

National Health and Nutrition Examination Survey (NHANES 1999-2004) Linked Mortality Files

Analytic guidelines

The NHANES Linked Mortality Files are a mortality follow-up study of NHANES participants for the survey years 1999-2004 with mortality follow-up through December 31, 2006. This is the first data release of mortality follow-up information for the NHANES years 1999 to 2004.

These guidelines address the following analytical topics:

[I. Eligibility status](#)

[II. NHANES 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 participants with sufficient identifying data to create a NDI submission record were eligible for mortality follow-up. The public-use version of the NHANES Linked Mortality Files only include mortality follow-up for eligible adults, with those 17 years of age and younger classified as ineligible (See [Important information about those 17 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 participants with an age last known alive of 100 years or greater

The NHANES (1999-2004) Linked Mortality Files include 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. When this occurs, the number of cases is small, but analysts should be aware and make appropriate adjustments to the data.

IV. Source of mortality information

The primary determination of mortality for eligible NHANES 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 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 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 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.](#)