NCHS Surveys
2011 Linked Mortality Files

Restricted-Use Data Dictionary

Section 1: List of Variables

Variable	Variable Label
PUBLICID	NHIS, SOA, LSOA II Public-use ID Number
SEQN	NHANES Respondent Sequence Number
RESNUM	2004 NNHS - Resident Record (Case) Number
CRID	1995 NNHS – Patient ID Number
FACID	1997 NNHS – Patient ID Number
PATNUM	2007 NHHCS – Patient/Discharge Record (Case) Number
Death Information	
ELIGSTAT	Eligibility Status for Mortality Follow-up
MORTSTAT	Final Mortality Status
MORTSRCE_NDI	Mortality Source: NDI Match
MORTSRCE_SSA	Mortality Source: SSA Information
MORTSRCE_CMS	Mortality Source: CMS Information
MORTSRCE_DC	Mortality Source: Death Certificate Match
MORTSRCE_DCL	Mortality Source: Data Collection
DODMONTH	Month of Death
DODDAY	Day of Death
DODYEAR	Year of Death
AGEDEATH	Age at Death
AGEPRALV	Age When Last Presumed Alive
Cause of Death	
CAUSEAVL	Cause of Death Data Available
ICD_9REV	ICD-9 Underlying Cause of Death (available up to 1998)
UCOD_282	ICD-9 Underlying Cause of Death 282 Groups Recode (available up to 1998)
UCOD_72	ICD-9 Underlying Cause of Death 72 Groups Recode (available up to 1998)
UCOD_34	ICD-9 Underlying Cause of Death 34 Groups Recode (available up to 1998)
ICD_10REV	ICD-10 Underlying Cause of Death (available 1999 forward)

UCOD_358	ICD-10 Underlying Cause of Death 358 Groups Recode (available 1999 forward)
UCOD_39	ICD-10 Underlying Cause of Death 39 Groups Recode (available 1999 forward)
UCOD_113	ICD-10 (all years) Underlying Cause of Death 113 Groups Recode
Multiple Cause of Death Conditions	
NUMENTAX	Number of Entity Axis Conditions
COND_1 - COND_20	Entity Axis 1st Condition - Entity Axis 20th Condition
NUMRAXCN	Number of Record Axis Conditions
RCOND_1 - RCOND_20	Record Axis 1st Condition - Record Axis 20th Condition
Survey Data – All Surveys	
DOBMONTH	Month of Birth
DOBDAY	Day of Birth
DOBYEAR	Year of Birth
Survey Data – NHIS, SOA, LSOA II	
INTVMONTH	Month of Interview
INTVDAY	Day of Interview
INTVYEAR	Year of Interview
AGEINTV	Age at Interview
WGT_NEW	Weight Adjusted for Ineligible Respondents - Person-level Sample Weight
SA_WGT_NEW	Weight Adjusted for Ineligible Respondents - Sample Adult Sample Weight
SC_WGT_NEW	Weight Adjusted for Ineligible Respondents - Sample Child Sample Weight
Survey Data – NHANES III and 1999-2010	
MECMONTH	Month of MEC Exam
MECDAY	Day of MEC Exam
MECYEAR	Year of MEC Exam
AGEMEC	Age at MEC Exam
SCRMONTH	Month of Screener Interview
SCRNDAY	Day of Screener Interview

SCRNYEAR	Year of Screener Interview
AGESCREEN	Age at Screener Interview
HMEMONTH	NHANES III Month of Home Exam
HOMEXYEAR	NHANES III Year of Home Exam
AGEHOMEX	NHANES III Age at Home Exam
Survey Data – NHEFS and NHANES II	
DOEMONTH	Month of Exam
DOEDAY	Day of Exam
DOEYEAR	Year of Exam
AGEEXAM	Age at Exam
Survey Data – NNHS	
ADMMONTH	Month of Admission
ADMDAY	Day of Admission
ADMYEAR	Year of Admission
INTVMONTH	Month of Interview
INTVDAY	Day of Interview
INTVYEAR	Year of Interview
AGEINTV	Age at Interview
Additional Death Certificate Data and NDI Matching Variables (See Below)	

Section 2: NCHS Survey Identifiers - Participant Identification Numbers

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PUBLICID NHIS Public-use ID

Type: Character Width: 14

Public use identifier assigned by NCHS.
Researchers linking to SOA, LSOA II and NHIS public-use data should use PUBLICID.

See notes on constructing PUBLICID in NHIS, SOA, and LSOA II

The previous NHIS - Linked Mortality Files also contained the variable PUBLICID_2. The family serial number was not necessary to uniquely identify a person-level record for the years 1997-2003 but was included in PUBLICID_2 for researchers who preferred to include it. The current file only includes PUBLICID, which was constructed with family serial number for all survey years.

SEQN NHANES Respondent Sequence Number

Type: Numeric Width: 5

Public use identifier assigned by NCHS.
Researchers linking to NHEFS, NHANES II, NHANES III, and 1999-2010 NHANES should use SEQN.

RESNUM 2004 NNHS - Resident Record (Case) Number

Type: Numeric Width: 6

Public use identifier assigned by NCHS.
Researchers linking to the 2004 NNHS should use RESNUM.

FACID 1997 NNHS – Patient ID Number

Type: Numeric Width: 6

Public use identifier assigned by NCHS.
Researchers linking to the 1997 NNHS should use FACID

CRID 1995 NNHS – Patient ID Number

Type: Numeric Width: 6

Public use identifier assigned by NCHS.
Researchers linking to the 1995 NNHS should use CRID

PATNUM 2007 NHHCS – Patient/Discharge Record (Case) Number

Type: Numeric Width: 6

Public use identifier assigned by NCHS.
Researchers linking to the 2007 NHHCS should use PATNUM

Section 3: Death Information

ELIGSTAT Eligibility Status for Mortality Follow-up

Type: Numeric Width: 3

1	Eligible
3	Ineligible

Survey participants are defined as ineligible for mortality linkage if they had insufficient identifying data to create a National Death Index submission record. Please note that all survey participants are included on the linked mortality files regardless of linkage eligibility. See the Linked Mortality File methodology report for more information.

MORTSTAT Final Mortality Status

Type: Numeric Width: 3

0	Assumed alive
1	Assumed deceased
Blank	Ineligible

The MORTSTAT variable is NCHS's final determination of vital status and should be used as an outcome variable and to calculate survival. Each survey participant who is eligible for mortality follow-up is assigned a vital status code (0 = assumed alive; 1 = assumed deceased).

Mortality Source. NCHS uses multiple sources of information to determine the final mortality status of a survey participant. Variables indicating which source or sources were used to determine vital status are available on the linked mortality files and are described below. Any combination of these mortality sources was used to identify survey participants as decedents.

MORTSRCE_NDI Mortality Source: NDI Match

Type: Numeric Width: 3

1	Yes
Blank	Ineligible or assumed alive

A code=1 indicates that mortality status was ascertained through a probabilistic match to a National Death Index (NDI) record.

MORTSRCE_SSA Mortality Source: SSA Information

Type: Numeric Width: 3

1	Yes
Blank	Ineligible or assumed alive

A code=1 indicates that mortality status was obtained from the Death Master File or Numident file from the Social Security Administration (SSA).

MORTSRCE_CMS Mortality Source: CMS Information

Type: Numeric Width: 3

1	Yes
Blank	Ineligible or assumed alive

A code=1 indicates that mortality status was obtained from the Centers for Medicare and Medicaid Services (CMS).

MORTSRCE_DC Mortality Source: Death Certificate Match

Type: Numeric Width: 3

1	Yes
Blank	Assumed alive

Variable is available for NHEFS and NHANES II. MORTSRCE_DC =1 indicates that mortality status was obtained from a death certificate. Death certificates may be reviewed to compare information provided on the death certificate with data collected from NHEFS or NHANES II survey records in order to assist NCHS in determining if a potential National Death Index match record correctly matches the NCHS survey participant.

MORTSRCE_DCL Mortality Source: Data Collection

Type: Numeric Width: 3

1	Yes
Blank	Assumed alive

Variable is available for LSOA II, NHEFS, and NNHS 1997. For NHEFS MORTSRCE_DCL =1 indicates that death information was obtained from a proxy decedent interview. For NNHS 1997, a code=1 indicates that death information was obtained during the NNHS survey period for Discharged Residents. Analysts should note that there are records on the 1997 NNHS public-use file indicating deceased status but were ineligible for NDI matching. On the Restricted-use Linked Mortality File, these records are classified as ineligible, and thus have no source of mortality.

DODMONTH Month of Death

Type: Numeric Width: 3

01	January
02	February
03	March
04	April
05	May
06	June
07	July
08	August
09	September
10	October
11	November
12	December
99	Unavailable
Blank	Ineligible or assumed alive

DODDAY Day of Death

Type: Numeric Width: 3

01 - 31	Day
99	Unavailable
Blank	Ineligible or assumed alive

DODYEAR Year of Death

Type: Numeric Width: 4

Year
Blank Ineligible or assumed alive

AGEDEATH Age at Death

Type: Numeric Width: 3

Age in years
Blank Ineligible or assumed alive

Misreporting or discrepancies in reported age at interview or date of birth may result in values for age at death that are inconsistent with interview age. See Analytic Guidelines.

AGEPRALV Age When Last Presumed Alive (as of December 31, 2011)

Type: Numeric Width: 3

Age in years
Blank Ineligible or assumed deceased

Misreporting or discrepancies in reported age at interview or date of birth may result in values for age when last presumed alive that are inconsistent with interview age. See Analytic Guidelines.

Section 4: Cause of Death

CAUSEAVL Cause of Death Data Available

Type: Numeric Width: 3

0	No
1	Yes
Blank	Ineligible or assumed alive

Death certificate data is available only for cases where the variable MORTSTAT=1 and MORTSRCE_NDI = 1. Users should note that it is possible to have an NDI match but no cause of death data available.

ICD_9REV ICD-9 Underlying Cause of Death (available up to 1998)
See Underlying and Multiple Causes

Type: Character Width: 4

001 – 999	Code range
Blank	Cause of death data not available or death after 1998

UCOD_282 ICD-9 Underlying Cause of Death 282 Groups Recode (available up to 1998)

See Underlying and Multiple Causes

Type: Character Width: 5

00300 – 35800	Code range
Blank	Cause of death data not available or death after 1998

UCOD_72 ICD-9 Underlying Cause of Death 72 Groups Recode (available up to 1998)

See Underlying and Multiple Causes

Type: Character Width: 3

010 – 840	Code range
Blank	Cause of death data not available or death after 1998

UCOD_34 ICD-9 Underlying Cause of Death 34 Groups Recode (available up to 1998)

See Underlying and Multiple Causes

Type: Character Width: 3

010 – 370	Code range
Blank	Cause of death data not available or death after 1998

ICD_10REV ICD-10 Underlying Cause of Death (available 1999 forward)

See Underlying and Multiple Causes

Type: Character Width: 4

A00 – Y89.9	Code range
Blank	Cause of death data not available or death before 1999

UCOD_358 ICD-10 Underlying Cause of Death 358 Groups Recode (available 1999 forward)

See Underlying and Multiple Causes

Type: Character Width: 3

001 – 456	Code range
Blank	Cause of death data not available or death before 1999

UCOD_39

ICD-10 Underlying Cause of Death 39 Groups Recode
(available 1999 forward)

See Underlying and Multiple Causes

Type: Character Width: 3

001 – 042	Code range
Blank	Cause of death data not available or death before 1999

UCOD_113

ICD-10 (all years) Underlying Cause of Death 113 Groups Recode
See Underlying and Multiple Causes

Type: Character Width: 3

001 – 135	Code range
Blank	Cause of death data not available

Section 5: Multiple Cause of Death Conditions

NUMENTAX

Number of Entity Axis Conditions
See Underlying and Multiple Causes

Type: Numeric Width: 2

00 – 20	Code range
Blank	Cause of death code not available

COND_1 - COND_20

Entity Axis 1st Condition - Entity Axis 20th Condition
See Underlying and Multiple Causes

Type: Character Width: 7

NUMRAXCN

Number of Record Axis Conditions
See Underlying and Multiple Causes

Type: Numeric Width: 3

00 – 20	Code range
Blank	Cause of death code not available

RCOND_1 - RCOND_20

Record Axis 1st Condition - Record Axis 20th Condition
See Underlying and Multiple Causes

Type: Character Width: 5

Section 6: Survey Data – All Surveys

Survey Date of Birth Variables

Complete date of birth information has been provided on the linked mortality files. Year of birth has not been bottom-coded. Where date of birth information is missing on the public-use files, it has been imputed with month = 06, day = 15, and YEAR = survey year minus the age at interview. In some cases, the date of birth information provided on the public-use files is inconsistent with date of interview information and there has been no attempt to reconcile this information. Also, imputing date of birth information for those less than one year of age can create inconsistencies in date of birth information and interview date.

DOBMONTH Month of Birth

Type: Numeric Width: 3

01	January
02	February
03	March
04	April
05	May
06	June
07	July
08	August
09	September
10	October
11	November
12	December

DOBDAY Day of Birth

Type: Numeric Width: 3

01 - 31	Day

DOBYEAR Year of Birth

Type: Numeric Width: 4

Year

Section 7: Survey Data – NHIS, SOA, LSOA II

INTVMONTH Month of Interview

Type: Numeric Width: 3

01	January
02	February
03	March
04	April
05	May
06	June
07	July
08	August
09	September
10	October
11	November
12	December
99	Unavailable

INTVDAY Day of Interview

Type: Numeric Width: 3

01 - 31	Day
99	Unavailable

INTVYEAR Year of Interview

Type: Numeric Width: 4

Year

AGEINTV Age at Interview

Type: Numeric Width: 3

Age in years

Age has not been top-coded.

WGT_NEW Weight Adjusted for Ineligible Respondents - Person-level Sample Weight

Type: Numeric Width: 8

Blank=Ineligible or weights not adjusted

1987-2009 NHIS: Values for WGT_NEW reflect the eligibility adjusted Person-level Sample Weights created to account for those ineligible for linkage to the NDI.

For the 1985 and 1986 NHIS Linked Mortality Files, there are no eligibility adjusted sample weights and WGT_NEW is therefore left blank. NCHS recommends using the final basic weight variable from the public-use files (WTFA).

WGT_NEW is not available for SOA or LSOA II.

SA_WGT_NEW Weight Adjusted for Ineligible Respondents - Sample Adult Sample Weight

Type: Numeric Width: 8

Blank= Ineligible or not a sample adult

1997-2009 NHIS: SA_WGT_NEW is available on the file. Blank values represent those ineligible or not a sample adult.

1987-1996 NHIS: The Sample Adult Sample Weight is not applicable for the 1987-1996 NHIS analyses and is therefore left blank. NCHS initiated a redesign of the NHIS questionnaire that was implemented in 1997. The Sample Adult File does not exist prior to the 1997 NHIS.

SA_WGT_NEW is not available for SOA or LSOA II.

SC_WGT_NEW Weight Adjusted for Ineligible Respondents - Sample Child Sample Weight

Type: Numeric Width: 8

Blank= Ineligible or not a sample child

1997-2009 NHIS: SC_WGT_NEW is available on the file. Blank values represent those ineligible or not a sample child.

1987-1996 NHIS: The Sample Child Sample Weight is not applicable for the 1987-1996 NHIS analyses. NCHS initiated a redesign of the NHIS questionnaire that was implemented in 1997. The Sample Child File does not exist prior to the 1997 NHIS.

SC_WGT_NEW is not available for SOA or LSOA II.

Section 8: Survey Data – NHANES III and 1999-2010

MECMONTH Month of MEC Exam

Type: Numeric Width: 3

01	January
02	February
03	March
04	April
05	May
06	June
07	July
08	August
09	September
10	October
11	November
12	December
Blank	No MEC exam

MECDAY Day of MEC Exam

Type: Numeric Width: 3

01 - 31	Day
Blank	No MEC exam

MECYEAR Year of MEC Exam

Type: Numeric Width: 4

Year	
Blank	No MEC exam

AGEMEC Age at MEC Exam

Type: Numeric Width: 3

Age in years	
Blank	No MEC exam

Age has not been top-coded.

SCRMONTH Month of Screener Interview

Type: Numeric Width: 3

01	January
02	February
03	March
04	April
05	May
06	June
07	July
08	August
09	September
10	October
11	November
12	December

SCRNDAY Day of Screener Interview

Type: Numeric Width: 3

01 - 31	Day

SCRNYEAR Year of Screener Interview

Type: Numeric Width: 4

Year

AGESCREEN Age at Screener Interview

Type: Numeric Width: 3

Age in years

Age has not been top-coded.

HMEMONTH **NHANES III** Month of Home Exam

Type: Numeric Width: 3

01	January
02	February
03	March
04	April
05	May
06	June
07	July
08	August
09	September
10	October
11	November
12	December
Blank	No home exam

HOMEXYEAR **NHANES III** Year of Home Exam

Type: Numeric Width: 3

Year	
Blank	No Home exam

AGEHOMEX **NHANES III** Age at Home Exam

Type: Numeric Width: 3

Age in years
Blank No Home exam

Age has not been top-coded.

Section 9: Survey Data – NHEFS and NHANES II

DOEMONTH Month of Exam

Type: Numeric Width: 3

01	January
02	February
03	March
04	April
05	May
06	June
07	July
08	August
09	September
10	October
11	November
12	December

DOEDAY Day of Exam

Type: Numeric Width: 3

01 - 31	Day

DOEYEAR Year of Exam

Type: Numeric Width: 4

Year

AGEEXAM Age at Exam

Type: Numeric Width: 3

Age in years

Age has not been top-coded.

Section 10: Survey Data – NNHS

ADMMONTH Month of Admission

Type: Numeric Width: 3

01	January
02	February
03	March
04	April
05	May
06	June
07	July
08	August
09	September
10	October
11	November
13	December
99	Unavailable

ADMDAY Day of Admission

Type: Numeric Width: 3

01 - 31	Day
99	Unavailable

ADMYEAR Year of Admission

Type: Numeric Width: 4

Year	
9999	Unavailable

INTVMONTH Month of Interview

Type: Numeric Width: 3

01	January
02	February
03	March
04	April
05	May
06	June
07	July
08	August
09	September
10	October
11	November
12	December

INTVDAY Day of Interview

Type: Numeric Width: 3

01 - 31 Day

INTVYEAR Year of Interview

Type: Numeric Width: 4

Year

AGEINTV Age at Interview

Type: Numeric Width: 3

Age in years

Age has not been top-coded.

DISMONTH Month of Discharge

Type: Numeric Width: 3

01	January
02	February
03	March
04	April
05	May
06	June
07	July
08	August
09	September
10	October
11	November
12	December
99	Unavailable
Blank	Current Resident

DISDAY Day of Discharge

Type: Numeric Width: 3

01 - 31	Day
99	Unavailable
Blank	Current Resident

DISYEAR Year of Discharge

Type: Numeric Width: 4

Year	
9999	Unavailable
Blank	Current Resident

Section 11: Death Certificate and Matching Variables

For the 2011 Restricted-use Linked Mortality Files, NCHS has made additional death certificate data and the complete probabilistic NDI match results available.

Death Certificate Data
The additional death certificate data are listed in Table 1, which shows the availability of variables by death year. Researchers should refer to Multiple Cause of Death documentation to determine whether, for a given death year, there is complete reporting of the death certificate information by all states.

NDI Match Result Data
Mortality ascertainment is based primarily upon the results from a probabilistic match between NCHS survey participants and NDI death certificate records. The complete probabilistic NDI match results include NDI record match results for all survey participants who returned a potential NDI match record, regardless of whether or not the records were considered correct matches by the probabilistic matching algorithm. These variables allow researchers to access NDI match results for survey participants whose final vital status was determined to be alive. The availability of these additional variables provides the user with the opportunity to alter the criteria for determining final match status. For example, with the variables SCORE and CLASS, the researcher can take either a more or less conservative approach to vital status ascertainment by setting different cut-off scores within each class and/or determining which classes contain true matches. For more information on the linkage methods, please refer to the 2011 Linked Mortality Files Matching Methodology document. The additional NDI match result variables are listed below in Table 2.

Table 1. Additional variables available from the death certificate**.**

VARIABLE DESCRIPTION	VARIABLE NAME	Variable Availability By Death Year											
		1979	*1980-81*	*1982-84*	*1985-88*	*1989*	*1990-92*	*1993*	*1994*	*1995-98*	*1999*	*2000-02*	*2003-11*
DEATH CERTIFICATE VARIABLES													
General													
Record Type	dvs_record_type	X	X	X	X	X	X	X	X	X	X	X	X
Reporting Area	dvs_report_area	X	X	X	X	X	X	X	X	X	X	X	X
Resident Status	dvs_resident_status	X	X	X	X	X	X	X	X	X	X	X	X
Day of Week of Death	dvs_death_week_day	-	-	-	-	X	X	X	X	X	X	X	X
Place of Death-Hospital and Status/Decedent Status	dvs_death_place	X	X	X	X	X	X	X	X	X	X	X	X
Manner of death	dvs_death_manner	-	-	-	-	-	-	-	-	-	X	X	X
Activity Code	dvs_death_activity	-	-	-	-	-	-	-	-	-	X	X	X
Occurrence Location													
Expanded State (includes NYC)	dvs_death_state	X	X	X	X	X	X	X	X	X	X	X	X
State or Territory (FIPS)	dvs_death_fips_state	-	-	X	X	X	X	X	X	X	X	X	X
County	dvs_death_county	X	X	X	X	X	X	X	X	X	X	X	-
County (FIPS)	dvs_death_fips_county	-	-	X	X	X	X	X	X	X	X	X	X
County Population size	dvs_death_county_population	-	-	-	-	X	X	X	X	X	X	X	X
Region and Division	dvs_death_reg_div_state	X	X	X	X	X	X	X	X	X	X	X	-

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2011 Linked Mortality Files
Death Certificate Variables

VARIABLE DESCRIPTION	VARIABLE NAME	Variable Availability By Death Year											
		1979	1980-81	1982-84	1985-88	1989	1990-92	1993	1994	1995-98	1999	2000-02	2003-11
Residence													
Expanded State (includes NYC)	dvs_res_state	X	X	X	X	X	X	X	X	X	X	X	X
State (FIPS)	dvs_res_fips_state	-	-	X	X	X	X	X	X	X	X	X	X
State/Country Recode	dvs_res_state_country_rec	-	-	-	-	-	-	-	-	-	-	-	X
Country of Residence	dvs_res_fips_country	-	-	-	-	-	-	-	-	-	-	-	X
County	dvs_res_county	X	X	X	X	X	X	X	X	X	X	X	-
County (FIPS)	dvs_res_fips_county	-	-	X	X	X	X	X	X	X	X	X	X
County Population Size	dvs_res_county_population	-	-	-	-	X	X	X	X	X	X	X	X
City	dvs_res_city	X	X	X	X	X	X	X	X	X	X	X	-
City (FIPS)	dvs_res_fips_city	-	-	-	-	-	-	-	X	X	X	X	X
City Population Size	dvs_res_population	X	X	X	X	X	X	X	X	X	X	X	X
Metropolitan/Nonmetropolitan County	dvs_res_county_metro_flag	X	X	X	X	X	X	X	X	X	X	X	X
Region, Division, and State Subcode	dvs_res_reg_div_state	X	X	X	X	X	X	X	X	X	X	X	-
PMSA/MSA	dvs_nchs_smsa	X	X	X	X	X	X	X	X	X	X	X	-
PMSA/MSA Population Size	dvs_res_msa_population	-	-	-	-	X	X	X	X	X	X	X	X
PMSA/MSA (FIPS)	dvs_res_fips_msa	-	X	X	X	X	X	X	X	X	X	X	X
CMSA (FIPS)	dvs_res_fips_cmsa	-	-	-	-	-	X	X	X	X	X	X	X
The Decedent													
Sex	dvs_sex	X	X	X	X	X	X	X	X	X	X	X	X
Race (Detail)	dvs_race	X	X	X	X	X	X	X	X	X	X	X	X
Recode 1	dvs_race_recode_1	X	X	X	X	X	X	X	X	X	X	X	X
Recode 2	dvs_race_recode_2	X	X	X	X	X	X	X	X	X	X	X	X
Multiple Race Fields	dvs_race_multiple	-	-	-	-	-	-	-	-	-	-	-	X
Bridged Race	dvs_bridged_race_flag	-	-	-	-	-	-	-	-	-	-	-	X
Race Imputation Flag	dvs_race_impute_flag	-	-	-	-	-	-	-	-	-	-	-	X

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Death Certificate Variables

VARIABLE DESCRIPTION	VARIABLE NAME	Variable Availability By Death Year											
		1979	1980-81	1982-84	1985-88	1989	1990-92	1993	1994	1995-98	1999	2000-02	2003-11
Age at Death													
Detailed Age at Death Unit	dvs_death_age_unit	X	X	X	X	X	X	X	X	X	X	X	X
Detailed Age at Death	dvs_death_age	X	X	X	X	X	X	X	X	X	X	X	X
Age Recode 1	dvs_death_age_class_1	X	X	X	X	X	X	X	X	X	X	X	X
Age Recode 2	dvs_death_age_class_2	X	X	X	X	X	X	X	X	X	X	X	X
Age Recode 3	dvs_death_age_class_3	X	X	X	X	X	X	X	X	X	X	X	X
Age Infant Recode	dvs_death_age_infant	X	X	X	X	X	X	X	X	X	X	X	X
Month of Birth	dvs_birth_month	-	-	-	-	X	X	X	X	X	X	X	X
Day of Birth	dvs_birth_day	-	-	-	-	X	X	X	X	X	X	X	X
Year of Birth	dvs_birth_year	-	-	-	-	X	X	X	X	X	X	X	X
Marital Status	dvs_marital_stat	X	X	X	X	X	X	X	X	X	X	X	X
State of Birth	dvs_birth_state	X	X	X	X	X	X	X	X	X	X	X	X
Country of Birth	dvs_birth_country	-	-	-	-	-	-	-	-	-	-	-	X
State/Country of Birth recode	dvs_birth_country_rec	-	-	-	-	-	-	-	-	-	-	-	X
Hispanic Origin													
Origin or Descent/Hispanic Origin	dvs_origin_descent	X	X	X	X	X	X	X	X	X	X	X	X
Hispanic Origin/Race Recode	dvs_origin_recode	-	-	-	-	X	X	X	X	X	X	X	X
Hispanic Origin Literal	dvs_origin_literal	-	-	-	-	-	-	-	-	-	-	-	X
Hispanic Origin Literal Code	dvs_origin_literal_code	-	-	-	-	-	-	-	-	-	-	-	X
Hispanic Origin Checkbox Items	dvs_origin_check_box	-	-	-	-	-	-	-	-	-	-	-	X
Kind of Business or Industry	dvs_industry	-	-	-	X	X	X	X	X	X	X	-	-
Usual Occupation	dvs_occupation	-	-	-	X	X	X	X	X	X	X	-	-
Education													
Education	dvs_education	-	-	-	-	X	X	X	X	X	X	X	X
Education Recode	dvs_education_rec	-	-	-	-	X	X	X	X	X	X	X	X
Education Reporting Flag	dvs_education_rpt_flag	-	-	-	-	-	-	-	-	-	-	-	X

NCHS Surveys
2011 Linked Mortality Files
Death Certificate Variables

VARIABLE DESCRIPTION	VARIABLE NAME	Variable Availability By Death Year											
		1979	1980-81	1982-84	1985-88	1989	1990-92	1993	1994	1995-98	1999	2000-02	2003-11
Underlying Cause (Infant)													
130 Cause Recode (ICD-10)	dvs_ucod_130_infant	-	-	-	-	-	-	-	-	-	X	X	X
Other Medical Items													
Autopsy Performed	dvs_autopsy_flag	X	X	X	X	X	X	X	X	-	-	-	X
Injury at Work	dvs_work_injury	-	-	-	-	-	-	X	X	X	X	X	X
Place of Accident/Injury for Specified Causes	dvs_injury_place	X	X	X	X	X	X	X	X	X	X	X	X
Method of Disposition	dvs_manner_disposition	-	-	-	-	-	-	-	-	-	-	-	X
Certifier	dvs_certifier	-	-	-	-	-	-	-	-	-	-	-	X
Certifier Literal	dvs_certifier_literal	-	-	-	-	-	-	-	-	-	-	-	X
Pregnancy Status	dvs_pregnancy_status	-	-	-	-	-	-	-	-	-	-	-	X
Tobacco Use Contributed to Death	dvs_tobacco_literal	-	-	-	-	-	-	-	-	-	-	-	X

Table 2. Additional variables available from the linkage process for researchers interested in altering the criteria for determining final match status.

Variable Description	Variable Name	Notes
NDI Record Returned	ndi_record	Flag indicates that the linkage process returned a potential NDI record match.
Class	resc_class	Class and Score are based on how many and which variables matched between the survey record and NDI record.
Score	resc_score	
Match Flag Variables		
First Name Match	ndi_first	Flags created to indicate which variables matched between survey record and NDI record. X indicates a match.
Middle Name Match	ndi_mid	
Last Name Match	ndi_last	
Surname Match	ndi_fsrnm	
Last Name (from Survey) & Surname (from NDI) Match	ndi_lnfsn	
Middle Name (from Survey) & First Name (from NDI) Match	ndi_middle_first	
First Initial (from Survey) & Middle Initial (from NDI) Match	ndi_fi_mid	
Surname (from Survey) & Last Name (from NDI) Match [Females Only]	ndi_fsnln	
Sex Match	ndi_sex	
SSN Match	ndi_ssn	
Month of Birth Match	ndi_birmm	
Day of Birth Match	ndi_birdd	
Year of Birth Match	ndi_biryy	
Resident State Match	ndi_state	
State of Birth Match	ndi_birst	
Race Match	ndi_race	
Marital Status Match	ndi_marst	
Age of Death Match	ndi_dtage	
Death Master File Match Flag	dmf_match_flag	Flag for survey records that also matched with Death Master File from Social Security Administration
Death Prior to Date Last Known Alive Flag	death_prior_alive_flag	Flag that indicates that the date of death for a potential match with an NDI record occurred prior to the last known date alive.
Manual Review Flag	man_review_flag	Flag for records below Class and Score cutoffs that were manually reviewed.
Death Identified by Multiple Sources	dead_by_sources	Flag indicating that multiple sources indicated that the survey participant has died.

Appendix: Notes on Constructing PUBLICID in NHIS, SOA and LSOA II

PUBLICID – NHIS Public ID Construction

The NHIS Linked Mortality Data Files are person-level files and can be linked to the NHIS public-use files by matching on the unique person-level NHIS ID number (PUBLICID). SOA and LSOA II are both supplements of the NHIS and therefore, construction of PUBLICID applies to these surveys as well. Across the NHIS years included in the Linked Mortality Files, NHIS has changed its construction of a unique person-level ID.

The ID number available on the Linked Mortality Files is consistent with the documentation provided for each NHIS year. Below are instructions on constructing a person-level id from the NHIS public-use files that can be merged with the Linked Mortality Files. The PUBLICID variable on the Restricted-use Linked Mortality Files is in character format with an assigned length of 14.

1986-1994 NHIS
The data items QUARTER x PSU x WEEK x SEGMENT x HOUSEHOLD NUMBER x PERSON NUMBER identify a person within each NHIS year. When combining across NHIS years it is necessary to include the NHIS year as part of the unique person-level ID.

Each file is in sequence by the following identifying items that can be concatenated to create the unique person identifier. Note: The NHIS SAS input statements available from the NHIS public-use data website do NOT input all of these variables as character and they must be in character format.

Variable	NHIS Public-use File Location	Variable Length	Description
YEAR	3-4	2	Year of interview
QUARTER	5	1	Calendar quarter of interview
PSUNUMR	6-8	3	Random recode of PSU
WEEKCEN	9-10	2	Week of interview within quarter
SEGNUM	11-12	2	Segment number
HHNUM	13-14	2	Household number
PNUM	15-16	2	Person number within household

SAS example:
```
length PUBLICID $14;
PUBLICID= trim(left(YEAR||QUARTER||PSUNUMR||WEEKCEN||SEGNUM||HHNUM||PNUM));
```

Stata example: (note this will convert the variables to string variables)
egen PUBLICID = concat(YEAR QUARTER PSUNUMR WEEKCEN SEGNUM HHNUM PNUM)

Notes on Constructing PUBLICID

1995-1996 NHIS
The data items HOUSEHOLD NUMBER x PERSON NUMBER identify a person within each NHIS year. When combining across NHIS years it is necessary to include the NHIS year as part of the unique person-level ID.

Each file is in sequence by the following identifying items that can be concatenated to create the unique person identifier. Note: the NHIS SAS input statements available from the NHIS public-use data website do NOT input all of these variables as character and they must be in character format.

Variable	NHIS Public-use File Location	Variable Length	Description
YEAR	3-4	2	Year of interview
HHID	5-14	10	Household number
PNUM	15-16	2	Person number within household

SAS example:
```
length PUBLICID $14;
PUBLICID= trim(left(YEAR||HHID||PNUM));
```

Stata example: (note this will convert the variables to string variables)
egen PUBLICID = concat(YEAR HHID PNUM)

1997-2003 NHIS
The data items HOUSEHOLD NUMBER x FAMILY NUMBER x PERSON NUMBER identify a person within each NHIS year. When combining across NHIS years it is necessary to include the NHIS year as part of the unique person-level ID.

Each file is in sequence by the following identifying items that can be concatenated to create the unique person identifier. Note: the NHIS SAS input statements available from the NHIS public-use data website do NOT input all of these variables as character and they must be in character format.

Variable	NHIS Public-use File Location	Variable Length	Description
SRVY_YR	3-6	4	Year of interview
HHX	7-12	6	Household number
FMX	13-14	2	Family number
PX	15-16	2	Person number within household

Notes on Constructing PUBLICID

SAS example:

```
length PUBLICID $14;
PUBLICID= trim(left(SRVY_YR||HHX||FMX||PX));
```

Stata example: (note this will convert the variables to string variables)
egen PUBLICID = concat(SRVY_YR HHX FMX PX)

2004 NHIS
The data items HOUSEHOLD NUMBER x FAMILY NUMBER x PERSON NUMBER identify a person within each NHIS year. When combining across NHIS years it is necessary to include the NHIS year as part of the unique person-level ID.

Each file is in sequence by the following identifying items that can be concatenated to create the unique person identifier. Note: the NHIS SAS input statements available from the NHIS public-use data website do NOT input all of these variables as character and they must be in character format.

Variable	NHIS Public-use File Location	Variable Length	Description
SRVY_YR	3-6	4	Year of interview
HHX	7-12	6	Household number
FMX	13-14	2	Family number
FPX	15-16	2	Person number within household

SAS example:

```
length PUBLICID $14;
PUBLICID= trim(left(SRVY_YR||HHX||FMX||FPX));
```

Stata example: (note this will convert the variables to string variables)
egen PUBLICID = concat(SRVY_YR HHX FMX FPX)

2005 - 2009 NHIS
The data items HOUSEHOLD NUMBER x FAMILY NUMBER x PERSON NUMBER identify a person within each NHIS year. When combining across NHIS years it is necessary to include the NHIS year as part of the unique person-level ID.

Each file is in sequence by the following identifying items that can be concatenated to create the unique person identifier. Note: the NHIS SAS input statements available from the NHIS public-use data website do NOT input all of these variables as character and they must be in character format.

Notes on Constructing PUBLICID

Variable	NHIS Public-use File Location	Variable Length	Description
SRVY_YR	3-6	4	Year of interview
HHX	7-12	6	Household number
FMX	16-17	2	Family number
FPX	18-19	2	Person number within household

SAS example:

```
length PUBLICID $14;
PUBLICID= trim(left(SRVY_YR||HHX||FMX||FPX));
```

Stata example: (note this will convert the variables to string variables)

```
egen PUBLICID = concat(SRVY_YR HHX FMX FPX)
```

SOA / LSOA II

The data items QUARTER x PSU x WEEK x SEGMENT x HOUSEHOLD NUMBER x PERSON NUMBER identify a SOA/LSOA participant.

Each file is in sequence by the following identifying items that can be concatenated to create the unique person identifier. Note: The public id variable on the restricted-use SOA/LSOA Linked Mortality Files is in character format and includes YEAR giving it an assigned length of 14.

Variable	SOA Public-use File Location	Variable Length	Description
YEAR	3-4	2	Year of interview
QUARTER	5	1	Calendar quarter of interview
PSU	6-8	3	Random recode of PSU
WEEKPROC	9-10	2	Week of interview within quarter
SEGNUM	11-12	2	Segment number
HHNUM	13-14	2	Household number
PNUM	15-16	2	Person number within household

SAS example:

```
length PUBLICID $14;
PUBLICID= trim(left(YEAR||QUARTER||PSU||WEEKPROC||SEGNUM||HHNUM||PNUM));
```

Stata example: (note this will convert the variables to string variables)

```
egen PUBLICID = concat(YEAR QUARTER PSU WEEKPROC SEGNUM HHNUM PNUM)
```