North Carolina Population

North Carolina is home to more than 9.6 million people. Of these, more than 3 million (31.9 percent) are over age 50; nearly 1.8 million (18.6 percent) are over 60; more than 830,000 (8.7 percent) are over 70; and almost 313,000 (3.3 percent) are over 80. The proportion of women rises to 65.5 percent of those 80 and older. The racial ethnic composition of North Carolinians is as follows:

<table>
<thead>
<tr>
<th>Race/Ethnicity of North Carolinians</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;55</td>
</tr>
<tr>
<td>55+</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau Projections, 2009

The proportion of North Carolina’s population that is 60 and older is growing more rapidly than other components of the population. The U.S. Census Bureau estimates that nearly 23 percent of North Carolina’s population will be 60 and older by the year 2030, an increase of more than 26 percent from 2012.

Projected North Carolina Population

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2012</th>
<th>2020</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-19 years</td>
<td>27.4%</td>
<td>19.5%</td>
<td>27.7%</td>
</tr>
<tr>
<td>20-39 years</td>
<td>27.0%</td>
<td>26.3%</td>
<td>26.1%</td>
</tr>
<tr>
<td>40-59 years</td>
<td>27.7%</td>
<td>27.1%</td>
<td>23.6%</td>
</tr>
<tr>
<td>60+ years</td>
<td>17.9%</td>
<td>19.5%</td>
<td>22.6%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau Projections, 2009
Suicide Among Older North Carolinians

2005–2009 National and Regional Suicide Rates per 100,000 Population

The five-year average suicide rate among North Carolinians ages 55–74 is very close to the rates in the 20–54 and the 75 and older age groups. The North Carolina rates are slightly higher than the rates in the nation and in Regions 4 and 5 combined, which include Alabama, Florida, Georgia, Illinois, Indiana, Kentucky, Michigan, Minnesota, Mississippi, North Carolina, Ohio, South Carolina, Tennessee, and Wisconsin.

Please note: States vary in their reporting practices regarding suicide deaths. The apparent rate of suicide is influenced by these reporting practices.

North Carolina Suicide Trend

The two-year moving average rate of suicide among older North Carolinians ages 55 and older—shown with the dashed line—has varied from a low of 14.1 per 100,000 in 2003–2004 to a high of 17.0 in 2001–2002. This rate in the 75 and older age group is consistently higher than the rate in younger age groups.

Please note: States may vary in their suicide reporting practices and may vary in practices from year to year within the same state. The number of suicides is generally low, so even a small difference in reported numbers may make the rate appear to fluctuate widely.

Source: CDC Vital Statistics, 2009
Older North Carolinians’ Substance Use/Abuse

30-DAY BINGE DRINKING AMONG OLDER NORTH CAROLINIANS—GENDER

Duke Medicine News (August 17, 2009) notes that binge drinking can cause “serious problems, such as stroke, cardiovascular disease, liver disease, neurological damage and poor diabetes control.” Binge drinkers are more likely to take risks such as driving while intoxicated and to experience falls and other accidents. Older people have less tolerance for alcohol. Therefore, the figure at left defines a “binge” as three or more drinks in one event for women and four or more for men. Binge drinking is higher among men in all states. In North Carolina, 12 percent of men ages 50 and older reported binge drinking, whereas 6.5 percent of women ages 50 and older reported binge drinking. The overall rate in North Carolina was 8.5 percent. Confidence intervals for national and State estimates are less than ±0.2 and ±1.0 percent, respectively.

30-DAY BINGE DRINKING AMONG OLDER NORTH CAROLINIANS—AGE GROUP

Binge drinking tends to decrease with age: 12.8 percent of North Carolinians ages 50–64 reported binge drinking, whereas 4.3 percent in the 65 and older group reported similar behavior. Confidence intervals for national and State estimates are less than ±0.2 and ±1.0 percent, respectively. The table below provides a breakdown by age group and gender.

Percentage of North Carolinians Reporting Binge Drinking by Age and Gender

<table>
<thead>
<tr>
<th></th>
<th>50-64 years</th>
<th>65 and older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>10.4%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Male</td>
<td>16.6%</td>
<td>6.6%</td>
</tr>
</tbody>
</table>

Source: BRFSS, 2011
Nationally, illicit drug use has more than doubled among 50–59-year-olds since 2002. The rate rose from 3.4 to 7.2 percent among 50–54-year-olds and from 1.9 to 4.1 percent among 55–59-year-olds. According to the Substance Abuse and Mental Health Services Administration (SAMHSA), “These patterns and trends partially reflect the aging into these age groups of members of the baby boom cohort, whose rates of illicit drug use have been higher than those of older cohorts.”

Specific data about substance abuse among older North Carolinians are not available; however, the SAMHSA National Survey on Drug Use and Health (NSDUH) (http://www.oas.samhsa.gov/2k9state/Cover.pdf) provides general information about substance use in North Carolina.

**DRUG-RELATED EMERGENCY DEPARTMENT VISITS INVOLVING PHARMACEUTICAL MISUSE AND ABUSE BY OLDER ADULTS**

SAMHSA’s Center for Behavioral Health Statistics and Quality periodically releases reports from the Drug Abuse Warning Network (DAWN). DAWN comprises a nationwide network of hospital emergency rooms (ERs) primarily located in large metropolitan areas. DAWN data consist of professional reviews of ER records to determine the likelihood and extent to which alcohol and drug abuse was involved. According to the November 25, 2010, DAWN Report:

- In 2004, there were an estimated 115,803 emergency department (ED) visits involving pharmaceutical misuse and abuse by adults aged 50 or older; in 2008, there were 256,097 such visits, representing an increase of 121.1 percent.
- One fifth (19.7 percent) of ED visits involving pharmaceutical misuse and abuse among older adults were made by persons aged 70 or older.
- Among ED visits made by older adults, pain relievers were the type of pharmaceutical most commonly involved (43.5 percent), followed by drugs used to treat anxiety or insomnia (31.8 percent) and antidepressants (8.6 percent).
- Among patients aged 50 or older who visited the ED for pharmaceutical misuse or abuse, more than half (52.3 percent) were treated and released, and more than one third (37.5 percent) were admitted to the hospital (italic text is taken directly from the report, available at http://www.samhsa.gov/data/2k10/WebSR018Pharma50+/Pharma50+HTML.pdf).
In 2010, North Carolina reported more than 7,500 admissions to substance abuse treatment among those ages 50 and older. This represented a rate of almost 248 admissions per 100,000 population. However, State reporting practices have a strong impact on the apparent rate:

- 74 percent of admissions were men.
- 57 percent of admissions were White.
- 40.6 percent of admissions were Black/African American.
- 1.3 percent of admissions were of Hispanic descent.
- 16.6 percent of admissions were referred to treatment through the criminal justice system.

Alcohol was by far the most frequently used substance among older North Carolinians in publicly financed substance abuse treatment in 2010. Alcohol was mentioned as the primary, secondary, or tertiary substance of abuse in more than 65 percent of admissions among those ages 50 and older. Alcohol was followed by cocaine at 26.7 percent, other drugs at 21.2 percent, marijuana at 12.0 percent, and opiates/synthetics at 9.1 percent.

Please note: TEDS data include only those clients reported to SAMHSA.

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1 TEDS data are collected by states that accept Substance Abuse Prevention and Treatment (SAPT) Block Grant funds. Guidelines suggest that states report all clients admitted to publicly financed treatment; however, states are inconsistent in applying the guidelines. States also have freedom to structure and implement different quality controls over the data. For example, states may collect different categories of information to answer TEDS questions. Information is then “walked over” to TEDS definitions.
Research shows a strong relationship between substance use and mental health disorders. Studies show 30–80 percent of people with a substance use or mental health disorder also have a co-occurring substance use/mental health disorder. The figure at left shows that more than 40 percent of North Carolinians ages 50 and older who were admitted to substance abuse treatment also had a mental health diagnosis. However, reporting practices influence these results. Although North Carolina reported this field, not all states within the region reported the existence of co-occurring disorders.

Please note: Data include only those admissions reported to TEDS.

Mental Health

NORTH CAROLINIANS AGES 65 AND OLDER ADMITTED TO STATE MENTAL HEALTH SERVICES

Nearly 3.5 percent of the people served by the North Carolina mental health system were ages 65 and older (2.3 percent were ages 65 to 74 and 1.2 percent were ages 75 or older). This represents a total of approximately 7,650 people. The figure at right shows penetration rates per 1,000 population whereas the data cited above refer to the percentage of individuals within the service system. These and other data about North Carolina’s mental health system are available at http://www.samhsa.gov/dataoutcomes/urs/2011/NorthCarolina.pdf.
North Carolinians in the 50–64 age group—as in the Nation—were more likely than those in the 65 and older group to report FMD: 12.9 percent in the 50–64 group and 6.8 percent in the 65 and older group reported FMD. Confidence intervals for national and North Carolina estimates are less than ±0.2 and ±1.0 percent, respectively. The table below provides a breakdown by age group and gender.

**Percentage of North Carolinians Reporting FMD by Age Group and Gender**

<table>
<thead>
<tr>
<th>50-64 years</th>
<th>65 and older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>9.7%</td>
</tr>
<tr>
<td>Female</td>
<td>15.3%</td>
</tr>
</tbody>
</table>

Source: BRFSS, 2011
Older Americans who experienced FMD were more likely to report that their physical health was poor or fair (as opposed to good, very good, or excellent). As shown in the figure at left, although 18 percent of older Americans with no mental distress reported poor or fair physical health, nearly 60 percent—nearly triple the rate—of those with FMD reported poor/fair health. Older Americans with FMD were also much more likely to report that they had experienced serious health problems.

These differences are statistically significant.

Older Americans who experience FMD, such as symptoms of depression or anxiety, are more likely to report that they had chronic health problems. People with FMD experienced strokes at twice the rate of those with some or no mental distress (10 percent versus 5 percent). They experienced coronary disease, heart attack, and diabetes/pre-diabetes at more than 1.5 times the rate of those with some or no mental distress (13 versus 8 percent for coronary disease and heart attack and 30 versus 18 percent for diabetes/pre-diabetes).

These differences are statistically significant.

Source: BRFSS, 2011
OTHER MEASURES OF MENTAL HEALTH

BRFSS collected other measures showing risk factors for mental and/or physical illness. These included:

- Social and Emotional Support (2010). BRFSS asked, “How often do you get the social and emotional support you need?” Responses included always, usually, sometimes, rarely, or never.
- Life Satisfaction (2010). BRFSS asked, “In general, how satisfied are you with your life?” Responses included very satisfied, satisfied, dissatisfied, or very dissatisfied.
- Current Depression (2006). In 2006, BRFSS included a special anxiety and depression module that was collected in 38 states and several jurisdictions, including North Carolina.
- Lifetime Diagnosis of Depression (2006). BRFSS asked, “Has a doctor or other healthcare provider EVER told you that you have a depressive disorder (including depression, major depression, dysthymia, or minor depression)?”
- Lifetime Diagnosis of Anxiety Disorder (2006). BRFSS asked, “Has a doctor or other healthcare provider EVER told you that you have an anxiety disorder (including acute stress disorder, anxiety, generalized anxiety disorder, obsessive-compulsive disorder, panic attacks, panic disorder, posttraumatic stress disorder, or social anxiety disorder)?”

The results of these surveys among older North Carolinians are shown below.

| BRFSS MEASURES, 2010 |
|----------------------|-----------------|-----------------|-----------------|
|                      | Ages 50+ | Ages 50–64 | Ages 65+ |
| Indicator                      | Data % | Confidence Interval | Data % | Confidence Interval | Data % | Confidence Interval |
| Core BRFSS Indicators (2010) |         |                 |         |                 |         |                 |
| Rarely or never get social or emotional support (revised) | 9.1 | (8.8–9.4) | 8.1 | (7.7–8.5) | 10.4 | (9.8–11.0) |
| Very dissatisfied or dissatisfied with life (revised) | 4.5 | (4.3–4.7) | 5.7 | (5.3–6.1) | 2.7 | (2.4–3.0) |

Anxiety and Depression Optional Module Indicators (2006)

|                      |         |                 |         |                 |         |                 |
| Current Depression | 8.8 | (7.4–10.5) | 10.9 | (8.9–13.4) | 5.4 | (3.8–7.4) |
| Lifetime Diagnosis of Depression | 14.2 | (12.7–15.9) | 17.0 | (14.8–19.4) | 9.8 | (7.8–12.3) |
| Lifetime Diagnosis of Anxiety Disorder | 10.1 | (8.8–11.7) | 11.7 | (9.8–14.0) | 7.6 | (6.0–9.7) |

DATA SOURCES

BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (http://www.cdc.gov/brfss/), CDC. Atlanta, Georgia: U.S. Department of Health and Human Services, 2010 and 2011. BRFSS is “the world’s largest, on-going telephone health survey system, tracking health conditions and risk behaviors in the United States yearly since 1984. Currently, data are collected monthly in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam.” BRFSS data are collected by local jurisdictions and reported to the CDC.

NATIONAL SURVEY ON DRUG USE AND HEALTH (https://nsduhweb.rti.org/), Center for Behavioral Health Statistics and Quality. Rockville, Maryland: U.S. Department of Health and Human Services, SAMHSA, ICPSR32722-v1; Ann Arbor, Michigan: Inter-university Consortium for Political and Social Research [distributor], 2011-12-05. doi:10.3886/ICPSR32722.v1. NSDUH, managed by SAMHSA, is “an annual nationwide survey involving interviews with approximately 70,000 randomly selected individuals aged 12 and older.” NSDUH data are most frequently used by state planners to assess the need for substance abuse treatment. NSDUH data also include information about mental health needs.

NATIONAL VITAL STATISTICS (http://www.cdc.gov/nchs/nvss.htm), CDC. Atlanta, Georgia: U.S. Department of Health and Human Services, 2009. The CDC Web site describes the National Vital Statistics System as “the oldest and most successful example of inter-governmental data sharing in Public Health and the shared relationships, standards, and procedures form the mechanism by which NCHS [National Center for Health Statistics] collects and disseminates the Nation’s official vital statistics. These data are provided through contracts between NCHS and vital registration systems operated in the various jurisdictions legally responsible for the registration of vital events—births, deaths, marriages, divorces, and fetal deaths.”

TREATMENT EPISODE DATA SET (http://www.icpsr.umich.edu/icpsrweb/SAMHDA/), Center for Behavioral Health Statistics and Quality. Rockville, Maryland: U.S. Department of Health and Human Services, SAMHSA. Treatment Episode Data Set—Admissions (TEDS-A), 2010. ICPSR30462-v2; Ann Arbor, Michigan: Inter-university Consortium for Political and Social Research [distributor], 2012-07-18. doi:10.3886/ICPSR30462.v2. States that participate in the SAPT Block Grant submit individual client data to TEDS. TEDS includes both admission and discharge data sets, and some 1.5 million admissions are reported annually. TEDS includes information about utilization of substance abuse treatment services as well as client demographic and outcome information.

UNIFORM REPORTING SYSTEM (http://www.samhsa.gov/dataoutcomes/urs/), CMHS. Rockville, Maryland: U.S. Department of Health and Human Services, SAMHSA, 2011. States that receive CMHS Block Grants are required to report aggregate data to URS. URS reports information about utilization of mental health services as well as client demographic and outcome information.

U.S. CENSUS BUREAU (http://www.census.gov/people/). Two main sources of Census Bureau data were used in this report: (1) population estimates and (2) population projections. Population projections and estimates were created using 2010 Census data.

This profile was developed by the Substance Abuse and Mental Health Services Administration in partnership with the U.S. Administration on Aging.