

Third National Health and Nutrition Examination Survey (NHANES III) Linked Mortality File

Analytic guidelines

The NHANES III Linked Mortality File is a mortality follow-up study of NHANES III survey participants (1988-1994) through December 31, 2006 and represents an update of the mortality experience of eligible NHANES III participants. The updated NHANES III Linked Mortality File supersedes any previous data releases of a NHANES III mortality follow-up study.

These guidelines address the following analytical topics:

[I. Eligibility status](#)

[II. NHANES III participants with an age last known alive of 100 years or greater](#)

[III. Inconsistencies in baseline age and follow-up age](#)

[IV. Source of mortality information](#)

[V. Special request data file](#)

I. Linkage eligibility status

All NHANES III participants with sufficient identifying data to create a [NDI](#) submission record were eligible for mortality follow-up. The public-use version of the updated NHANES III Linked Mortality File only includes mortality follow-up for eligible adults, with those 16 years of age and younger classified as ineligible (See [Important information about those 16 years and younger](#)).

Eligibility status for mortality follow-up is indicated by the variable ELIGSTAT and for mortality or survival analyses, analysts should keep only the records with a value of ELIGSTAT = 1. For more information please refer to the File Layout and Detailed Notes for Selected Variables.

II. NHANES III participants with an age last known alive of 100 years or greater

The NHANES III Linked Mortality File includes records where the calculated age presumed alive at the end of mortality follow-up (December 31, 2006) is 100 years or greater. For these cases there was no valid NDI record match or any other source of mortality information. Yet, given the probabilistic nature of the mortality ascertainment, analysts may wish to consider these cases as loss to follow-up and make them ineligible for mortality analyses.

III. Inconsistencies in baseline age and follow-up age

Misreporting or discrepancies in reported age at baseline (screener interview or MEC exam) or date of birth can result in values for age at death or age last presumed alive that may be inconsistent with baseline age, resulting in negative follow-up time for survival analyses. Although the number of cases where this happens is small, analysts should be aware and make appropriate adjustments to the data.

IV. Source of mortality information

The primary determination of mortality for eligible NHANES III participants is based upon matching records to the NDI. However, NCHS collects multiple sources of information to determine the final mortality status of a NHANES III survey participant. Examples of other sources of mortality include indication of deceased status from the Social Security Administration, the Centers for Medicare and Medicaid Services, or death certificate review. If a source of mortality, other than a NDI record was available, the NHANES III participant was considered deceased. Variables indicating which source or sources were used to determine vital status are available on the linked mortality file. More than one source of mortality may be available. For more information please refer to the File Layout and Detailed Notes for Selected Variables.

V. Special request data file

A [special request data file](#) is available that includes additional death certificate data as well as NDI record match results for potential NDI matches that were considered “false” by the probabilistic matching algorithm, thus providing date and cause of death for those NHANES III participants NCHS determined to be alive. To provide the analyst with the opportunity to alter the criteria for determining final vital status, NCHS has provided the SCORE and CLASS for the best NDI record match. The analyst can take either a more or less conservative approach to vital status ascertainment by setting a different cut-off score within each class and/or determining which classes contain true matches. For more information on the implications of using alternate cut-off scores on vital status ascertainment, please refer to the [matching methodology document](#), [Appendix B](#).