CORONER /MEDICAL EXAMINER
FORM

INSTRUCTIONS: The Coroner/Medical Examiner Form is completed for each eligible out-of-hospital death that was identified as a coroner or medical examiner case on the death certificate, and recorded as such on the Death Certificate Form. Event ID, Name (or Soundex code) must be entered above. Refer to this form's Q by Q instructions for information on specific items. For multiple choice and "yes/no" 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.

1. Date of death from death certificate:

2. Name of coroner's or medical examiner's office:

3. Abstracting for:
   - Cohort
   - Surveillance

4. Has an official coroner's or medical examiner's report or another source of information from the coroner's or medical examiner's office been located?
   - Yes
   - No

5. Was an autopsy performed as part of the medical examiner (coroner) investigation?
   - Yes
   - No
6. Did the coroner's report mention any of the following as contributing to or being present at death?

| a. Recent myocardial infarction | Y N |
| b. Coronary heart disease/ischemic/atherosclerotic heart disease (other than MI) | Y N |
| c. Hypertensive heart disease | Y N |
| d. Valvular heart disease | Y N |
| e. Other heart disease | Y N |
| f. Recent cerebral hemorrhage | Y N |
| g. Recent cerebral infarction | Y N |
| h. Recent cerebral embolus | Y N |
| i. Recent subarachnoid hemorrhage | Y N |
| j. Recent stroke, other or unspecified type | Y N |

7. a. Was any non-cardiac, non-stroke finding mentioned as contributing to death?
   - Yes ...............Y
   - No...............N

   Go to Item 8, Screen 4

   | b. Kidney disease | Y N |
| c. Chronic respiratory disease | Y N |
| d. Psychiatric illness/depression | Y N |
| e. Alcohol or drug addiction | Y N |
| f. Epilepsy | Y N |
| g. Liver disease | Y N |
| h. Other | Y N |
| i. Specify ________________________________

   Go to Item 8, Screen 4
8. List the final diagnoses:
CORONER/MEDICAL EXAMINER FORM (CORAS SCREEN 5 OF 15)

9. Pick one of the following:

- Patient had acute symptoms (cardiac or non-cardiac) which led to an overt change in activity or to seeking medical care ..........A
- Patient died suddenly and was known to have no acute symptoms ....................B
- Patient was found dead with no documentation of symptoms .....................C
- Patient had symptoms but they were chronic (without change) or did not lead to a change in activity or seeking medical care ..........D
- Unknown .........................U

Go to Item 11, Screen 7

CORONER/MEDICAL EXAMINER FORM (CORAS SCREEN 6 OF 15)

10. Within 3 days of death or just before death, did any of the following symptoms begin for the first time?

- a. Shortness of breath...Y N U
- b. Dizziness..............Y N U
- c. Palpitations.............Y N U
- d. Marked or increased fatigue, tiredness or weakness ...Y N U
- e. Headache.................Y N U
- f. Sweating..................Y N U
- g. Paralysis..............Y N U
- h. Loss of speech...........Y N U
- i. Attack of indigestion or nausea or vomiting ......Y N U
- j. Other (specify)...........Y N U

Go to Item 11, Screen 7

k. Specify: __________________
11. a. Was there an acute episode(s) of pain or discomfort anywhere in the chest, left arm or shoulder or jaw either just before death or within 72 hours of death?
   - Yes
   - No
   - Unknown
   
   Go to Item 12, Screen 8

b. Did this pain or discomfort specifically involve the chest?
   - Yes
   - No
   - Unknown
   
   Go to Item 12, Screen 8

c. Did the patient take or was he/she given nitrates at the time of the acute episode?
   - Yes
   - No
   - Unknown

12. Place of death (circle only one):
   - In an automobile
   - In an automobile
   - In nursing home
   - In emergency room
   - In an ambulance
   - In hospital
   - Other
   - Unknown
**CORONER/MEDICAL EXAMINER FORM (CORASCREEN 9 OF 15)**

13. a. Did anyone witness the death?
   - Yes ........... Y
   - No ........... N
   - Unknown ......... U

   Go to Item 15, Screen 10

b. Name: __________________________
   Address: __________________________

   c. Relationship of this witness to deceased:
   - Spouse ................. S
   - Parent .................. P
   - Daughter/Son ............ C
   - Other relative .......... R
   - Friend .................. F
   - Workmate ............... W
   - Other ..................... O
   - Unknown ................. U

**CORONER/MEDICAL EXAMINER FORM (CORASCREEN 10 OF 15)**

14. Time from onset of acute symptoms to death (or time since last known to be alive if no known acute symptoms) (circle only one):
   - 5 minutes or less ............ A
   - More than 5 minutes to 1 hour ................. B
   - More than 1 hour to 24 hours ........ C
   - More than 24 hours ............ D
   - Unknown ................. U

15. a. Is there a history of a myocardial infarction prior to the onset of this event?
   - Yes ........... Y
   - No ........... N
   - Unknown ......... U

   Go to Item 16, Screen 12
CORONER/MEDICAL EXAMINER FORM (COR A SCREEN 11 OF 15)

b. Did an MI occur within four weeks prior to this event?
   Yes ............Y
   No ............N
   Unknown........U
   Go to Item 16,
   Screen 12

c. Was the deceased hospitalized for the MI?
   Yes ............Y
   No ............N
   Unknown........U
   Go to Item 16,
   Screen 12

d. Name of hospital: ____________

CORONER/MEDICAL EXAMINER FORM (COR A SCREEN 12 OF 15)

16. Is there any history of angina pectoris or coronary insufficiency?
   Yes ............Y
   No ............N
   Unknown........U

17. Is there a history of any other chronic ischemic heart disease?
   Yes ............Y
   No ............N
   Unknown........U

18. Is there a history of valvular disease or cardiomyopathy?
   Yes ............Y
   No ............N
   Unknown........U

19. Is there a history of coronary bypass surgery prior to this event?
   Yes ............Y
   No ............N
   Unknown........U
20. Is there a history of coronary angioplasty prior to this event?
   Yes .............. Y
   No .............. N
   Unknown......... U

21. a. Is there a history of stroke prior to this event?
   Yes .............. Y
   No .............. N
   Unknown......... U

   b. Did a stroke occur within four weeks prior to this event?
   Yes .............. Y
   No .............. N
   Unknown......... U

22. Is there a history of hypertension (high blood pressure) prior to this event?
   Yes .............. Y
   No .............. N
   Unknown......... U

23. Was the decedent taking any of the following medications as an outpatient within the four weeks prior to death?
   a. Nitrates.............. Y N U
   b. Calcium channel blockers.............. Y N U
   c. Beta-blockers.............. Y N U
   d. Digitalis.............. Y N U

24. Was this form completed by abstraction or by interview with the coroner?
   Abstraction .............. A
   Interview .............. I

25. Abstractor number:

26. Date abstract completed:
   mm  dd  yy
Other required forms: (circle the letter corresponding to form(s) required)

<table>
<thead>
<tr>
<th>Form</th>
<th>Criteria based on this form</th>
</tr>
</thead>
<tbody>
<tr>
<td>27. A. IFI(s)</td>
<td>Item 13a = Y and 13b completed.</td>
</tr>
<tr>
<td>28. B. HRA</td>
<td>Item 15c = Y and 15d completed. (If item 3 = S, 15d must also be a catchment area hospital.)</td>
</tr>
<tr>
<td>29. C. STR</td>
<td>Item 3 = C and Item 21b = Y.</td>
</tr>
<tr>
<td>30. D. AUT</td>
<td>Item 3 = C and Item 5 = Y.</td>
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</tbody>
</table>
General Instructions

This form is completed for each eligible, out-of-hospital cohort or surveillance event which was a medical examiner's (coroner's) case. The medical examiner's (coroner's) report may consist of an investigation, an autopsy, or both. If this is a cohort case and an autopsy was done, Form AUT must also be completed. The abstractor should be familiar with ARIC Instructions for Completion of Paper Forms and the instructions for the Hospital Record Abstraction Form and Informant Interview Form. Whenever you have difficulty interpreting the medical information in the medical examiner's (coroner's) report, consult with your surveillance director.

Header

Record the event ID number as assigned on the CEL or SEL form, the participant's last name and initials. Before going to the coroner/medical examiner office, complete items 1-3.

1. Date of Death: Transfer date from the death certificate or from the death printout.

2. Medical Examiner/Coroner's Office: Record the name of the office from the death certificate.

3. Cohort/Surveillance: Record C or S based on the SEL or CEL forms.

4. Report found? The report may be permanently lost. If so, indicate "no" and skip to Item 25. If "yes", complete the form.

5. Autopsy? Indicate whether an autopsy was done as part of the investigation. If an autopsy was done but not as part of the coroner's/medical examiner's investigation, record "No".

6. Examiner's findings: Review the examiner's report and diagnoses completely for conditions contributing to or present at death. To answer "yes" these do not have to be listed among the final diagnoses, but need only have been present. "Recent" here generally means in the last month and may require your judgement. If a condition (a-j) is specifically mentioned record as "yes". If definitely not present or not mentioned at all, record as "no". If equivocal, consult your surveillance director. Synonyms for the conditions are provided in the instructions for the HRA and STR forms.

7. Non-cardiac, non-stroke cause: Answer this question as described for Item 6. If you are uncertain about a condition, record in "specify" space and check with Surveillance Director.
8. **Diagnoses:** Record in order the listed final diagnoses and attach an ID label. This page will be duplicated for the MMCC.

9. **Symptoms:** This question seeks to determine if any acute symptoms (cardiac or non-cardiac) were known to have occurred. Indicate which one of the statements applies. If acute symptoms were not present, follow the skip.

10. **Other symptoms:** This question asks about symptoms other than pain or discomfort in the chest. The timing of onset of these "other" symptoms is critical. Make sure the onset was within 3 days, and that the condition was not long-standing or "usual". If not specified at all in the examiner's report, record as "U". If another prominent symptom occurred, specify under k. "Specify".

11. a. **Onset of Acute Pain:** For the event under consideration, was there acute pain anywhere in the chest, left arm or jaw, (this description may also have involved the back, shoulder, right arm or abdomen on one or both sides) mentioned and present within 72 hours of onset of CHD event? Included in this definition for pain are ischemic pain, angina, cardiac and substernal pain. Answer unknown if no history either way or no indication at all of timing. If "no" or "unknown", skip.

b. **Chest location:** Indicate specifically if pain involved the chest (yes) or did not (no). If not mentioned either way, answer "unknown".

c. **Nitrates:** Did the patient take or was he/she given nitrates at this time (see list of generic and brand name nitrates, HRA Form Appendix BB). Answer "no" if specifically not taken. If not indicated either way, answer "unknown".

d. **Noncardiac pain.** This question is asked to determine if the pain experienced satisfies the ARIC criteria for chest pain by establishing that there is no definite non-cardiac cause of chest pain. It refers to the final conclusion about a pain or discomfort. The pain may result from an old diagnosis, rather than a new one. Answer "Yes" if there is an explicit statement by a physician that the pain is definitely due to a non-cardiac cause. If yes, specify the diagnosis of what the pain was due to. Examples could be: fractured ribs, costochondritis, esophagitis, or an acute gallbladder attack. The answer "No" is to be used when an explicit statement that the pain is definitely cardiac. If neither a clear positive or negative statement is available, answer "U".

12. **Location of death:** Record location.

13. a. **Witness of death:** Use the definitions of witness as outlined for the IFI form: this means being within sight or sound of the deceased at the time of death, for example lying next to in bed, in the next room and could be heard, left decedent alone momentarily. The death was not witnessed if the closest individual was out of sight and sound.
b. **Name and Address:** Record the name and address of the witness.

c. **Relationship:** Circle the appropriate response.

14. **Timing:** Estimate time from acute symptom onset to death (IFI definition) or if no known acute symptoms, time from last known to be alive until death. Make an estimate to fit the categories. If it cannot be determined, check "U". Acute symptom onset is defined as that point in time when new symptoms caused a change in activity. If the symptom is chronic, there must be a change in severity or frequency. Symptoms might be stepwise (e.g. one chest pain, then a more severe one an hour later). In this case it is the first pain, if it was new and caused a change, that is the onset of the episode. The final episode for someone who collapses, is revived and collapses again began at the first collapse.

Questions 15-23 refer to the patient's medical history before the onset of this event. Do not record the causes of death as "Yes" here, since they are listed in Question 8.

15. a. **Previous MI:** Previous history refers to a time preceding the onset of the event under consideration. If this information states "previous silent MI", "borderline heart attack", record the answer as "Yes". An "old MI" on autopsy can be used for positive previous history. A history of angina or chest pain without documented MI should be recorded as "No". Statements such as: "No cardiac problems", "No adult illness", "Previously well", and "No previous history of heart disease" are sufficient to answer "No" to previous MI. If no indication either way, answer "Unknown".

b. **MI within 4 weeks:** Review recency of MI.

c. & d. **Hospitalization:** Circle the appropriate response and record name if available.

16. **Previous angina or coronary insufficiency:** Examine the record for mention of previous angina pectoris or coronary insufficiency prior to this event (i.e., > 72 hours before admission). This would include mention of chronic chest pain, ischemic pain, and "history of chest pain". Chest pain specified as being "of unknown origin" does not qualify. Answer "Yes" if the history includes any mention of the patient taking nitroglycerin for chest pain noted that the patient had "substernal pressure, pain, tightness, or burning distress precipitated by exercise or excitement, or both and is relieved by rest and/or nitroglycerin". Answer "No" if the history explicitly states that the patient has no history of any of the above. Answer U = unknown if none of the criteria for "Yes"/"No" responses apply.

17. **Other IHD:** History of other chronic ischemic heart disease may include CHF described as due to coronary disease or ASHD (Atherosclerotic Heart Disease).
18. Valvular disease or cardiomyopathy: History of valvular disease such as rheumatic heart disease, mitral valve prolapse, valvular stenosis or regurgitation. Other valvular diseases include: Aortic Valve diseases or disorders, aortic valve incompetence, insufficiency, regurgitation, or stenosis, aortic valve failure; Mitral valve diseases, disorders, mitral valve incompetence, insufficiency, regurgitation and stenosis or mitral valve failure; or Pulmonary valve diseases, disorders, incompetence, insufficiency, regurgitation and stenosis; and Tricuspid valve diseases, disorders, incompetence, insufficiency, regurgitation, stenosis and failure. In addition, any mention of valvular endocarditis warrants an answer of "Yes" to history of valvular disease. Not recorded is recorded as "U".

19. and 20. Coronary bypass or angioplasty: Has the patient had previous coronary bypass surgery or coronary angioplasty before this event (refer to HRA Form Appendix AA for definitions). Not recorded is "U".

21. a. Stroke: Equivalents to stroke are CVA (cerebrovascular accident), cerebral embolus, intracranial, intracerebral or cerebral hemorrhage, cerebral thrombosis, cerebral apoplexy, cerebral (artery) occlusion and cerebral infarction. An "old stroke" on autopsy can be taken as a positive previous history.

b. Stroke within four weeks prior to the event: Review history for recency of stroke.

22. Hypertension: If there is explicit mention of hypertension (high blood pressure) as being present, answer "Yes". If hypertension history is explicitly recorded as negative, answer "No". If no mention either way, record "U". Even if the patient is on a medication sometimes used for hypertension (e.g., beta-blocker), but hypertension is not mentioned, answer "U".

23. Heart medication: Refer to HRA Form Appendix BB (the list of Digitalis, Nitrates, Calcium Channel Blocking, and Beta-Blocking drugs). Does the history indicate the patient was taking any of these drugs? Record "Yes" if the general category, trade name, or generic name of the drug is listed. If no prior medications are listed, record "U". If meds are detailed but none of these heart medications were being taken, record "No".

24. Completed by Abstraction or Interview: Circle "A" for Abstraction or "I" for Interview.

25. Abstractor Number: Record your I.D.

26. Date abstract completed.
27 - 30. Form flags

Be sure to complete. Circle the letter corresponding to the form(s) required. HRA and STR will be needed for cohort for any recent MI or stroke hospitalization and for surveillance if the MI or stroke hospitalization occurred in a catchment area hospital.