I. GENERAL INSTRUCTIONS

The Death Certificate Form is completed for each eligible surveillance death (see manual 3, sections 2.3.1 and table 2.3) and for all cohort deaths. The abstractor must be certified and should be familiar with the document titled "General Instructions For Completing Paper Forms" prior to completing this form. Event ID Number and Name (of decedent) should be completed in the form header section as described in that document.

DEATH ELIGIBILITY CHECK SECTION
As opposed to earlier versions of the DTH form in the DMS, Version F, begins with the “Death Eligibility Check”, which is an automated version of the algorithm for determining whether a death is eligible for DTH abstraction. This section of the form is comprised of certain questions that impact on eligibility (e.g., date of death).

Questions have been reordered and separated into DEATH ELIGIBILITY CHECK SECTION blocks. We have added questions 5.a. (question 0.), 5.b. (question 3.h.), and 5.c. (question 3.i.) from the Confidential Data form (CFD) to the Death Form (DTH). Two new questions 18a and 18b have been added to the DTH. The questions in the first DEATH ELIGIBILITY CHECK SECTION block should be answered in the following order:

4 → 0 → 8 → 9 → 18, 18a, 18b, → 3.a.

After the abstractor enters responses in these questions, the DMS determines if the death is eligible for abstraction or not. If eligible, the abstractor should fill out the rest of the DTH form. If ineligible, the abstractor should delete the form immediately.

II. DETAILED INSTRUCTIONS FOR VARIOUS QUESTIONS

4. Sex. Record the decedent’s sex.

0. Cohort Status. Record “C,” “J” or “S”. Check the cohort roster to determine if the event is for a cohort member. If so, record case as C “ARIC Cohort” in 0.

If the event is not an ARIC cohort member but it does meet selection criteria for community surveillance, record ‘S’ “Community Surveillance”. (NOTE: A cohort participant may or may not meet the criteria for community surveillance but if it is a cohort participant code “C” not “S”)

If the event is being abstracted for the Jackson Heart Study and the case is NOT also an ARIC cohort member, record J “JHS Cohort-not ARIC cohort” for question. Use the current JHS cohort rosters to determine eligibility. (If the event is a Jackson Heart Study Participant and also an ARIC cohort, code the event as “C” not “J”.)

8. Date of Birth. Enter as listed on the death certificate.
9. Date of Death. Enter as listed on the death certificate.

18. ICD code for underlying cause of death. The underlying cause is the most important or primary cause that lead to this death. It may not be the same as the first or "immediate" cause, and is assigned by a nosologist or a computer. Enter the ICD-10 Code for the underlying cause of death recorded on the central death index computer listing. The first space should be a letter, followed by a two-digit number. There may also be a number to the right of the decimal point. If a digit to the right of the decimal is not given, leave this field blank. Do not zero fill!

18a. Did this person die in-hospital? Record “Y” or “N”. In-Hospital Deaths are all deaths occurring after admission to a hospital

18b. Is this an eligible CHD event on HLIST? Record “Y” or “N” if event on the Hospital Index List.

3a. Decedent’s place of residence at time of death, including street, city, state, and zipcode. If the decedent is homeless, use the address of the shelter for residence at time of death. Enter “no” if the decedent’s place of residence is unavailable go to Section A and complete items 1-3 then save the form, until an address can be located. If the address cannot be located, complete the abstraction.

3.b. Address Information This item has been divided into five major components: [3.B.1] PO Box, Box and / or Route and Number; [3.B.2-4] Street Number; [3.B.5-8] Street Name; [3.B.9-12] Unit; and [3.B.13] Other. Pertinent fields should be completed only when necessary. Other fields should remain blank. Please see Appendix A for examples.

3.b.1. If there is no PO Box, Box or Route and Number, leave blank. PO Box, Box and / or Route should include all relevant descriptors and numbers, e.g. “PO BOX” (post office box), “BOX”, “R” (route), “RR” (rural route), et cetera.. For example, if the address in the medical record is “Route 16, Box 14-A”, item 3.B.1 = ROUTE 16 BOX 14 A.

3.b.2. Street Number Prefix (refers only to prefixes for the number in 3.b.3.) If there is no street number, leave blank. This item is designed for alphanumeric characters that may precede street numbers and may be separated from them by a hyphen. Hyphens should be dropped at data entry. An example might be B-21 East Main Street. The “B” would be entered in 3.b.2.

3.b.3. Street Number This question should include numeric street data only. If there is no street number, leave blank. For example, if the address is B 21 Main Street, “21” would be recorded in 3b.3.

3.b.4. Street Number Suffix (refers only to suffixes for the number in 3.b.3.) This item is designed for alphanumeric characters that may follow street numbers and may be separated from them by a hyphen. Hyphens should be dropped at data entry. An example might be 21-B East Main Street. The “B” would be entered in 3.b.4. If there is no suffix, leave blank.

3.b.5. Street Name Prefix This item typically refers to street directions (e.g. EAST; NORTH; SOUTH; WEST) or their common abbreviations and combinations (e.g. E; N; NE; NO; NW; S; SE; SO; SW; W). Generally, only a prefix or a suffix [question 3.b.8.]—but not both—are available. For example, if the address is 21-B East Main Street, the “E” is entered in item 3.b.5. If there is no street prefix, leave blank.
3.b.6. **Street Name**  This item refers to the name of the street, avenue, etc. If the address is 21-B East Main Street, then “Main” would be entered into item 3.b.6. Digits must be used for entering numbered street names. For example "1300 South Second Street" should be entered as - street prefix "S", and street name "2ND", and "ST" as street type; "Five Public Square" should be entered as "5 Public Square". The "street number" for any street must also be expressed as digits (although street number prefix and/or suffix could be letters).

3.b.7. **Street Name type** This item refers to the type of roadway used in the address. If the address is 21-B East Main Street, then “Street” would be entered into item 3.b.7. If none leave blank.

3.b.8. **Street Name Suffix** This item typically refers to street directions (e.g. EAST; NORTH; SOUTH; WEST) or their common abbreviations and combinations (e.g. E; N; NE; NO; NW; S; SE; SO; SW; W). Generally, only a suffix or a prefix [question 3.b.5.], but not both, are available. For example, if the address is 21-B Main Street East, the “E” is entered in item 3.b.8.

3.b.9, 10, 11, 12. **Unit Type/Unit Prefix/Unit Identifier/Unit Suffix** Item [3.b.9] **Unit Type** usually designates a building, apartment or other unit in a residential complex or neighborhood. These units are often abbreviated in standard format e.g. “BLDG”, “APT” et cetera. They are often labeled by an alphanumeric identifier and prefix or suffix. If none leave blank.

For example, if the address in the medical record includes “Apt A-1”, then item [3.b.9] **Unit Type** = APT; [3.b.11] **Unit Identifier** = A, and [3.b.12] **Unit Suffix** = 1. When two units are included in the same address, e.g. “Bldg A Apt 1”, both units and identifiers should be recorded and separated by a forward slash “/”, as follows: [3.b.9] **Unit Type** = BLDG/APT; [3.b.11] **Unit Identifier** = A/1. Note that item [3.b.12] **Unit Suffix** should remain blank in the latter example.

3.b.13. **Other** Formal names (e.g. professional or business offices, residential neighborhoods or complexes, and assisted-living or skilled nursing facilities) that may accompany street addresses are typically superfluous. They should be separated from the remainder of the address and recorded in item [3.b.13].

3.c.1. **City** The city of residence for the address being transcribed. Please recognize that abbreviations of city (W-S, G’boro, Mnpls, Bham, Pgh, NYC, Brklyn, LA, SD, et cetera) must be transcribed in full into the address entry panel.

3.d.1. **County** The county of residence for the address being transcribed. If the county is unavailable or suspect, leave blank. It can be compared to information from the Federal Information Processing Codes returned by the geocoding vendor at the time of analysis. NOTE: Some states do not have cities that reside in counties, so county information may not be available.

3.e. **State** The state of residence for the address being transcribed. Abbreviations for states should follow the standard U.S.P.S. two-character format (Abbreviations can be found in the field help in the DMS).

3.e.1 **Country** (enter only if not in U.S.A.) The country of residence for the address being transcribed if not U.S.A.

3.f. **Zip Code** The zip code associated with the address being transcribed. If available, zip code information in 5+4 format should be transcribed in full, since they are more informative.
3g. Ready to calculate eligibility? Record “Y”, “N” or “R”. If “Y” is entered for Q3.g., and you want to re-calculate eligibility, then enter “R”. If “R” is already in the response, enter “Y”. If “N” enter questions 1-3 in Section A. (The decedents name, death certification number and social security number) and save the form, until ready to calculate eligibility.

3.h. Is the decedent’s address in the ARIC community surveillance catchment area?

3.h. Is the decedent’s address in the ARIC community surveillance catchment area?
If the address is determined by the abstractor to be in the ARIC catchment area, record “Y”.

If the address is determined by the abstractor as not being in the ARIC catchment area and if the participant is either an ARIC or JHS cohort, record “C”.

If the address is determined by the abstractor as not being in the ARIC catchment area and if the participant is neither an ARIC nor JHS cohort, the abstractor should enter “O”.

If the address could not be determined by the abstractor after all means available to resolve, the abstractor should enter “U” (undetermined).

3.i. Abstractor Investigation of Undetermined in Q3h. If item 3h. = U then field center needs to work through all available resources or contact Coordinating Center to resolve whether patient’s address is in or out of catchment, then return to this form and fill out Q3.i. Based on the information available, the abstractor will record the status of the address as follows:

If the address is determined by the abstractor to be in the ARIC catchment area, record Y.

If the address is determined by the abstractor as not being in the ARIC catchment area and if the participant is either an ARIC or JHS cohort, record “C”.

If the address is determined by the abstractor as not being in the ARIC catchment area and if the participant is neither an ARIC nor JHS cohort, the abstractor should enter “O”.

If the address could not be determined by the abstractor after all means available to resolve, the abstractor should enter “U” (undetermined).

For JHS Cohort, if the answer to 3h is “U”, select only “Y”, “C”, or “U” for 3i.

3.j. ELIGIBLE TO COMPLETE FORM. (Automatically filled by DES.). The DES will fill Question 3j with “Y” if, based on the information provided, this death meets the eligibility criteria and so has been determined to be an eligible death. Complete form items beginning with Section A. The DES will fill Question 3j with “N” if the death does not meet the eligibility criteria and so has been determined to ineligible. The abstractor should delete the form.
The DES will make Question 3j be blank if it is unable to determine the eligibility of the death (e.g., if Question 8 "Date of birth" is left blank or is made unresolvable).

3.j.1. INELIGIBLE: PLEASE DELETE THIS FORM: If the event is found to be ineligible delete the form. This question is only unskipped if the DES has determined the death to be ineligible. The abstractor should delete the form.

A. INFORMATION FROM DEATH INDEX/CERTIFICATE

1. Decedent's Name. Enter the first, middle, and last name of the decedent. Begin each name in the leftmost box using capital letters.

2. Death Certificate Number. This number will be found stamped or typed on the death certificate. If a computer printout is used, it must include this information. Record the number starting in the leftmost box. Do not add zeroes to the right of the number.

3. Social Security Number. If the Social Security Number is on the death certificate, copy it exactly. If for some reason the entire SSN cannot be abstracted, then abstract all digits available and leave the rest blank.

5. Race. Circle the response that corresponds to the race specified on the death certificate. If missing, record "U". If the death certificate just indicates Hispanic origin, then record "O", and indicate appropriately in Item 6 below.

6. Hispanic. Record "Y" (yes) if the death certificate clearly indicates that the decedent was of Hispanic origin. Record "N" (no) if the death certificate clearly indicates some other origin, i.e., "German", or "Scandinavian". If there is no information at all then record "U", i.e., if the death certificate merely indicates "White", then record "W" in Item 5 above, and record "U" in Item 6.

7. Marital Status. Record as listed. If certificate just says "never married" or "S", record as "Single".

7a. Decedents Veteran Status. Record as listed

10. Age at death. If the age at death is recorded on the death certificate, check by using the following algorithm. Also if age is not recorded, then use this algorithm to compute it.
   1) If the month and day of birth fall before the month and day of death, subtract the year of birth from the year of death.
   2) If the month and day of birth fall after the month and day of death, subtract (year of birth + 1) from the year of death.
   Record the correct age on the form. If the age at death cannot be computed then enter "=" in each field.

11. Time of Death. Convert all times to a 24 hr. clock and record. Enter unknown as "=" in each field.

12. Location of Death. If in a hospital or other institution, its name will usually be listed; otherwise, a street address is usually provided. If a hospital location, refer to your center's list of catchment area hospitals, and indicate whether or not it is in the catchment area. If so, this would indicate the need for hospital record
abstraction. If the decedent died in a nursing home, enter "N". If the decedent died at home or at another
residence, or at a non-hospital institution circle "O" and then specify the information as written on the death
certificate for the location of death. If obviously the home, indicate this in parentheses. **Note the skip pattern.**

13. In Hospital Location. If an in-hospital death most death certificates will specify whether it was DOA, ER,
inpatient, etc. If this information is not recorded then circle "F" (not recorded).

14. Hospital/Nursing Home. Enter the name and location of the hospital, or the nursing home, where the
decedent died. Include the city and state.

15. Coroner's Case. Record "Y" or "N" as indicated on the death certificate. Coroners cases will be investigated
using the COR Form, for out-of-hospital deaths only. **Note the skip pattern.**

16. Coroner or Medical Examiner. Record the name and address of the medical examiner or coroner who signed
the death certificate. Provide as much detail as is recorded on the death certificate.

17. Autopsy. Record "Y" if the death certificate indicates that an autopsy was performed. If not recorded circle
"N".

19. All other listed ICD codes. Record all other ICD-10 codes, up to ten, exactly as they are listed on the central
death index computer listing. This list may include the code for the underlying cause of death recorded in Item
18. Enter the codes in the same way as for Item 18.

20. Causes of death. Transcribe the causes of death exactly as recorded on the death certificate. Sometimes two
causes will be listed on one line of the death certificate. Record them similarly on the form.

21. Other significant conditions. Transcribe the other significant conditions contributing to the death, exactly as
recorded on the death certificate.

22. Interval between onset and death. Enter the shortest possible category for the immediate cause of death, as
recorded on the death certificate. If this is missing, do not substitute the interval for another cause.
Instantaneous should be recorded as "5 minutes or less."

23. Informant. Most death certificates have a line for informant. Often this is the spouse, but it may be a co-
worker, etc. Record the name and address. Provide as much detail as is recorded on the death certificate.

24. Relationship of informant. Record as listed on the death certificate. If no information is provided then record
"U". **Note the skip pattern.**

25. Spouse. Record the name and address of the decedent's spouse if not the informant already listed in Item
23. If the death certificate does not contain any information on the spouse then leave blank.

26. Certifying physician. Record the name and address of the certifying physician who signed the death
certificate, **if not the coroner or medical examiner.**

27. Date abstract completed. Record the date the death certificate abstract is completed.
28. Code number of abstractor. The field center staff member who has performed the abstraction and completed the form must enter his/her valid ARIC code number in the boxes provided.

29. COR form. Record if a COR form is needed. Record “yes” if the form is needed or “No” if it is not needed. In the DES this is automatically determined (if Q16=Y and Q18=E10-14, I10-11, I20-25, I46-51, I70, I97 (except I97.2), J81, J96, R96, R98, or R99 regardless of decimal).
Appendix A

Example A

DEATH CERTIFICATE FORM

INSTRUCTIONS: The Death Certificate Form is completed for each eligible community death as determined by the surveillance event eligibility criteria and for all solace deaths. Event ID and Name must be entered above. Refer to this form’s Q & Q instructions for information on entering numerical responses. For multiple choice* and ‘yes/no’ type questions, record the letter corresponding to the most appropriate response.

NOTE: Use this section if date of death is 01/01/1999 or later.

3.b. Address Information

3.b.1. PO Box, Box, &/or Route and Number: R T 7 B O X 4

3.b.2. Street Number Prefix: 

3.b.3. Street Number: 

3.b.4. Street Number Suffix: 

3.b.5. Street Name Prefix: 

3.b.6. Street Name (e.g., Elm): 

3.b.7. Street Name type: 

3.b.8. Street Name Suffix: 

3.b.9. Unit Type: 

3.b.10. Unit Prefix: 

3.b.11. Unit Identifier: 

3.b.12. Unit Suffix: 

3.b.13. Other 

3.c.1. City: 

3.d.1. County: 

3.e. State: 

3.e.1. Country (if not USA): 

3.f. Zip Code: 

W I N S T O N - S A L E S 

F O R S Y T H 

N C 

L E M 

1 1 1 1 1 – 1 1 1 1 1
Appendix A

Example B

ARIC
Atherosclerosis Risk in Communities

DEATH CERTIFICATE FORM

INSTRUCTIONS: The Death Certificate Form is completed for each eligible community death as determined by the surveillance event eligibility criteria and for all cohort deaths. Event ID and Name must be entered above. Refer to this form's Q by Q instructions for information on entering numerical responses. For multiple choice and “yes/no” type questions, record the letter corresponding to the most appropriate response.

NOTE: Use this version if date of death is 01/01/1999 or later.
Appendix A

Example C
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<td>3.b.4. Street Number Suffix:</td>
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<td>3.b.5. Street Name Prefix:</td>
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<td>3.b.6. Street Name (e.g., Elm):</td>
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<td>3.b.8. Street Name Suffix:</td>
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