

# Running the Numbers

*A Periodic Feature to Inform North Carolina Healthcare Professionals  
About Current Topics in Health Statistics*

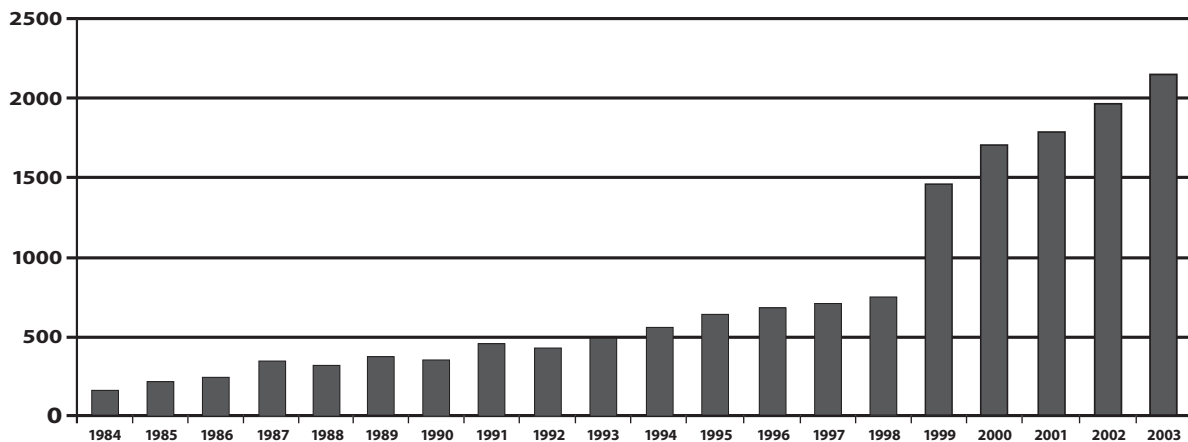
From the State Center for Health Statistics, North Carolina Department of Health and Human Services  
[www.schs.state.nc.us/SCHS](http://www.schs.state.nc.us/SCHS)

## Deaths and Hospitalizations from Alzheimer's Disease in North Carolina

Alzheimer's disease was the seventh leading cause of death in North Carolina in 2003, ranking behind heart disease, cancer, stroke, chronic lung disease, diabetes, and non-motor-vehicle injuries. In 2003, 2,143 death certificates of North Carolina residents showed Alzheimer's disease as the primary cause of death. Alzheimer's disease was the fifth leading cause of death in 2003 among persons ages 65 and older (all but 19 of the total Alzheimer's deaths occurred in this age group) and the fifth leading cause of death among females (1,557 deaths compared to 586 for males). In addition to the 2,143 deaths in 2003 with Alzheimer's disease as the primary cause of death, there were 1,110 deaths with another primary cause, but with Alzheimer's disease listed as a condition contributing to the death.

Over the past 20 years, there has been a large increase in the number of deaths in North Carolina from Alzheimer's disease. The chart below shows the trend, based on primary cause of death. There is a large jump in the number of Alzheimer's disease deaths in 1999, due mainly to the change from the ninth to the tenth revision of the International Classification of Diseases (ICD) mortality coding system. Nearly all deaths that were attributed to "pre-senile dementia" under the ninth revision of the ICD were coded as Alzheimer's disease under ICD-10. In 1998 (the year before implementation of ICD-10) there were 748 deaths attributed to Alzheimer's disease and 481 more attributed to pre-senile dementia.

**Number of Deaths from Alzheimer's Disease in North Carolina, 1984-2003**



In 2002, there were 1,481 hospitalizations of North Carolina residents with Alzheimer's disease listed as the primary cause of admission. Of these hospitalizations, 906 were for females and 575 for males; 39 were for persons under age 65, 236 ages 65-74, 743 ages 75-84, and 463 ages 85 and older. The total hospital charges for these 1,481 hospitalizations were \$15,628,000, or \$10,552 per hospitalization. The North Carolina hospitalization database still uses the ICD-9 for diagnosis coding, but only another 21 hospitalizations in 2002 had pre-senile dementia listed as the primary cause of admission.

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