

Running the Numbers

*A Periodic Feature to Inform North Carolina Health Care Professionals
about Current Topics in Health Statistics*

*From the State Center for Health Statistics, North Carolina Department of Health and Human Services
<http://www.schs.state.nc.us/SCHS>*

Recent Data on Health Insurance Coverage Associated with the Economic Downturn in North Carolina

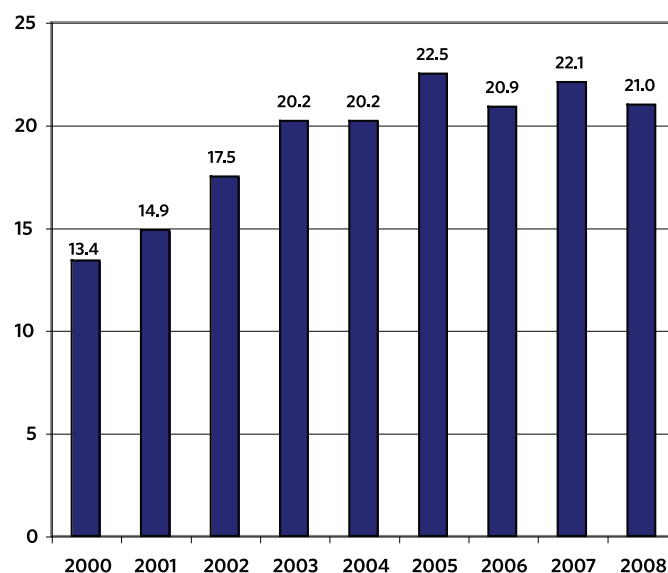
For many North Carolinians, health insurance and employment are closely linked. Compared to other states, employment in North Carolina is still relatively concentrated in manufacturing, and manufacturing jobs are disproportionately affected by a recession. Since the economic downturn in the second half of 2008, North Carolina has had one of the highest unemployment rates in the nation. We would expect this to result in individuals losing their health insurance¹ and the medical care industry seeing a decrease in their paying customers.

The North Carolina Behavioral Risk Factor Surveillance System (BRFSS) monitors health insurance coverage among adults in the state. To obtain data, the BRFSS uses random telephone surveys of North Carolina residents ages 18 and older. The BRFSS is funded by the US Centers for Disease Control and Prevention (CDC) and is conducted in all 50 states. In 2008, the latest year of North Carolina BRFSS data, nearly 16,000 adults were interviewed. The data are weighted to make the survey results more representative of the entire population of North Carolina adults. However, BRFSS data are self-reported by respondents over the telephone and therefore may not be as reliable as some other means of data collection.

For this installment of *Running the Numbers*, we used the results of the question, "Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?" In 2008, 17.8% of all adults ages 18 and older responded "no." Since most people age 65 and older are covered by Medicare, we only tracked the percent uninsured for adults ages 18-64 (21.0% in 2008), which should be more affected by current economic trends.

Figure 1 shows the percent uninsured of North Carolinians in this age range from 2000-2008. The wording of the BRFSS health insurance question did not change over this time period. The percent uninsured increased sharply from 2000

Figure 1.
Percentage of Persons Ages 18-64 Who Reported that
They Had No Health Insurance, 2000 through 2008:
North Carolina Behavioral Risk Factor Surveillance
System (BRFSS)



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to 2003 and then remained fairly stable from 2003 through 2008, at slightly more than one in five adults ages 18-64 uninsured.

Part of the reason that the percent increased early in the decade may be attributed to the rapid growth in the Hispanic population in North Carolina, who are more likely to be uninsured, and the fact that, for the first time, North Carolina added a Spanish language BRFSS survey in 2002.² In 2008, 81% of Hispanics adults ages 18-64 who completed the BRFSS survey in Spanish reported that they had no health insurance, compared to 33% of Hispanics who completed the survey in English.

Table 1 shows the 2008 percent uninsured in North Carolina (ages 18-64) by level of total household income. The 95% confidence interval shows the range in which we would expect the true value for all North Carolina adults to fall 95% of the time. As a good approximation, if two 95% confidence intervals do not overlap, then the difference between the corresponding percentages is statistically significant at $p < 0.05$. Adults in lower income households are much more likely to be uninsured than those in higher

income households, suggesting that ability to pay strongly affects whether a person has health insurance.

Being uninsured is also strongly associated with employment status. In 2008, among persons ages 18-64, 16.3% of those who were employed reported that they were uninsured, compared to 28.4% of those self-employed, 56.5% of those out of work for less than one year, and 53.4% of those out of work for more than one year. Only 7.5% of retired persons under the age of 65 reported that they were uninsured.

Table 1.
Percentage of Persons Ages 18-64 Reporting No Health Insurance by Categories of Total Household Income: 2008 North Carolina BRFSS

Household Income	Percent Uninsured	95% Confidence Interval
Less than \$15,000	56.1	51.1-61.1
\$15,000 - \$24,999	48.3	43.9-52.7
\$25,000 - \$34,999	28.7	24.2-33.6
\$35,000 - \$49,999	14.6	12.0-17.5
\$50,000 - \$74,999	7.0	5.3-9.2
\$75,000 or more	2.8	2.0-3.9
Total	21.0	19.6-22.3

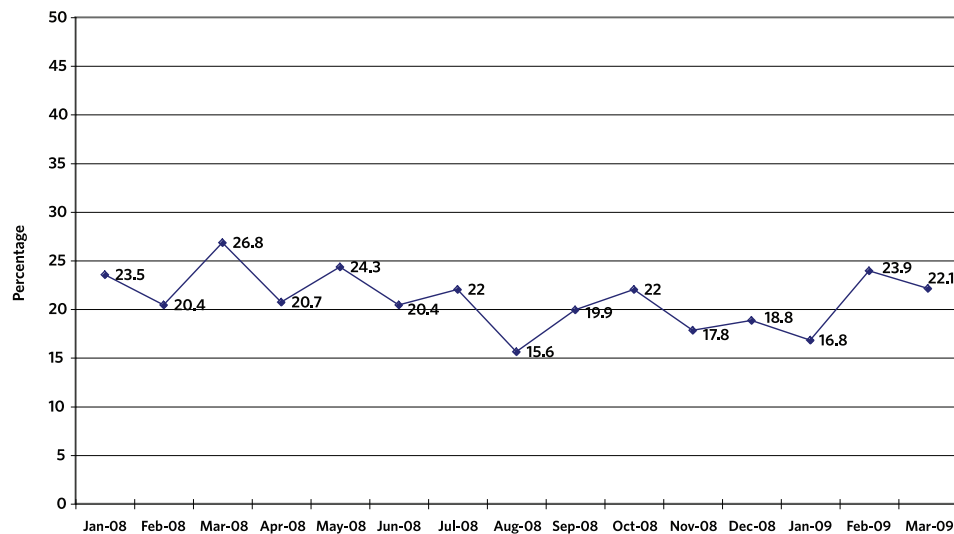
Figure 2 (page 371) shows the monthly percent uninsured for persons ages 18-64, from January 2008 through March 2009. While the annual BRFSS sample size for persons ages 18-64 is nearly 11,000, the monthly sample size is approximately 900. Therefore, there is much more sampling variability in the monthly data. Nevertheless, contrary to expectation, there is no discernable trend over this 15-month period, with the percentages uninsured fluctuating between 16% and 27%.

There are two primary possible reasons why the North Carolina BRFSS data do not show an increase in percent uninsured in the last part of 2008 and early 2009, in step with the economic downturn. First, recently unemployed persons are eligible to purchase health insurance from their employer under COBRA coverage for at least 18 months, which could lead to a lag between unemployment and loss of health insurance coverage. However, even COBRA health insurance premiums are expensive and may not be affordable for many unemployed persons. Effective March 1, 2009, under the national economic stimulus package, unemployed persons may be eligible for reduced premiums in which the federal government will reimburse employers 65% of the COBRA premium and charge the former employee only 35% of the COBRA premium.³

Second, the North Carolina BRFSS is a landline telephone survey and there has been a strong trend in the United States toward households electing to drop their landline telephone service and go with cell phones only. Cell phone-only households increased at a record pace in the last six months of 2008 and now are 20% of the total population.⁴ As recently as 2003, this figure was only 3%. In fact, the growing number of cell phone-only households may in part be due to the recession, with families looking to reduce their budgets.

Nationally, the percent of persons without health insurance coverage among cell phone-only nonelderly adults (27.5%) was substantially higher than the percent of nonelderly adults living in landline households

Figure 2.
Percentage of Persons Ages 18-64 Who Reported that They Had No Health Insurance by Month, January 2008 through March 2009:
North Carolina Behavioral Risk Factor Surveillance System (BRFSS)



(16.4%).⁴ Young people are much more likely to be cell phone-only (33% for ages 18-24 and 42% for ages 25-29, nationally) and young people are also much more likely to be uninsured. In 2008, 36% of persons ages 18-24 reported through the North Carolina BRFSS that they had no health insurance, compared to 13% of those ages 55-64. North Carolina BRFSS data for recent years show decreasing coverage for groups who are more likely to have only cell phones and less likely to have health insurance, those who are either young, Hispanic, of minority race, or have lower education and income. Weighting the BRFSS data attempts to alleviate, but does not overcome, this problem.

The North Carolina BRFSS is still a landline telephone survey, though a small cell phone pilot began in April 2009. The CDC has recognized that the BRFSS can no longer ignore cell phones and still provide valid health measurements for the adult population.

REFERENCES

- 1 Holmes M, Ricketts T, King J. Updating uninsured estimates for current economic conditions: state specific estimates. Cecil G. Sheps Center for Health Services Research, University of North Carolina and North Carolina Institute of Medicine; 2009. http://www.shepscenter.unc.edu/new/FindingsBrief_UninsuredUnemployment_Mar2009.pdf. Accessed May 12, 2009.
- 2 Herrick H, Gizlice Z. Spanish-speaking Hispanics in North Carolina: health status, access to health care, and quality of life (results from the 2002 and 2003 NC BRFSS surveys). SCHS Studies, No. 143. State Center for Health Statistics; 2004. <http://www.schs.state.nc.us/SCHS/pdf/SCHS143.pdf>. Accessed May 12, 2009.
- 3 Obama stimulus package: 65% COBRA premium reduction possible. Associated Content website. http://www.associatedcontent.com/article/1508773/obama_stimulus_package_65_cobra_premium.html. Updated February 29, 2009. Accessed May 15, 2009.
- 4 Blumberg SJ, Luke JV. Wireless substitution: early release of estimates from the National Health Interview Survey, July-December 2008. Division of Health Interview Statistics, National Center for Health Statistics. <http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless200905.htm>. Accessed May 12, 2009.

Contributed by

*Paul A. Buescher, PhD; Brian F. Head, MA; James W. Cassell, MA
 State Center for Health Statistics, North Carolina Division of Public Health*