

## Introduction to NC Vital Statistics Data

- \* Introduction
- \* Guidelines
- \* General Information
- \* UNC File Information
- \* Exhibits

This Web site contains documentation for North Carolina vital statistics data files that are available for public use. Both documentation and data files can be downloaded from this Web site. These files were created and made available by the State Center for Health Statistics (SCHS) in response to numerous requests from users of vital statistics data who desire analysis different from that normally published by the SCHS. The Howard W. Odum Institute for Research in Social Science at The University of North Carolina at Chapel Hill maintains this Web site to support public awareness and access to these data.

SCHS continually strives to be responsive to the needs of users of vital statistics data. In recent years, we have made tremendous strides in the timeliness, the content, and the number of different publications released from this office. Yet, we realize that the published reports can never meet everyone's needs. Keeping in mind our legal and moral obligations concerning the confidentiality of these reported vital events, we have created these data files such that each record does not identify an individual yet retains all variables of statistical interest that were originally captured from the certificates.

Neither SCHS nor the Odum Institute assumes responsibility for any interpretations or conclusions which may be made based on these data. We recommend that users follow the guidelines in this publication, which are included to help the user better utilize the data files and to help us better meet our objectives in the dissemination of vital statistics data.

Access to these files is available through this Web site. Any questions regarding this Web page or accessing these data at UNC should be directed to:

Chris Wiesen  
Institute for Research in Social Science  
CB# 3355  
University of North Carolina  
Chapel Hill, NC 27599-3355  
Phone: (919) 843-5110  
Fax: (919) 962-4777  
Chris\_Wiesen@unc.edu

Any questions regarding SCHS and these data that are not related to the Web site should be directed to:

State Center for Health Statistics  
North Carolina Department of Health and Human Services  
1908 Mail Service Center  
Raleigh NC 27699-1908  
Telephone (919) 733-4728

Direct comments or questions to Chris\_Wiesen@unc.edu.

## Introduction

As mentioned in the Preface, one objective of the State Center for Health Statistics (SCHS) is the dissemination of vital statistics data. This objective is met primarily by such standard publications as Vital Statistics, volume 1 and volume 2, Detailed Mortality Statistics, the Basic Automated Birth Yearbook (BABY BOOK), and the North Carolina Health Statistics Pocket Guide. In addition to this major series of publications, special one-time reports are prepared as part of the Center for Health Statistics (CHS) Studies series. Unpublished tabulations dealing with vital statistics are also available. Information concerning any of these materials may be obtained by communication with the SCHS.

The data sets described in this publication add another dimension to our efforts to meet the needs of vital statistics data users. We are making available files containing data on births, deaths, fetal deaths, marriages, and divorces occurring since 1968. A separate data set exists for each event type and year of occurrence. Additional files will be made available each year. Exact definitions of these events and information concerning how they are collected can be found in this publication under General Information.

Another type of data set which is a subset of birth and death files is also available. We have created a consolidated birth/infant death file that contains records of deaths occurring during the first year of life. Each such death record has been matched with a corresponding birth record creating a composite record containing information about both events. Users of these consolidated files should be aware that the file year of these data sets refers to the year of birth, not the year of death. For example, the 1970 consolidated birth/infant death file contains records of births occurring during 1970 that ended in an infant death either in 1970 or 1971. For this reason, the number of infant deaths for a particular year as obtained from the consolidated file will not be the same as the number obtained from the death file for that same year. This difference should especially be kept in mind when using this file in conjunction with the publication Vital Statistics, volume 1.

In establishing these files for different years, we encountered numerous versions of code structures and record formats. Our objective was to create files with a common format and code structure for all years. This was successfully accomplished for years 1968 to 1974. In 1975 our vital statistics processing changed significantly in terms of data captured and codes used. As a result of this new direction in our processing, we decided to deviate slightly from the existing file structure for data years 1975 onward.

In 1978, North Carolina began using revised certificates for births, deaths, fetal deaths, and marriages based on the model state certificates proposed by the National Center for Health Statistics. Once again we were faced with a decision on maintaining the 1975-1977 file structure or adding new data. The birth file is the only one we chose to modify as a result of these revisions. Seven new items have been added, extending the records by 15 characters. Once again, the first 51 characters are the same for all years and positions 52-62 agree with the 1975-1977 format. To keep the record length of fetal deaths the same as births, blanks were inserted in these new fields for fetal deaths.

The 1978 consolidated birth/infant death file has been modified to include the seven new birth items as well. The first 78 characters are the same for all years and positions 79-88 agree with the 1975-77 format. Positions 89-104 have been added to accommodate the new variables. The 1978 consolidated birth/infant death file, being by year of birth, has a mixture of cause-of-death codes. Causes for infants dying in 1978 are coded according to ICDA-8 and those dying during 1979 are coded according to the ICD-9 version.

The 1978 death file structure was not modified, in anticipation of a 1979 revision to accommodate the change in cause-of-death coding. The Ninth Revision of the International Classification of Diseases (ICD) became effective January 1, 1979. This revision has several major changes which result in a lack of comparability for persons doing trend analysis. In addition to the change in cause-of-death coding, three new items have been added, extending the death records by 6 characters. The first 36 characters are the same for all years with positions 37-42 having been added to accommodate the new variables.

The 1984 death file structure remains the same except for the addition of occupation and industry codes of the decedent in positions 43-45 and 46-48. The codes for occupation and industry are derived from the Bureau of the Census Alphabetical Index of Industries and Occupations.

In 1988, major revisions were instituted for birth and fetal deaths. These changes are reflected in the new file descriptions. Although the files are very similar, the differences are such that separate descriptions are included.

The new birth certificate implemented by North Carolina in 1988 requires the reporting of mother's date of birth rather than her age; we then compute her age. Some other states made this change in 1989, but Virginia still collects mother's age and not her date of birth. Mother's age is not routinely keyed. As a result, it was discovered that some age-specific data published for 1988 and 1989 was in error due to missing age information, statewide to a small extent but most notably for Alleghany, Currituck, Dare, Caswell, Gates, Hertford, and Northampton counties.

We cannot correct the 1988 files because photocopies of out-of-state birth certificates for North Carolina residents have been destroyed according to the prescribed retention schedule. We have corrected the 1989 and later files to reflect recorded mother's age for out-of-state births.

Starting with the 1990 live birth, fetal death, and consolidated birth/infant death records, the field for race of child will be the same as the field for race of mother. Race of child was formerly based on race of mother and race of father, but the National Center for Health Statistics is now using race of mother only.

There will be instances where race of mother is unknown (code "9"). However, race of child will always assume a known value (codes "0-8"), based on random assignment in the same proportions as the known cases.

Starting in 2011, the birth and consolidated birth/death file was modified to reflect the 2003 revision of the U.S. Standard Birth Certificate. Changes to these files are reflected in the updated file descriptions.

Changes seen in the new birth certificate implemented by North Carolina are based on the 2003 U.S. Standard Birth Certificate, which includes several new or modified data fields. These data fields include indicators for risk factors during pregnancy, maternal morbidity, and abnormal conditions of the newborn. Another significant change in the birth file is the use of FIPS codes (NCHS Part8A) for data fields containing state, county, and city information.

## Guidelines

1. Any publication using these data should acknowledge the State Center for Health Statistics (SCHS) and the Howard W. Odum Institute for Research in Social Science at UNC at Chapel Hill as the source of data. Such an acknowledgement should make it clear that these agencies are responsible for the original data only, and not for any content of the publication.
2. Users of the data files should notify the State Center for Health Statistics at the beginning of each new major project or study that will use the data. By sharing with us a brief overview of each new use of the data, the user will be able to benefit from our knowledge of similar efforts completed.
3. The State Center for Health Statistics requests a copy of any material based on the data. This includes position papers, scientific reports, and graduate papers in addition to publications.
4. All users of the data files should use SCHS publications as a baseline for their analysis whenever possible. Doing so will be an added safeguard against misinterpretation of the data. Supporting publications are mentioned in the Introduction.
5. Any and all discrepancies between the documentation and the data files or any problems encountered in accessing the data sets should be reported to the State Center for Health Statistics as soon as possible.
6. Requests for publications or problems encountered with the data sets should be addressed to:

Vital Statistics Branch  
State Center for Health Statistics  
Department of Environment, Health, and Natural Resources  
P.O. Box 29538  
Raleigh, North Carolina 27626-0538  
Telephone: (919) 733-4728

## General Information

A live birth is the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which, after such separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or any definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached. (Definition adopted by World Health Organization in 1950.)

A fetal death is death prior to the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, as indicated by the fact that after such expulsion or extraction the fetus does not breathe or show any evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles. (Definition adopted by World Health Organization in 1950.) Consistent with North Carolina law, this includes only fetal deaths which do not qualify as therapeutic abortions and which result from pregnancies of 20 or more weeks duration.

Death is defined as the permanent disappearance of any evidence of life at any time after live birth (1). This definition excludes fetal deaths.

North Carolina law defines marriage as the legal union of a male and a female (G.S. 51-1). Legal divorce or annulment can occur only by decree of an authorized court. Annulments, which void marriage from the beginning, constitute less than one percent of the sum of these events. A divorce from bed and board is a judicial separation suspending cohabitation but not otherwise affecting the marriage bond. Divorces from bed and board are not included in these files.

The origin, flow, and disposition of North Carolina vital records are illustrated in the flow diagram included as Exhibit G. A brief history of vital records processing in North Carolina and current registration practice are discussed below. The user of these data sets may note in particular the paragraph regarding registration of fetal deaths. Legislation enacted by the 1971 North Carolina General Assembly altered fetal death registration practice.

The Bureau of Vital Statistics, with the State Health Director as State Registrar of Vital Statistics, was created by an act of the General Assembly of 1913. The duties of the State Registrar of Vital Statistics are accomplished primarily by the Vital Records Section of the Division of Epidemiology with support from the State Center for Health and Environmental Statistics.

The collection of birth and death records began on October 1, 1913. The Division of Vital Records is the custodian of these records. Statutes enacted by the General Assembly of 1913 required that physicians, midwives, or other persons attending a birth, file a birth certificate within five days after birth. In 1989 the reporting period was changed from five days to ten. The funeral director or persons burying a body is responsible for filing a death certificate or fetal death certificate with the local registrar prior to final disposition and within 72 hours after death. North Carolina was admitted into the National Death Registration Area in 1916 and into the National Birth Registration Area in 1917.

The local registrar is the health director in all 100 counties. A clerk of the county health department, designated by the local registrar as deputy registrar, carries out registration procedures locally. The deputy registrar forwards the original birth and death certificates to the Vital Records Section on the fifth day of the month following the event, where they are processed and permanently preserved.

Prior to May 19, 1971, North Carolina law required the filing of a fetal death certificate for fetal deaths (stillbirths) of 20 or more weeks gestation. Legislation enacted by the 1971 General Assembly (G.S. 14- 45.1) requires that an induced abortion be reported on a separate form. For this reason, the number of fetal deaths reported since 1971 is not strictly comparable to the number in previous years.

In 1957, the General Assembly enacted legislation requiring that the duties of the clerk of court include the registration of divorces and annulments of marriage effective January 1, 1958. Lists of divorces and annulments were required to be sent to the Vital Records Section on or before the 15th day of the month following the event. In 1985 a certificate of absolute divorce or annulment replaced the listing. (See Exhibits K and R.)

By virtue of legislation enacted in 1961, the duties of the county register of deeds include the registration of marriages occurring on or after January 1, 1962. Copies of the certificates of marriage are required to be forwarded to the Vital Records Section on or before the 15th day of the month following the marriage. The original certificates are filed with the county registers of deeds.

In January 1964, North Carolina was admitted to the National Marriage Registration Area. North Carolina is not a member of the National Divorce Registration Area.

Completeness of registration is defined as the degree to which reported vital event enumerations agree with the true counts in a given time frame. Birth registration, tested for completeness in 1940 and 1950, was found to be 86 and 96 percent complete respectively (2). Death registration is believed to be even more complete than birth registration.

Fetal death registration, tested for completeness in 1974, was found to be 99 percent complete (3). Marriage registration was tested for completeness in 1963. Over 99 percent of performed marriages resulted in properly recorded certificates of marriage (4).

Delayed registration results in underenumeration of vital events for a specific time period. Records in these data sets are based on events filed with the local registrar prior to March 1 of the year following occurrence and processed in the State office before the end of March. Based on examinations of lagtimes in prior years, the number of calendar year events filed after March 1 of the subsequent year is considered negligible.

(1)R.D. Grove and A.M. Hetzel, Vital Statistics Rates in the United States: 1940-1960, Public Health Service Publication No. 1677, (Washington, D.C.: U.S. Government Printing Office, 1968), pp. 47-49.

(2)U.S. Department of Health, Education and Welfare, Public Health Service, National Office of Vital Statistics, "Birth Registration Completeness in the United States and Geographic Areas, 1950," 39:2 (September 21, 1954), p. 55.

(3)Lucas, I.J. (1975). A Study of Completeness of Fetal Death Registration in North Carolina. North Carolina Department of Environment, Health and Natural Resources, Division of Statistics and Information Services Statistical Report Series, No. SRS-5141-07-28-75, Raleigh, North Carolina, p. 16.

(4)North Carolina State Board of Health, Public Health Statistics Section. Test conducted in compliance with procedures of the National Office of Vital Statistics.

UNC File Information

North Carolina Vital Statistics Data  
Updated September 2007

Data sets containing North Carolina vital statistics -- data on births, deaths, fetal deaths, marriages and divorces occurring in North Carolina from 1968 to present -- are downloadable directly from this Web site.

Instructions for using these data and complete file layouts are available on this webpage. IRSS also has hardcopy reference materials for using these data and can answer any specific questions you may have. Direct questions and comments to Chris Wiesen via e-mail at [Chris\\_Wiesen@unc.edu](mailto:Chris_Wiesen@unc.edu) or via phone at (919) 843-5110.

Source:

The North Carolina Vital Statistics data files were created and made available by the Center for Health Statistics.



Exhibits

- EXHIBIT A1. Vital Statistics Codes of North Carolina Counties and Incorporated Places of 2500 and Over (1970 Census), 1968-74
- EXHIBIT A2. Vital Statistics Codes of North Carolina Counties and Incorporated Places of 2500 and Over (1970 Census), 1975-79
- EXHIBIT A3. Vital Statistics Codes of North Carolina Counties and Incorporated Places of 2500 and Over (1980 Census), 1980 Onward
- EXHIBIT B. North Carolina District Codes as an Indicator of Population: 1970 Census
- EXHIBIT C1. Out-of-State Codes, 1968-1974
- EXHIBIT C2. Out-of-State Codes, 1975 Onward
- EXHIBIT D. Certificate of Live Birth, 1968 Revision
- EXHIBIT E. Certificate of Fetal Death, 1968 Revision
- EXHIBIT F. Certificate of Death, 1968 Revision
- EXHIBIT G. The Origin, Flow, and Disposition of Vital Records: North Carolina
- EXHIBIT H. North Carolina County Codes
- EXHIBIT I. Out-of-State Codes, Marriage Files
- EXHIBIT J. Application, License and Certificate of Marriage, 1968 Revision
- EXHIBIT K. Monthly Report of Divorces Granted
- EXHIBIT L. Certificate of Live Birth, 1978 Revision
- EXHIBIT M. Report of Fetal Death, 1978 Revision
- EXHIBIT N. Certificate of Death, 1978 Revision
- EXHIBIT O. Application, License and Certificate of Marriage, 1978 Revision
- EXHIBIT P. The Apgar Score 106
- EXHIBIT Q. Report of Fetal Death, 1979 Revision
- EXHIBIT R. Certificate of Absolute Divorce or Annulment
- EXHIBIT S. Certificate of Live Birth, 1988 Revision
- EXHIBIT T. Report of Fetal Death, 1988 Revision
- EXHIBIT U. Certificate of Death, 1988 Revision
- EXHIBIT V. Report of Fetal Death, 1989 Revision
- EXHIBIT W. Certificate of Death, 1989 Revision
- EXHIBIT X. Application, License and Certificate of Marriage, 1989 Revision
- EXHIBIT Y. Certificate of Live Birth, 1990 Revision
- EXHIBIT Z. Matched Infant Birth/Death File, 1998 & Beyond

Titles not highlighted are not available in electronic form at this time.

Direct comments or questions to Chris\_Wiesen@unc.edu.

**sheaves**  
D:20080915095314-04'00'9/15/2008 8:53:14 AM

---

Exhibits not underlined are not available at this time.

s and Incorporated

s and Incorporated



NC Vital Statistics Documentation -- Exhibit A1

North Carolina Vital Statistics  
Odum Institute for Research in Social Science

Exhibit A1

Vital Statistics Codes of N.C. Counties and Incorporated Places of  
2500 and over, 1968-1974.

00100 Alamance  
00170 Graham  
00190 Burlington

00200 Alexander

00300 Alleghany

00400 Anson  
00460 Wadesboro

00500 Ashe

00600 Avery

00700 Beaufort  
00770 Washington

00800 Bertie

00900 Bladen

01000 Brunswick

01100 Buncome  
01160 Black Mountain  
01195 Asheville

01200 Burke  
01260 Valdese  
01280 Morganton

01300 Cabarrus  
01380 Concord

01400 Caldwell  
01461 Hudson  
01480 Lenoir

01500 Camden

01600 Carteret  
01660 Beaufort  
01670 Morehead City

01700 Caswell

01800 Catawba  
01860 Longview  
01861 Conover  
01870 Newton  
01880 Hickory

01900 Chatham  
01960 Siler City

02000 Cherokee

02100 Chowan  
02160 Edenton

02200 Clay

02300 Cleveland  
02370 Kings Mountain  
02380 Shelby

02400 Columbus  
02460 Whiteville

02500 Craven  
02570 Havelock  
02580 New Bern

02600 Cumberland  
02660 Spring Lake  
02695 Fayetteville

02700 Currituck

02800 Dare

02900 Davidson  
02980 Lexington  
02981 Thomasville

03000 Davie  
03060 Mocksville\*

03100 Duplin  
03160 Wallace\*  
03161 Warsaw\*

03200 Durham  
03295 Durham

03300 Edgecombe  
03370 Tarrboro  
03390 Rocky Mount

03400 Forsyth  
03460 Kernersville  
03495 Winston Salem

03500 Franklin  
03560 Louisburg

03600 Gaston  
03662 Dallas  
03663 Lowell  
03665 Belmont  
03671 Bessemer City  
03673 Mount Holly  
03690 Gastonia

03700 Gates

03800 Graham

03900 Granville  
03970 Oxford

04000 Greene

04100 Guilford  
04195 Greensboro  
04196 High Point

04200 Halifax  
04260 Scotland Neck  
04295 Enfield  
04280 Roanoke Rapids  
  
04300 Harnett  
04360 Erwin  
04370 Dunn  
  
04400 Haywood  
04470 Waynesville  
04471 Canton  
  
04500 Henderson  
04570 Hendersonville  
  
04600 Hertford  
04661 Murfreesboro  
04670 Ahoskie  
  
04700 Hoke  
04760 Raeford  
  
04800 Hyde  
  
04900 Iredell  
04970 Mooresville  
04980 Statesville  
05000 Jackson  
  
05100 Johnston  
05160 Selma  
05161 Clayton  
05170 Smithfield  
  
05200 Jones  
  
05300 Lee  
05380 Sanford  
  
05400 Lenoir  
05460 La Grange\*  
05480 Kinston  
  
05500 Lincoln  
05570 Lincolnton  
  
05600 McDowell  
05660 Marion  
  
05700 Macon  
  
05800 Madison  
  
05900 Martin  
05970 Williamston  
  
06000 Mecklenburg  
06060 Davidson  
06095 Charlotte  
  
06100 Mitchell  
  
06200 Montgomery  
  
06300 Moore  
06370 Southern Pines  
  
06400 Nash  
06490 Rocky Mount

06500 New Hanover  
06590 Wilmington

06600 Northhampton

06700 Onslow  
06780 Jacksonville\*

06800 Orange  
06860 Carrboro\*  
06890 Chapel Hill

06900 Pamlico

07000 Pasquotank  
07080 Elizabeth City

07100 Pender

07200 Perquimans

07300 Person  
07370 Roxboro

07400 Pitt  
07460 Farmville  
07610 Ayden  
07490 Greenville

07500 Polk

07600 Randolph  
07671 Archdale\*  
07680 Asheboro

07700 Richmond  
07760 Hamlet  
07770 Rockingham

07800 Robeson  
07860 Red Springs  
07861 Fairmont\*  
07880 Lumberton

07900 Rockingham  
07961 Mayodan\*  
07980 Reidville  
07981 Eden

08000 Rowan  
08060 Spencer  
08080 Salisbury

08100 Rutherford  
08161 Rutherfordton  
08162 Spindale  
08170 Forest City

08200 Sampson  
08270 Clinton

08300 Scotland  
08370 Laurinburg

08400 Stanly  
08480 Albemarle

08500 Stokes

08600 Surry  
08660 Elkin  
08670 Mount Airy  
  
08700 Swain  
  
08800 Transylvania  
08870 Brevard  
  
08900 Tyrell  
  
09000 Union  
09060 Wingate\*  
09080 Monroe  
  
09100 Vance  
09180 Henderson  
  
09200 Wake  
09260 Wake Forest  
09262 Fuquay Springs  
09263 Garner  
09270 Cary  
09295 Raleigh  
  
09300 Warren  
  
09400 Washington  
09460 Plymouth  
  
09500 Watauga  
09570 Boone  
  
09600 Wayne  
09660 Mount Olive  
09690 Goldsboro  
  
09700 Wilkes  
09760 North Wilkesboro  
  
09800 Wilson  
09890 Wilson  
  
09900 Yadkin  
  
10000 Yancey

\*= Added January 1, 1971

NC Vital Statistics Documentation - Exhibit A2

North Carolina Vital Statistics  
Odum Institute for Research in Social Science

Exhibit A2, for data Years 1975-1979  
Vital Statistics Codes of North Carolina Counties and Incorporated  
Places of 2500 and Over (1970 Census)

001-00 Alamance  
001-70 Graham  
001-90 Burlington

002-00 Alexander

003-00 Alleghany

004-00 Anson  
004-60 Wadesboro

005-00 Ashe

006-00 Avery

007-00 Beaufort  
007-70 Washington

008-00 Bertie

009-00 Bladen

010-00 Brunswick

011-00 Buncombe  
011-60 Black Mountain  
011-95 Asheville

012-00 Burke  
012-60 Valdese  
012-80 Morganton  
012-81 Hickory (P)

013-00 Cabarrus  
013-80 Concord

014-00 Caldwell  
014-61 Hudson  
014-80 Lenoir

015-00 Camden

016-00 Carteret  
016-60 Beaufort  
016-70 Morehead City

017-00 Caswell

018-00 Catawba  
018-60 Longview  
018-61 Conover  
018-70 Newton  
018-80 Hickory (P)

019-00 Chatham  
019-60 Siler City

020-00 Cherokee

021-00 Chowan  
021-60 Edenton

022-00 Clay

023-00 Cleveland  
023-70 Kings Mountain (P)  
023-80 Shelby

024-00 Columbus  
024-60 Whiteville

025-00 Craven  
025-70 Havelock  
025-80 New Bern

026-00 Cumberland  
026-60 Spring Lake  
026-95 Fayetteville

027-00 Currituck

028-00 Dare

029-00 Davidson  
029-80 Lexington  
029-81 Thomasville  
029-96 High Point (P)

030-00 Davie  
030-60 Mocksville

031-00 Duplin  
031-60 Wallace  
031-61 Warsaw

032-00 Durham  
032-90 Chapel Hill (P)  
032-95 Durham

033-00 Edgecombe  
033-70 Tarrboro  
033-90 Rocky Mount (P)

034-00 Forsyth  
034-60 Kernersville (P)  
034-95 Winston Salem

035-00 Franklin  
035-60 Louisburg

036-00 Gaston  
036-62 Dallas  
036-63 Lowell  
036-65 Belmont  
036-70 Kings Mountain (P)  
036-71 Bessemer City  
036-73 Mount Holly  
036-90 Gastonia

037-00 Gates

038-00 Graham

039-00 Granville  
039-70 Oxford

040-00 Greene

041-00 Guilford  
041-60 Kernersville (P)  
041-95 Greensboro  
041-96 High Point (P)

042-00 Halifax  
042-60 Scotland Neck  
042-95 Enfield  
042-80 Roanoke Rapids

043-00 Harnett  
043-60 Erwin  
043-70 Dunn

044-00 Haywood  
044-70 Waynesville  
044-71 Canton

045-00 Henderson  
045-70 Hendersonville

046-00 Hertford  
046-61 Murfreesboro  
046-70 Ahoskie

047-00 Hoke  
047-60 Raeford

048-00 Hyde

049-00 Iredell  
049-70 Mooresville  
049-80 Statesville

050-00 Jackson

051-00 Johnston  
051-60 Selma  
051-61 Clayton  
051-70 Smithfield

052-00 Jones

053-00 Lee  
053-80 Sanford

054-00 Lenoir  
054-60 La Grange  
054-80 Kinston

055-00 Lincoln  
055-70 Lincolnton

056-00 McDowell  
056-60 Marion

057-00 Macon

058-00 Madison

059-00 Martin  
059-70 Williamston

060-00 Mecklenburg  
060-60 Davidson  
060-95 Charlotte

061-00 Mitchell

062-00 Montgomery



063-00 Moore  
063-70 Southern Pines

064-00 Nash  
064-90 Rocky Mount (P)

065-00 New Hanover  
065-90 Wilmington

066-00 Northhampton

067-00 Onslow  
067-80 Jacksonville

068-00 Orange  
068-60 Carrboro  
068-90 Chapel Hill (P)

069-00 Pamlico

070-00 Pasquotank  
070-80 Elizabeth City

071-00 Pender

072-00 Perquimans

073-00 Person  
073-70 Roxboro

074-00 Pitt  
074-60 Farmville  
076-10 Ayden  
074-90 Greenville

075-00 Polk

076-00 Randolph  
076-71 Archdale  
076-80 Asheboro  
076-96 High Point (P)

077-00 Richmond  
077-60 Hamlet  
077-70 Rockingham

078-00 Robeson  
078-60 Red Springs  
078-61 Fairmont  
078-80 Lumberton

079-00 Rockingham  
079-61 Mayodan  
079-80 Reidville  
079-81 Eden

080-00 Rowan  
080-60 Spencer  
080-80 Salisbury

081-00 Rutherford  
081-61 Rutherfordton  
081-62 Spindale  
081-70 Forest City

082-00 Sampson  
082-70 Clinton

083-00 Scotland  
083-70 Laurinburg

084-00 Stanly  
084-80 Albemarle

085-00 Stokes

086-00 Surry  
086-60 Elkin (P)  
086-70 Mount Airy

087-00 Swain

088-00 Transylvania  
088-70 Brevard

089-00 Tyrell

090-00 Union  
090-60 Wingate  
090-80 Monroe

091-00 Vance  
091-80 Henderson

092-00 Wake  
092-60 Wake Forest  
092-62 Fuquay Springs  
092-63 Garner  
092-70 Cary  
092-95 Raleigh

093-00 Warren

094-00 Washington  
094-60 Plymouth

095-00 Watauga  
095-70 Boone

096-00 Wayne  
096-60 Mount Olive  
096-90 Goldsboro

097-00 Wilkes  
097-60 North Wilkesboro  
097-61 Elkin (P)

098-00 Wilson  
098-90 Wilson

099-00 Yadkin

100-00 Yancey  
050-00 Jackson

North Carolina Vital Statistics  
Odum Institute for Research in Social Science

Exhibit A3

Vital Statistics Codes for North Carolina Counties  
And Incorporated Places of 2,500 and Over (1980 Census)

001-00 Alamance  
001-60 Elon College  
001-61 Gibsonville (P)  
001-62 Mebane (P)  
001-70 Graham  
001-90 Burlington

002-00 Alexander

003-00 Alleghany

004-00 Anson  
004-60 Wadesboro

005-00 Ashe

006-00 Avery

007-00 Beaufort  
007-70 Washington

008-00 Bertie

009-00 Bladen  
009-60 Elizabethtown

010-00 Brunswick  
010-60 Southport  
010-61 Long Beach (3)

011-00 Buncome  
011-60 Black Mountain  
011-61 Woodfin  
011-95 Asheville

012-00 Burke  
012-60 Valdese  
012-61 Longview (P)  
012-80 Morganton  
012-81 Hickory (P)

013-00 Cabarrus  
013-80 Concord  
013-81 Kannapolis (P) (2)

014-00 Caldwell  
014-61 Hudson  
014-62 Granite Falls  
014-63 Gamewell (3)  
014-61 Sawmills (3)  
014-80 Lenoir

015-00 Camden  
015-60 Elizabeth City (P)

016-00 Carteret  
016-60 Beaufort  
016-61 Newport (3)  
016-70 Morehead City

017-00 Caswell

018-00 Catawba  
018-60 Longview (P)  
018-61 Conover  
018-62 Maiden (P)  
018-70 Newton  
018-80 Hickory (P)

019-00 Chatham  
019-60 Siler City

020-00 Cherokee  
020-60 Andrews (3)

021-00 Chowan  
021-60 Edenton

022-00 Clay

023-00 Cleveland  
023-70 Kings Mountain (P)  
023-80 Shelby

024-00 Columbus  
024-60 Whiteville  
024-61 Tabor City

025-00 Craven  
025-70 Havelock  
025-80 New Bern

026-00 Cumberland  
026-60 Spring Lake  
026-61 Hope Mills  
026-95 Fayetteville

027-00 Currituck

028-00 Dare  
028-60 Kill Devil Hills (3)

029-00 Davidson  
029-80 Lexington  
029-81 Thomasville  
029-96 High Point (P)

030-00 Davie  
030-60 Mocksville

031-00 Duplin  
031-60 Wallace  
031-61 Warsaw  
031-62 Mount Olive (P)

032-00 Durham  
032-90 Chapel Hill (P)  
032-95 Durham (P)

033-00 Edgecombe  
033-70 Tarrboro  
033-90 Rocky Mount (P)

034-00 Forsyth  
034-60 Kernersville (P)  
034-61 Clemmons (3)  
034-62 King (P) (3)  
034-95 Winston Salem

035-00 Franklin  
035-60 Louisburg

036-00 Gaston  
036-61 Stanley (3)  
036-62 Dallas  
036-63 Lowell  
036-65 Belmont  
036-70 Kings Mountain (P)  
036-71 Bessemer City  
036-72 Cherryville  
036-73 Mount Holly  
036-90 Gastonia

037-00 Gates

038-00 Graham

039-00 Granville  
039-70 Oxford

040-00 Greene

041-00 Guilford  
041-60 Jamestown (3)  
041-61 Gibsonville (P)  
041-62 Archdale (P)  
041-63 Kernersville (P) (4)  
041-95 Greensboro  
041-96 High Point (P)

042-00 Halifax  
042-60 Scotland Neck  
042-95 Enfield  
042-80 Roanoke Rapids

043-00 Harnett  
043-60 Erwin  
043-70 Dunn

044-00 Haywood  
044-70 Waynesville  
044-71 Canton

045-00 Henderson  
045-60 Fletcher  
045-70 Hendersonville

046-00 Hertford  
046-61 Murfreesboro  
046-70 Ahoskie

047-00 Hoke  
047-60 Raeford

048-00 Hyde

049-00 Iredell  
049-60 Davidson (P)  
049-70 Mooresville  
049-80 Statesville

050-00 Jackson

051-00 Johnston  
051-60 Selma  
051-61 Clayton  
051-62 Benson  
051-70 Smithfield

052-00 Jones

053-00 Lee  
053-80 Sanford

054-00 Lenoir  
054-60 La Grange  
054-80 Kinston

055-00 Lincoln  
055-60 Maiden (P)  
055-70 Lincolnton

056-00 McDowell  
056-60 Marion

057-00 Macon  
057-60 Franklin

058-00 Madison

059-00 Martin  
059-70 Williamston

060-00 Mecklenburg  
060-60 Davidson (P)  
060-61 Mint Hill  
060-70 Matthews (3)  
060-95 Charlotte

061-00 Mitchell

062-00 Montgomery  
062-60 Troy

063-00 Moore  
063-60 Aberdeen (3)  
063-61 Pinehurst (3)  
063-70 Southern Pines

064-00 Nash  
064-60 Nashville  
064-90 Rocky Mount (P)

065-00 New Hanover  
065-60 Wrightsville Beach  
065-61 Carolina Beach (3)  
065-90 Wilmington

066-00 Northhampton

067-00 Onslow  
067-70 Camp Lejeune (4)  
067-80 Jacksonville

068-00 Orange  
068-60 Carrboro  
068-61 Hillsboro  
068-62 Mebane (P)  
068-90 Chapel Hill (P)  
068-90 Durham (P) (3)

069-00 Pamlico

070-00 Pasquotank  
070-80 Elizabeth City (P)

071-00 Pender  
071-60 Wallace (P)

072-00 Perquimans

073-00 Person  
073-70 Roxboro

074-00 Pitt  
074-60 Farmville  
076-10 Ayden  
074-90 Greenville

075-00 Polk

076-00 Randolph  
076-71 Archdale (P)  
076-80 Asheboro  
076-96 High Point (P)

077-00 Richmond  
077-60 Hamlet  
077-70 Rockingham

078-00 Robeson  
078-60 Red Springs  
078-61 Fairmont  
078-62 Maxton (P)  
078-63 Pembroke  
078-80 Lumberton

079-00 Rockingham  
079-60 Madison  
079-61 Mayodan  
079-80 Reidville  
079-81 Eden

080-00 Rowan  
080-60 Spencer  
080-80 Salisbury  
080-81 Kannapolis (P) (2)

081-00 Rutherford  
081-61 Rutherfordton  
081-62 Spindale  
081-70 Forest City

082-00 Sampson  
082-70 Clinton

083-00 Scotland  
083-60 Maxton (P)  
083-70 Laurinburg

084-00 Stanly  
084-80 Albemarle

085-00 Stokes  
085-60 King (P)

086-00 Surry  
086-60 Elkin (P)  
086-70 Mount Airy

087-00 Swain

088-00 Transylvania  
088-70 Brevard

089-00 Tyrell

090-00 Union  
090-60 Wingate  
090-61 Stallings (3)  
090-80 Monroe

091-00 Vance  
091-80 Henderson

092-00 Wake  
092-60 Wake Forest  
092-62 Fuquay Springs  
092-63 Garner  
092-64 Apex  
092-65 Wendell (3)  
092-66 Zebulon (3)  
092-70 Cary  
092-95 Raleigh

093-00 Warren

094-00 Washington  
094-60 Plymouth

095-00 Watauga  
095-70 Boone

096-00 Wayne  
096-60 Mount Olive (P)  
096-90 Goldsboro

097-00 Wilkes  
097-60 North Wilkesboro  
097-61 Elkin (P)  
097-62 Wilkesboro (3)

098-00 Wilson  
098-90 Wilson

099-00 Yadkin

100-00 Yancey

(1) = Added effective 1984 due to incorporation  
(2) = Added effective 1985 due to incorporation  
(3) = Added effective January 1988  
(4) = Added effective July 1990



State Codes

01 Alabama	31 New Jersey
02 Alaska	32 New Mexico
03 Arizona	33 New York
04 Arkansas	34 North Carolina
05 California	35 North Dakota
06 Colorado	36 Ohio
07 Connecticut	37 Oklahoma
08 Delaware	38 Oregon
09 District of Columbia	39 Pennsylvania
10 Florida	40 Rhode Island
11 Georgia	41 South Carolina
12 Hawaii	42 South Dakota
13 Idaho	43 Tennessee
14 Illinois	44 Texas
15 Indiana	45 Utah
16 Iowa	46 Vermont
17 Kansas	47 Virginia
18 Kentucky	48 Washington
19 Louisiana	49 West Virginia
20 Maine	50 Wisconsin
21 Maryland	51 Wyoming
22 Massachusetts	52 Puerto Rico
23 Michigan	53 Virgin Islands
24 Minnesota	54 Guam
25 Mississippi	55 Canada
26 Missouri	56 Cuba
27 Montana	57 Mexico
28 Nebraska	58 Remainder of World
29 Nevada	99 Not Classifiable, unknown, not stated
30 New Hampshire	

Cities of 10,000 and Over Population

084-80 Albemarle	076-96 High Point (P)
076-80 Asheboro	067-80 Jacksonville
011-95 Asheville	013-81 Kannapolis (P) (2)
095-70 Boone	080-81 Kannapolis (P) (2)
001-90 Burlington	054-80 Kinston
092-70 Cary	083-70 Laurinburg
032-90 Chapel Hill (P)	014-80 Lenoir
068-90 Chapel Hill (P)	029-80 Lexington
060-95 Charlotte	078-80 Lumberton
013-80 Concord	090-80 Monroe
032-95 Durham (P)	012-80 Morganton
068-90 Durham (P)	025-80 New Bern
079-81 Eden	092-95 Raleigh
021-60 Edenton	079-80 Reidsville
015-60 Elizabeth City (P)	042-80 Roanoke Rapids
070-80 Elizabeth City (P)	033-90 Rocky Mount (P)
026-95 Fayetteville	064-90 Rocky Mount (P)
092-63 Garner	080-80 Salisbury
036-90 Gastonia	053-80 Sanford
096-90 Goldsboro	023-80 Shelby
041-95 Greensboro	049-80 Statesville
074-90 Greenville	029-81 Thomasville
025-70 Havelock	065-90 Wilmington
091-80 Henderson	098-90 Wilson
012-81 Hickory (P)	034-95 Winston Salem
018-80 Hickory (P)	076-96 High Point (P)
029-96 High Point (P)	067-80 Jacksonville
041-96 High Point (P)	013-81 Kannapolis (P) (2)

NC Vital Statistics Documentation - Exhibit B

North Carolina Vital Statistics  
Odum Institute for Research in Social Science

Exhibit B

North Carolina District Codes As an Indicator of Population: 1970 Census

DISTRICT CODE	POPULATION RANGE
00	Rural and unincorporated places
60-69	2,500 to 4,999
70-79	5,000 to 9,999
80-89	10,000 to 24,999
90-94	25,000 to 49,999
95 and over	50,000 and over

NC Vital Statistics Documentation - Exhibit C1

North Carolina Vital Statistics  
Odum Institute for Research in Social Science

Exhibit C1

Out-of-State Codes, 1968-1974

99901	Alabama	99929	New Jersey
99902	Arizona	99930	New Mexico
99903	Arkansas	99931	New York (except New York City)
99904	California	99933	North Dakota
99905	Colorado	99934	Ohio
99906	Connecticut	99935	Oklahoma
99907	Delaware	99936	Oregon
99908	District of Columbia	99937	Pennsylvania
99909	Florida	99938	Rhode Island
99910	Georgia	99939	South Carolina
99911	Idaho	99940	South Dakota
99912	Illinois	99941	Tennessee
99913	Indiana	99942	Texas
99914	Iowa	99943	Utah
99915	Kansas	99944	Vermont
99916	Kentucky	99945	Virginia
99917	Louisiana (except New Orleans)	99946	Washington
99918	Maine	99947	West Virginia
99919	Maryland (except Baltimore)	99948	Wisconsin
99920	Massachusetts	99949	Wyoming
99921	Michigan	99950	Alaska
99922	Minnesota	99951	Hawaii
99923	Mississippi	99952	Puerto Rico
99924	Missouri	99953	Virgin Islands
99925	Montana	99954	Baltimore
99926	Nebraska	99956	New York City
99927	Nevada	99957	New Orleans
99928	New Hampshire		
99958	Immigration and naturalization Service, Department of Justice		
99959	Passport Division, Department of State		
99999	Out of the country		

NC Vital Statistics Documentation - Exhibit C2

North Carolina Vital Statistics  
Odum Institute for Research in Social Science

Exhibit C2

Out-of-State Codes, 1975 Onward

99901	Alabama	99931	New Jersey
99902	Alaska	99932	New Mexico
99903	Arizona	99933	New York
99904	Arkansas	99935	North Dakota
99905	California	99936	Ohio
99906	Colorado	99937	Oklahoma
99907	Connecticut	99938	Oregon
99908	Delaware	99939	Pennsylvania
99909	District of Columbia	99940	Rhode Island
99910	Florida	99941	South Carolina
99911	Georgia	99942	South Dakota
99912	Hawaii	99943	Tennessee
99913	Idaho	99944	Texas
99914	Illinois	99945	Utah
99915	Indiana	99946	Vermont
99916	Iowa	99947	Virginia
99917	Kansas	99948	Washington
99918	Kentucky	99949	West Virginia
99919	Louisiana	99950	Wisconsin
99920	Maine	99951	Wyoming
99921	Maryland	99952	Puerto Rico
99922	Massachusetts	99953	Virgin Islands
99923	Michigan	99954	Guam
99924	Minnesota	99955	Canada
99925	Mississippi	99956	Cuba
99926	Missouri	99957	Mexico
99927	Montana	99958	Other Western Hemisphere
99928	Nebraska	99959	Remainder of World
99929	Nevada	99999	Not classifiable, unknown, not stated
99930	New Hampshire		

NC Vital Statistics Documentation - Exhibit H

North Carolina Vital Statistics  
Odum Institute for Research in Social Science

Exhibit H

North Carolina County Codes

001	Alamance	026	Cumberland	051	Johnston	076	Randolph
002	Alexander	027	Currituck	052	Jones	077	Richmond
003	Alleghany	028	Dare	053	Lee	078	Robeson
004	Anson	029	Davidson	054	Lenoir	079	Rockingham
005	Ashe	030	Davie	055	Lincoln	080	Rowan
006	Avery	031	Duplin	056	McDowell	081	Rutherford
007	Beaufort	032	Durham	057	Macon	082	Sampson
008	Bertie	033	Edgecombe	058	Madison	083	Scotland
009	Bladen	034	Forsyth	059	Martin	084	Stanly
010	Brunswick	035	Franklin	060	Mecklenburg	085	Stokes
011	Buncombe	036	Gaston	061	Mitchell	086	Surry
012	Burke	037	Gates	062	Montgomery	087	Swain
013	Cabarrus	038	Graham	063	Moore	088	Transylvania
014	Caldwell	039	Granville	064	Nash	089	Tyrrell
015	Camden	040	Greene	065	New Hanover	090	Union
016	Carteret	041	Guilford	066	Northampton	091	Vance
017	Caswell	042	Halifax	067	Onslow	092	Wake
018	Catawba	043	Harnett	068	Orange	093	Warren
019	Chatham	044	Haywood	069	Pamlico	094	Washington
020	Cherokee	045	Henderson	070	Pasquotank	095	Watauga
021	Chowan	046	Hertford	071	Pender	096	Wayne
022	Clay	047	Hoke	072	Perquimans	097	Wilkes
023	Cleveland	048	Hyde	073	Person	098	Wilson
024	Columbus	049	Iredell	074	Pitt	099	Yadkin
025	Craven	050	Jackson	075	Polk	100	Yancey

NC Vital Statistics Documentation -- Exhibit I

North Carolina Vital Statistics  
Odum Institute for Research in Social Science

Exhibit I

Out-of-State Codes, Marriage Files

901	Alabama	927	Montana
902	Alaska	928	Nebraska
903	Arizona	929	Nevada
904	Arkansas	930	New Hampshire
905	California	931	New Jersey
906	Colorado	932	New Mexico
907	Connecticut	933	New York
908	Delaware	935	North Dakota
909	District of Columbia	939	Ohio
910	Florida	937	Oklahoma
911	Georgia	938	Oregon
912	Hawaii	939	Pennsylvania
913	Idaho	940	Rhode Island
914	Illinois	941	South Carolina
915	Indiana	942	South Dakota
916	Iowa	943	Tennessee
917	Kansas	944	Texas
918	Kentucky	945	Utah
919	Louisiana	946	Vermont
920	Maine	947	Virginia
921	Maryland	948	Washington
922	Massachusetts	949	West Virginia
923	Michigan	950	Wisconsin
924	Minnesota	951	Wyoming
925	Mississippi	952	Remainder of World
926	Missouri	999	Unknown

NC Vital Statistics Documentation - Exhibit P

North Carolina Vital Statistics  
Odum Institute for Research in Social Science

Exhibit P

The Apgar Score

The Apgar Score is a system for rating the physical condition of newborns. Scores range from 0-10 and are a summation of scores 0-2 assigned to each of five items; heart rate; respiratory effort; muscle tone; reflex irritability and color. Apgar scores of 0-2 represent severe asphyxiation; 3-6 represent mild to moderate asphyxia; 7-10 represent rare need for resuscitation.

Scores at five minutes are more highly correlated with mortality and neurologic defects than are scores at one minute.

THE APGAR SCORING METHOD \*

Sign	0	1	2
Heart Rate	Absent	Below 100	Over 100
Respiratory effort	Absent	Minimal; weak cry	Good; strong cry
Muscle Tone	Limp	Some flexion of extremities	Active motion; extremities well flexed
Reflex irritability (response to stimulation on sole of foot)	No Response	Grimace	Cry
Color	Blue or pale	Body pink; extremities blue	Pink

\*From Apgar: Anesthesia and Analgesia, 32:260, 1953. Apgar, et al.: J. American Medical Association, 168: 1985, 1958.

NC Vital Statistics Documentation - Exhibit Z

North Carolina Vital Statistics  
Odum Institute for Research in Social Science

Information Regarding Matched Infant Death File for 1998  
and Beyond

The North Carolina Center for Health Informatics and Statistics (CHIS) has changed the method in which the linked Birth/Infant Death File is created. Prior to 1998, CHIS created files based on a birth cohort. For example, the 1995 linked Birth/Infant Death File consisted of all children born in 1995 that died before reaching one year of age, whether the death occurred in 1995 or 1996. The major problem with this methodology is that it takes much longer to create a closed file since there is a year of follow-up necessary.

Beginning in 1998, CHIS has moved to creating these files based on a death cohort. The primary benefit of this switch is that we are able to release these files very soon after the general data release for the year. This means that the 1999 linked Birth/Infant Death File consists of all infants dying in 1999, whether they were born in 1998 or 1999. Most of the linked Birth/Infant Death data releases from NCHS also now follow this death cohort method.

Unfortunately, the switch in methodology leads to some complications when evaluating multiple years of data that span 1998. Any infant who was born in 1997 and died in 1998 (matched.year1998 file) is present in both the 1997 birth cohort file and the 1998 death cohort file. To prevent having duplicate records in a dataset, CHIS has created a 1998 bridge file (matched.year1998b), which consists solely of infants who were born and died in 1998.