code number of person performing this examination: 


INSTRUCTIONS FOR THE PHYSICAL EXAMINATION FORM
PHE, VERSION B, 01/22/90
PREPARED 01/22/90

I. GENERAL INSTRUCTIONS

The Physical Examination Form should be completed during the participant's clinic visit to record the results of that procedure. The technician must be certified and should have a working knowledge of the ARIC Physical Examination Manual of Operations. The recorder should be familiar with and understand the document entitled "General Instructions for Completing Paper Forms" prior to completing this form. ID Number, Contact Year, and Name should be completed as described in that document.

II. DETAILED INSTRUCTIONS FOR EACH ITEM

A.1. This item refers to the current Annual Follow-Up Form. Note that the most recent annual follow-up refers to the telephone call immediately preceding Visit 2, that is, the third anniversary follow-up. Results will be available in the participant folder. If AFU item 12 was answered L (10 minutes or less) then PHE item 1 should be answered Yes. If AFU item 12 was answered M (more than 10 minutes) then item 1 should be answered No. If the answer for AFU item 12 is missing, then item 1 should be No.

2. The past year refers to the period between the second and most recent annual follow-up call. If an episode of pain is identified that falls outside this time, that is, between Visit 1 and the second annual follow-up, the item should not be coded but the episode should be recorded on a note log. The location of the pain should be ascertained by asking the participant to point to the area or areas and each should be recorded under A, B, C, D. Areas other than those should be specified on a note log after item E. The areas are the examiner's best approximation with the sternum divided into thirds, and the anterior chest to the left of the sternum and below the clavicle. The left arm includes the area below the clavicle and above the left hand. The left shoulder (clavicle and above), neck and jaw are coded E (other).

3. Ask question as written. Code yes for any positive response when comparing the pain in the last two months to any previous chest pain.

B.4. "Legs" refers to the entire lower extremity (not just "below the knee," which is the restricted anatomical definition). Answer "Yes" if there is any doubt, because you will be probing as part of Question #5 anyway. "Surgery" does not include lower extremity arteriography, even though that is an "invasive" procedure. Also, abdominal aortic aneurysm repair would be included here.

5. When probing, remember that a person who has had coronary bypass surgery may have had another "open heart" procedure concomitantly (or vice versa), in which case you should mark "Yes" for both "a" and "b".
Examples of "other heart procedures" include: valve replacement, ventricular aneurysm resection, ASD repair, VSD repair, patent ductus closure, etc. Also, do not omit heart surgery procedures...
done in childhood, such as congenital defect repairs (e.g., Tetralogy of Fallot, septal defects, valvulotomies, etc.); note that coarctation of the aorta would not be included here as an isolated surgical procedure.

With regard to the lower extremity, "Other arterial revascularization" does include any procedure where additional blood flow is brought to the lower extremity via bypass from a location elsewhere in the body (e.g., an ilio-femoral bypass procedure).

Note that balloon angioplasty is covered in the next item (Question #6), so do not enter information relating to such procedures here.

For all of the "Specify" items (b and e), please restrict any entries to the allotted space.

Note that answering Yes (Y) to item 5f. will not produce a notelog. Continue on to item 6.

6. "Legs" refers to the entire lower extremity (not just "below the knee," which is the restricted anatomical definition). Make sure that the participant knows the difference between simply a catheterization and a balloon angioplasty procedure before recording any "Yes" or "No" response.

7. Balloon angioplasty of the renal arteries does not fit any of the categories for Question #7 and should not be recorded.

8. The overlap in Items 8 and 9.e. is deliberate. If a catheterization had taken place prior to Visit 1 and another since Visit 2, both Items 8 and 9.e. would be coded Y.

C.9. Ask as written. May remind participant of date of Visit 1, not of the dates of follow-up phone call.

a. Echocardiogram; if required describe the procedure to the participant.

b. ECG at rest; do not include the treadmill or stress test.

c. May also be called exercise test; include Thallium or other nuclear tests.

D.10, 11. Should be ascertained at the time the participant comes to the examination room.

12. Individuals should walk ten steps along a line in the center of a hallway at a rapid rate. A dystaxic gait is present if the individual passes one ankle more than six inches away from the other in walking. A hemiplegic or paretic gait is noted when the normal leg is on the floor, and the abnormal leg swings in a circular motion to place the opposite foot on the floor. A limp is usually apparent. If an arm is affected, it usually does not swing and may be held flexed at the elbow.
13. Arm weakness is shown by a drop of 6 inches or more from the horizontal or pronation of the hand beyond 90 degrees.

14. The participant stands with feet together, ankles and big toes of each foot touching. He or she is asked to fix gaze on a distant location putting arms outstretched horizontally, but not touching each other, palms up. After the participant is well balanced, he or she is asked to close his or her eyes and balance for 10 seconds. A positive test is one in which the individual has to move a foot to maintain balance.

E.15. The participant should be supine. If breath sounds interfere, the participant should be asked to stop breathing momentarily. The areas to listen with the stethoscope bell are (a) above the clavicle for the carotid artery, and (b) at the angle of the jaw for the carotid bifurcation.

In each position the stethoscope should be placed for three cardiac cycles alternating sides of the neck.

16. Other findings include venous pulsations or other arterial sounds.

F.17,18. The participant is in the sitting position. The stethoscope diaphragm (which should be warmed in the palm of the hand) will be used. The participant should be instructed to breathe through his or her mouth. Each side of the chest should be auscultated beginning posteriorly at the apices for one full breath in each location. There should be three descending locations from the apex to the base of the lung on each side for a total of six locations. Rhonchi are defined as coarse breathing noises. Rales are fine moist noises.

19. Other findings include changes in the breath sounds and evidence of surgery.

20, 21. With the participant sitting, first listen with the diaphragm of the stethoscope consecutively at the apex (the point of apical impulse), the left sternal border at the fifth intercostal space, the left sternal border at the second intercostal space, and the right sternal border at the second intercostal space. Listen for at least five beats in each location. Re-do each of the four spaces with the ball of the stethoscope lightly applied to each area. S3 is heard best at the apex, occurring after the second sound and usually with the stethoscope bell. The location of systolic and diastolic murmurs is reported in the area in which it appears loudest. More than one location of equal intensity is acceptable. Grade one is barely audible. Grade two is just easily audible. Grades three and four are intermediate and increasing in intensity; grade four is palpable as a thrill; grade five is louder, palpable but still requires the stethoscope on the chest, lightly applied. Grade six can be heard with the stethoscope off the surface of the chest.

Repeat cardiac auscultation with the participant lying supine.
22. Other findings include radiation and character of the murmur.

G.23. Examine with the participant in the supine position. Press gently but firmly along the mid-tibia, anteriorly down to the ankle in each leg. Pitting or indentation remaining after pressure is removed is definite edema. Identify the midpoint between the prominence of the medial malleolus and the inferior border of the patella. Pitting at or above that midpoint is recorded as "marked" edema (corresponding to ++). Pitting only below that point is recorded as "mild" edema.

24. Palpate inferior to the medial malleolus of each foot. Record the presence or absence of arterial pulsation. If in doubt, compare with the radial pulsation.

25. Other findings include any structural abnormality in the legs or evidence of vascular surgery or vascular compromise and any findings regarding edemas.

26. The lateral surface of the sole of the foot (plantar surface) is stroked with pressure beginning at the heel and going forward along the lateral surface and crossing the forefoot (ball of the foot) toward the big toe. The absence of Babinski reflex is a plantar flexion of the great toe. If the leg is withdrawn (a tickle response), the lateral surface of the foot (not the sole) should be stroked similarly beginning at the heel and going forward toward the little toe. The Babinski sign is one in which the great toe extends on these maneuvers (dorsiflexion).

H.27. Record any physical findings of note.

28. Record the date on which the measurements were performed.

29. Record "C" if the form was completed on the computerized data entry system, or "P" if the paper form was used.

30. The person at the clinic who has completed the form must enter his/her code number in the boxes provided.