Instructions for the Coroner/Medical Examiner Form (COR)
Version C 05/05/2014

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. 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 data 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 coroner’s/medical examiner’s investigation, record “No”. If autopsy was done but not as part of the coroner’s/medical examiner’s investigation, record “No”. If autopsy is done by facility outside of Medical Examiner’s office, and that report is included in case file, answer “Yes”.
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. Use whatever information is available in the case file, including the Autopsy report.
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. Unless a condition or disease specifically contributes to death, do not include in #7. A history of condition or disease (i.e. hypertension or diabetes mellitus) = “No”. Active disease or condition (right now) = “Yes”. Chronic obstructive pulmonary disease (COPD) should be considered as a “yes” to 7c. Many of these will not be clear-cut and will require review on a case by case basis with the medical director. Use whatever information is available in the case file, including Autopsy report.

The following are not inclusive, just some examples:

- Acute glomerulonephritis. Acute renal failure.
- Emphysema, Pneumonia, Asthma, and COPD.
d. Suicide attempt. Schizophrenia, Psychosis.
g. Cirrhosis, Alcoholic Fatty Liver, Liver abscess, Hepatitis.
h & i. Myeloproliferative disorder, Amyolateral Sclerosis, Myxedema, a cancer that is widely metastatic and active. Bleeding ulcer, traumatic injuries.

8. **Diagnosis:** 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”. May be answered through autopsy.

b. **MI within 4 weeks:** Review recency of MI. May be answered through autopsy.

c. & d. **Hospitalization:** Circle the appropriate response and record name if available. May be answered through autopsy.

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. Cannot be answered through autopsy findings.

17. **Other IHD:** History of other chronic ischemic heart disease may include CHF described as due to coronary disease or ASHD (Atherosclerotic Heart Disease). Cannot be answered through autopsy findings.

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, 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”. May be answered through autopsy findings.

19. **Coronary bypass or angioplasty:** Has the patient had previous coronary bypass surgery or
20. coronary angioplasty before this event (refer to HRA Form Appendix AA for definitions). Not recorded is “U”. 19. May be answered through autopsy. 20. Cannot be answered through autopsy findings.

21. a. Stroke: Equivalents to stroke are CVA (cerebrovascular accident), cerebral embolus, intracranial, intercerebral 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. May be answered through autopsy findings.

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”.

22a. Is there a history of diabetes?

If there is explicit mention of diabetes as being present answer “Yes”. This includes mention of “diabetes”, “diabetes mellitus or DM”, “insulin dependent diabetes (mellitus) (IDDM)”, “non-insulin dependent diabetes (mellitus) (NIDDM)”, “Type I diabetes (mellitus) (DM)”, or “Type II diabetes (mellitus)”. It also includes explicit mention of the term “diabetic”. This excludes mention of a history of “glucose intolerance”, “hyperglycemia”, “hypoglycemia”, or “diabetes insipidus”.

22b. Is there a history of smoking?

If there is evidence that the patient had a positive history of smoking but you are not able to determine if they were a past or current smoker, record “Yes”. For the purpose of this question do not attempt to distinguish between cigarette, pipe, or cigar smoking. If there is evidence that the patient has quit smoking, record “Yes”. If there is explicit mention of a history of smoking record “Yes”. If there is explicit mention that the patient was a “non-smoker”, record “No”. If there is no mention of smoking status, record “Unknown”.

23. Heart medication: Refer to HRA Form Appendix BB (the list of ACE inhibitors, Aspirin, 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.