

The North Carolina Office on Disability and Health

2015 Needs Assessment

Introduction

The North Carolina Office on Disability and Health (NCODH) integrates the health concerns of people with disabilities into state and local public health programs. This integration helps to create sustainable infrastructure, build capacity, maximize resources and promote inclusive policy initiatives.

The goals of the NCODH are to:

- Increase awareness and understanding of the health needs of individuals with disabilities
- Improve access to health services and health promotion programs
- Conduct surveillance and monitoring activities and develop reports using disability data
- Recommend sustainable system changes in policies, procedures and practices related to health and disability

Data Sources

A primary source of disability-related data used by the Office on Disability and Health in North Carolina for adults is the Behavioral Risk Factor Surveillance System (BRFSS).¹ BRFSS data can be accessed through the North Carolina State Center for Health Statistics as well as through the Centers for Disease Control and Prevention's (CDC) Disability and Health Data System. BRFSS is a random telephone survey of state residents ages 18 and older in households with telephones. Consistent with the CDC's 10-year national objectives for improving the health of all Americans, Healthy People 2010, disability is determined using the following two BRFSS questions:

- Are you limited in any way in any activities because of physical, mental or emotional problems?
- Do you now have any health problem that requires you to use special equipment, such as a cane, a wheelchair, a special bed or a special telephone?

The following questions about health problems or impairments were added to the 2013 survey:

- Are you blind or do you have serious difficulty seeing, even when wearing glasses?
- Because of a physical, mental or emotional condition, do you have serious difficulty concentrating, remembering or making decisions?
- Do you have serious difficulty walking or climbing stairs?
- Do you have difficulty dressing or bathing?
- Because of a physical, mental or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping?

¹ The Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System. Available at: www.cdc.gov/brfss/

For data related to children’s health, primary data sources include the Child Health Assessment Monitoring Program (CHAMP)² and the Youth Risk Behavior Surveillance System (YRBSS).³ CHAMP data are from the 2011 survey unless otherwise noted. CHAMP identifies children with special health care needs (CSHCN), which include children with disabilities as well as those with medical needs including allergies, asthma, Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder or depression/anxiety.

YRBSS is a voluntary survey implemented statewide in the spring of every odd numbered year with high school and middle school students. The YRBSS asks the following three questions related to disability:

- 83. Do you consider yourself to have a disability?
- 84. Are you limited in any way in any activities because of disability or health problem?
- 85. Do you have trouble learning, remembering or concentrating because of disability or health problem?

Data on Disability

North Carolina compared to the United States and Territories: In North Carolina, 23.4 percent of people who responded to the 2013 BRFSS survey reported having a disability, while nationally, 21.4 percent reported having a disability.^{4,5} Regionally, the South reported a disability rate of 22.1 percent.⁶

Additional BRFSS data:

- General Health: When BRFSS respondents were asked about their general health conditions, in North Carolina 47.9 percent responded that they had fair or poor health, compared to 44.3 percent of adults with disabilities in the United States and territories.
- Health Care Coverage: When BRFSS respondents were asked if they had health care coverage, 77.8 percent of adults with disabilities in North Carolina said “yes,” compared to 80.9 percent for the United States and territories.
- Mental and Emotional Health: When BRFSS respondents were asked if they ever had depression, 42.3 percent of adults with disabilities in North Carolina said “yes,” compared to 40.2 percent of adults with disabilities in the United States and territories.

² The North Carolina State Center for Health Statistics. Child Health Assessment and Monitoring Program. Available at: www.schs.state.nc.us/units/stat/champ/

³ The Centers for Disease Control and Prevention. Adolescent and School Health. Youth Risk Behavior Surveillance System. www.cdc.gov/HealthyYouth/yrbs/index.htm

⁴ 2013 BRFSS Survey Results: North Carolina. Disability Status. Available at: www.schs.state.nc.us/data/brfss/2013/nc/all/disabled2.html

⁵ The Centers for Disease Control and Prevention, Disability and Health Data System. North Carolina Disability Status Overview. Available at: <http://dhds.cdc.gov/profiles/profile?profileId=19&geoTypeId=1&geoids=37>

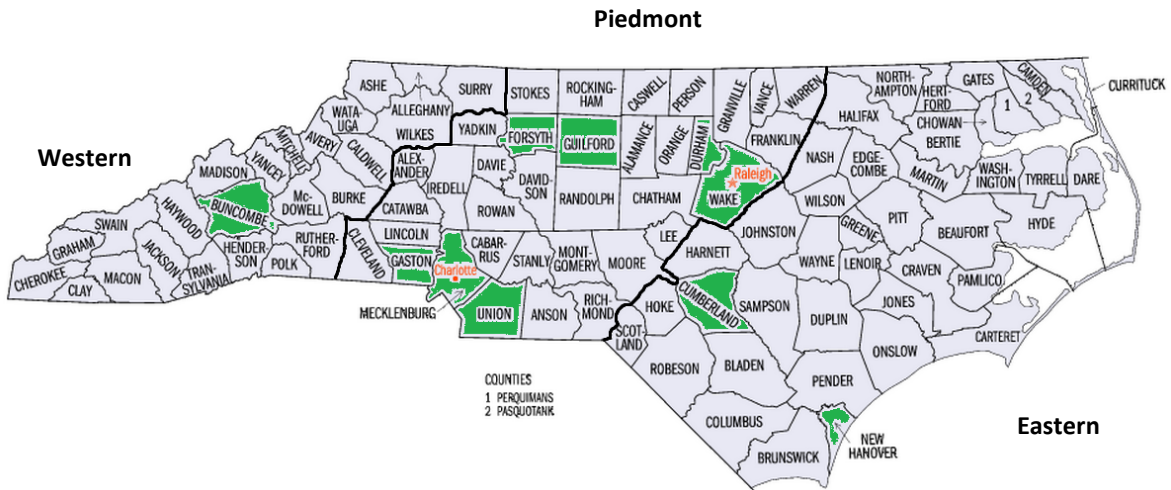
⁶ 2012 BRFSS Survey Results: North Carolina. Disability Status. Available at: <http://dhds.cdc.gov/dataviews/tabular?viewId=792&geoid=1&subsetId=&z=1>

2013 BRFSS Survey Results: North Carolina Counties and Regions

The Piedmont, the most populous and urban area of the state, has the lowest percent of reported disability with 18.8 percent. Both eastern and western North Carolina regions reported higher percentages of people with disabilities; 22.7 in the east and 27.6 in the west.

Percent of the population with disabilities:

Figure 1: County Map of North Carolina⁷



NC REGIONS

Western NC 27.6%
 Eastern NC 22.7%
 Piedmont 18.8%

NC COUNTIES

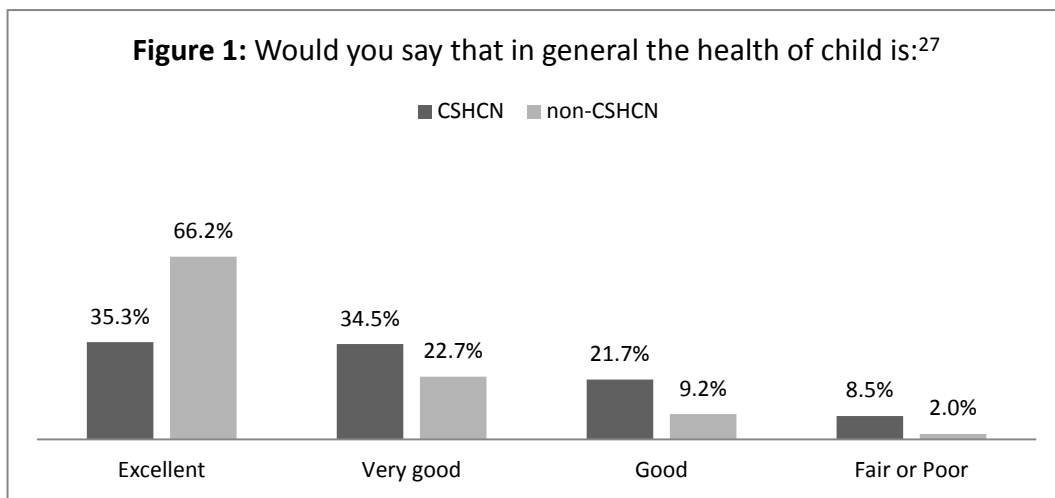
| | | | |
|------------|-------|-------------|-------|
| Buncombe | 30.0% | Guilford | 16.5% |
| Cumberland | 25.1% | Mecklenburg | 16.6% |
| Durham | 16.7% | New Hanover | 18.2% |
| Forsyth | 20.3% | Union | 12.6% |
| Gaston | 26.9% | Wake | 14.4% |

⁷United States Census Bureau. State & County QuickFacts. North Carolina County Selection Map. Available at: quickfacts.census.gov/qfd/maps/north_carolina_map.html

Children with Special Health Care Needs

Approximately half a million families in North Carolina care for a child with special health care needs (CSHCN).⁸ In the 2011 North Carolina Child Health Assessment and Monitoring Program (CHAMP) survey, CSHCN are defined as those ages 0 to 17 who, “need prescription medications or have an elevated need for medical, mental health or educational services due to a medical, behavioral or other health condition that has lasted or is expected to last for at least 12 months.”⁹

Fifty-three percent of CSHCN reported needing medical care, mental health or educational services and 88 percent reported needing medicine prescribed by a doctor other than vitamins. Twenty-three percent of CSHCN reported being limited or prevented in ability to do things most children of the same age do while 19 percent reported needing special therapy, physical, occupational or speech. Thirty-eight percent reported having an emotional, developmental or behavioral problem for which they need treatment or counseling.



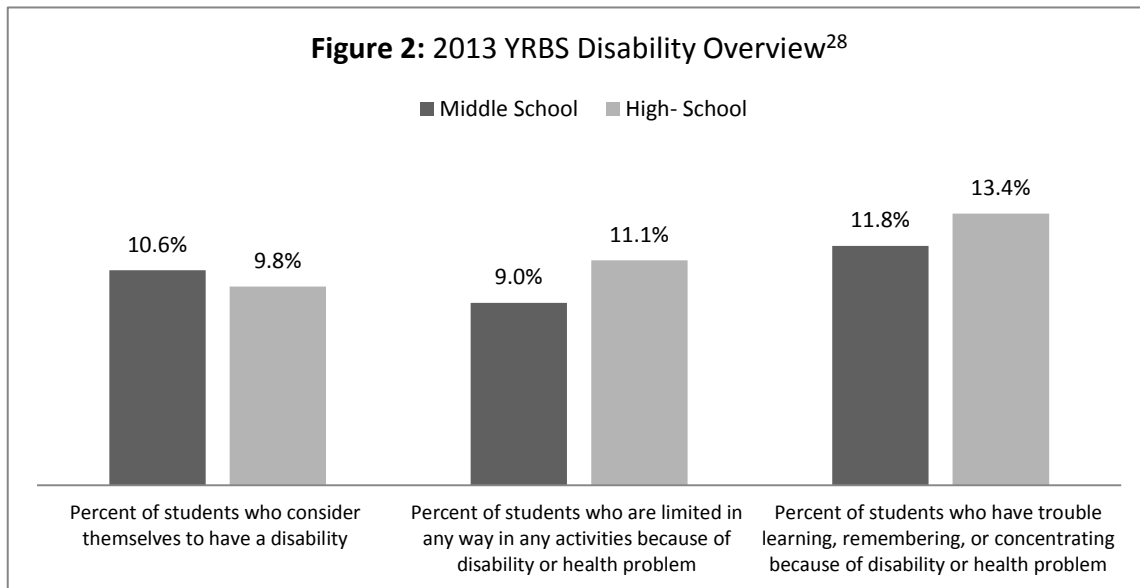
According to CHAMP, only 35 percent of CSHCN reported being in “excellent” health, compared to 66 percent of non-CSHCN. When asked how many days of school were missed due to illness in the past 12 months, 39 percent of CSHCN reported missing one or more weeks, compared to 20 percent non-CSHCN. Eighteen percent of CSHCN reported not missing any days, compared to 29 percent of non-CSHCN. However, 93 percent of CSHCN reported having a preventative care or well check visit in the past 12 months, compared to 89 percent of non-CSHCN.

⁸ Miles DR, Ford CA, Herrick H, Mizelle E, Sanderson M. Children with Special Health Care Needs 2006-2007: A report from the North Carolina Child Health Assessment and Monitoring Program. Raleigh NC: NC Department of Health and Human Services, February 2010. Available from: www.schs.state.nc.us/SCHS/pdf/CHAMP_CSHCN_2006-2007.pdf

⁹ North Carolina State Center for Health Statistics. Child Health Assessment and Monitoring Program (CHAMP). Available from: www.schs.state.nc.us/schs/champ/2011/topics.html#gh

Students with Special Health Care Needs

The 2012 North Carolina Youth Risk Behavior Surveillance System (YRBS) reported that 11 percent of middle school and 10 percent of high school students consider themselves to have a disability.¹⁰ Nine percent of middle school students and 11 percent of high school students responded that they were limited because of disability or health problems. Twelve percent of middle and 13 percent of high school students indicated that they have trouble learning, remembering or concentrating because of a health problem.



The 2015 Needs Assessment

The 2015 Office on Disability and Health Needs Assessment addresses the following focus areas:

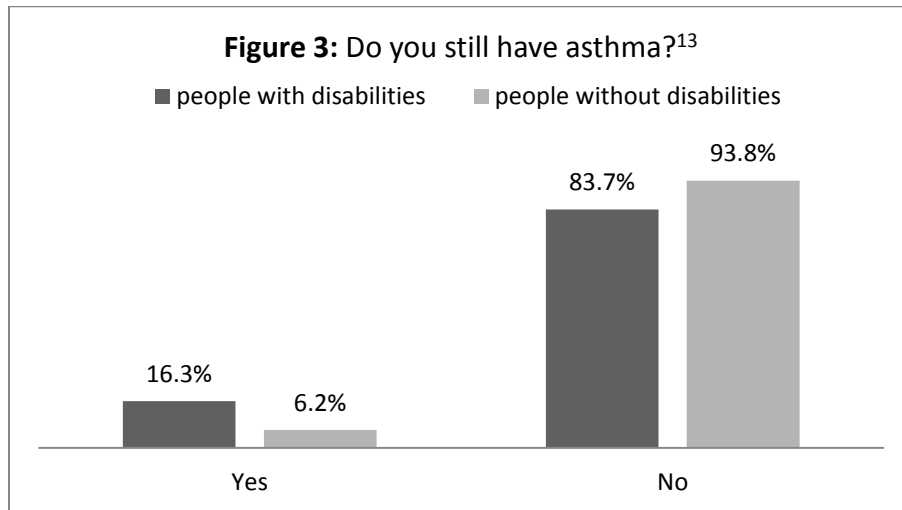
- Environmental Health
- Immunization
- Injury and Violence
- Mental Health
- Substance Abuse
- Tobacco Use

Each of these focus areas are leading health indicators in the NC Office on Disability and Health work plan and are intended to increase understanding of the health-related needs of adults with disabilities and children with special health care needs.

¹⁰ North Carolina Healthy Schools. Youth Risk Behavior Survey. *High School and Middle School 2013 Survey Results*. Available from: www.nchealthyschools.org/data/yrbs/

Environmental Health

Environmental health consists of preventing or controlling disease, injury and disability related to the interactions between people and their environment.¹¹ People living with developmental disabilities may be at greater risk of secondary health effects from toxic exposures than people without disabilities.¹²



Additional Survey Results

- 21.4 percent of adults with disabilities reported that a doctor, nurse, or other health professional has EVER told them they have asthma compared to 10.6 percent of adults without disabilities.¹³
- 17.8 percent of percent of adults with disabilities reported that someone smoked in their home while they were there for all seven days compared to 9.1 percent of adults without disabilities.¹³

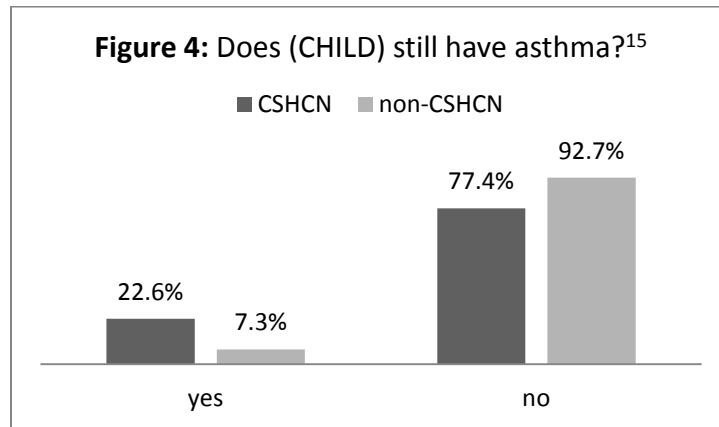
¹¹Office of Disease Prevention and Health Promotion. Healthy People 2020. Available at: www.healthypeople.gov/2020/topics-objectives/topic/environmental-health

¹²Autism Society. Core Partners. Available at: www.autism-society.org/research/core-partners/

¹³North Carolina Center for Health Statistics. 2013 BRFSS Survey Results: North Carolina. Available at: www.schs.state.nc.us/data/brfss/2013/nc/all/ASTHNOW.html

Children with Special Health Care Needs

In the United States, children in fair or poor health are three and one-half times as likely to have been diagnosed with asthma and almost five times as likely to still have asthma as children in excellent or very good health. Children in fair or poor health are two to three times as likely to have had respiratory allergies, food allergies and skin allergies as children in excellent or very good health.¹⁴



Additional Survey Results

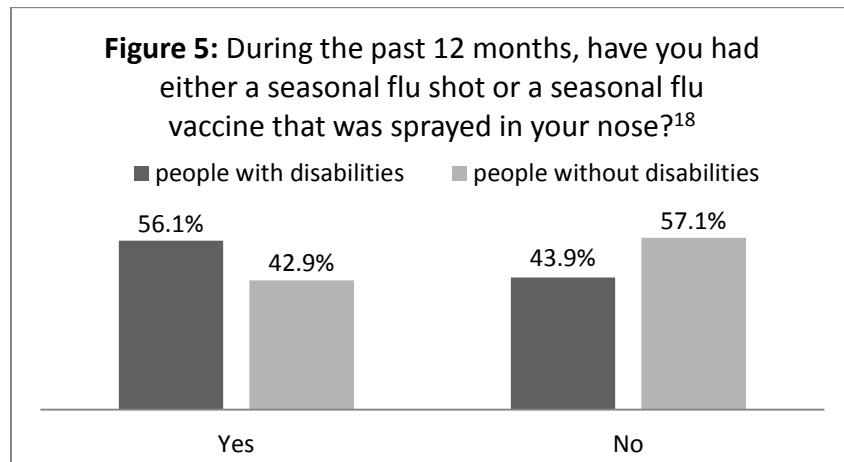
- 16.7 percent of children have been told that they have asthma by a doctor at least once.¹⁵
- 15.1 percent of children have visited the hospital emergency room or an urgent care clinic during the past 12 months because of his/her asthma?¹⁵

¹⁴The Centers for Disease Control and Prevention. Summary Health Statistics for U.S. Children: National Health Interview Survey, 2012. Available at: www.cdc.gov/nchs/data/series/sr_10/sr10_258.pdf

¹⁵North Carolina State Center for Health Statistics. Child Health Assessment and Monitoring Program (CHAMP). Available at: www.schs.state.nc.us/schs/champ/2011/topics.html

IMMUNIZATION

Vaccines prevent a disease from occurring and are one of the best ways to put an end to the serious consequences of certain diseases.¹⁶ Vaccines protect not only individuals but entire communities and are vital to the public health goal of preventing diseases. To protect North Carolina's children, adolescents and adults, maximum immunization coverage in all populations, including people with disabilities, should be achieved.¹⁷



Additional Survey Results

- 17.6 percent of adults with disabilities reported having a Tdap shot since 2005 (the tetanus shot that also has pertussis or whooping cough vaccine) compared to 23.6 percent of adults without disabilities.¹⁸
- 49.2 percent of adults with disabilities reported ever having a pneumonia shot compared to 25.3 percent of adults without disabilities.¹⁸

Children with Special Health Care Needs

Improving access to immunization for children with disabilities will give them a healthier start in life by allowing them to avoid preventable illnesses, further disablement or death.¹⁹

- 71.4 percent of children whose parent is aware of the HPV vaccine have never had it²⁰
- 50.4 percent of children have not had a meningitis vaccine¹⁷
- 19.1 percent of children with special health care needs received a tetanus vaccine¹⁷

¹⁶ Centers for Disease Control and Prevention. How vaccines prevent disease. 2014. Available at: www.cdc.gov/vaccines/gen/howvpcd.htm

¹⁷ U.S. Department of Health and Human Services. Understanding vaccines: What they are, how they work. NIH Publication No. 08-4219. Washington, DC: USDHHS, National Institutes of Health. 2008.

¹⁸ North Carolina Center for Health Statistics. 2013 BRFSS Survey Results: North Carolina. Available at: www.schs.state.nc.us/data/brfss/2013/

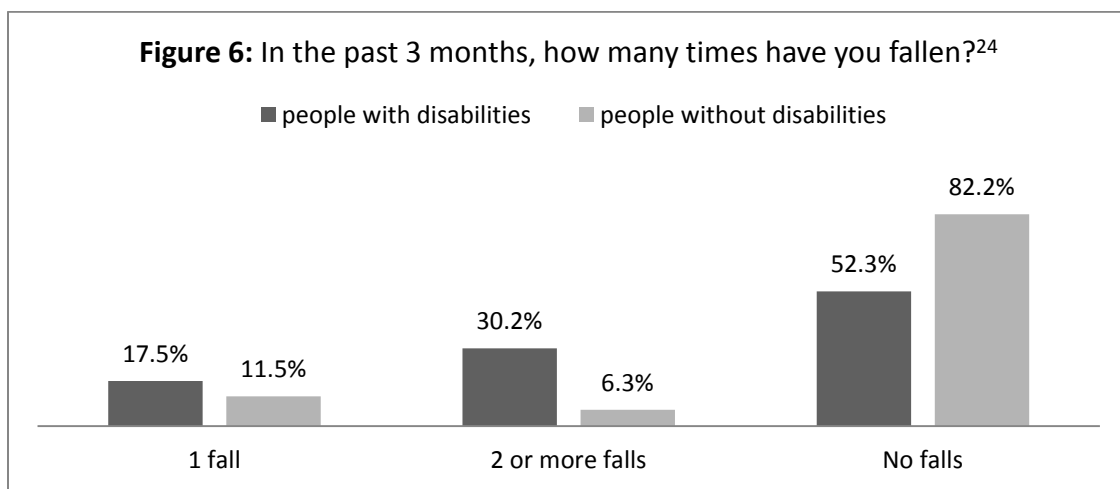
¹⁹ UNICEF. Disability Prevention Efforts and Disability Rights: Finding Common Ground on Immunization Efforts. Available at: www.unicef.org/disabilities/files/UNICEF_Immunization_and_Disability_Paper_FINAL.pdf

²⁰ North Carolina State Center for Health Statistics. Child Health Assessment and Monitoring Program (CHAMP). Available at: www.schs.state.nc.us/schs/champ/2011/topics.html

INJURY AND VIOLENCE

Children and adults with disabilities are more likely to be victims of violence than those without disabilities. People with mental health conditions are at nearly four times the risk of experiencing violence.²¹ Unintentional injury is the leading cause of death for North Carolinians ages one to 44.²² Unintentional injury deaths includes motor vehicle traffic, suffocation, drowning, fire/burn, firearm and pedestrian.

Violence and suicide are both in the top ten leading causes of death for people ages 15 to 44.²³ For people ages 15 to 24, homicide is the second leading cause of death, and for people ages 25 to 34, suicide is the second leading cause of death. Violence related injury deaths include suffocation, firearms, drowning, cut/pierce, falls and poisoning.



Additional Survey Results

- 20.8 percent of adults with disabilities report that before the age of 18 a parent or adult in their home hit, beat, kick, or physically hurt them at least once, compared with 13.6 percent in the general population.²⁴
- 17.4 percent of adults with disabilities report experiencing sexual abuse before age 18, compared with 8.9 percent in the general population.²⁴
- 21.8 percent of adults with disabilities had someone they knew, not including a partner or ex-partner, push, hit, slap, kick or physically hurt them in any other way compared to 11.4 percent of adults without disabilities.²⁵

²¹ The World Health Organization. Violence against adults and children with disabilities. Available at:

www.who.int/disabilities/violence/en/

²² The Centers for Disease Control and Prevention. Injury Prevention & Control: Data & Statistics (WISQARS™). Available at:

www.cdc.gov/injury/wisqars/fatal.html

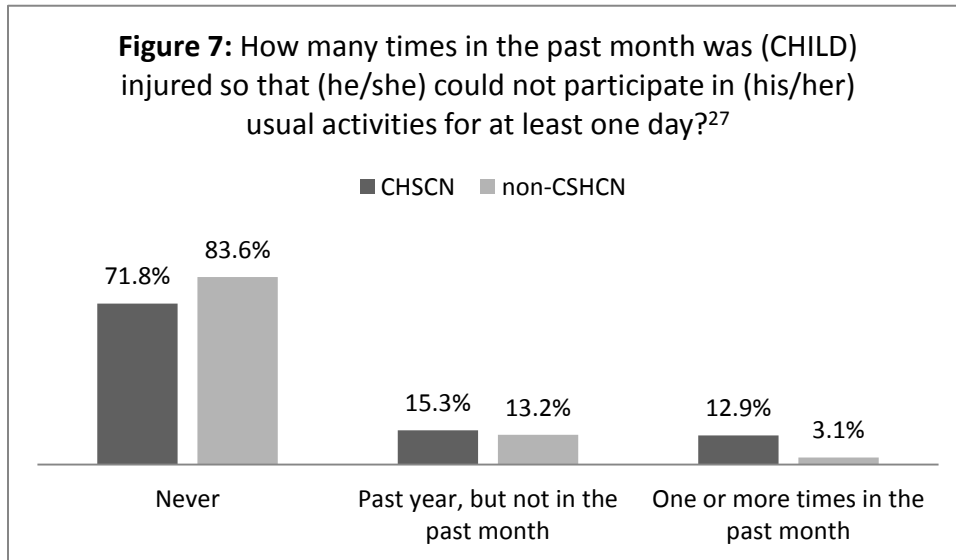
²³ Centers for Disease Control and Prevention. Surveillance for violent deaths—National violent death reporting system, 16 states, 2005. Morbidity and Mortality Weekly Report Surveillance Summaries. 2008; 57(SS03): 1-43, 45.

²⁴ North Carolina State Center for Health Statistics. Behavioral Risk Factor Surveillance System (BRFSS). Available at:

www.schs.state.nc.us/schs/brfss/2012/

Children with Special Health Care Needs

Children with disabilities are 3.7 times more likely than non-disabled children to be victims of any sort of violence, 3.6 times more likely to be victims of physical violence and 2.9 times more likely to be victims of sexual violence. Children with mental or intellectual impairments appear to be among the most vulnerable, with 4.6 times the risk of sexual violence than their non-disabled peers.²⁶



Additional Survey Results

- 38.7 percent of CSHCN live in a home with at least one gun present, compared to 30.1 percent of non-CSHCN.²⁷
- 84.2 percent of CSHCN live in a home in which prescription medication is not kept in a locked place.²⁷

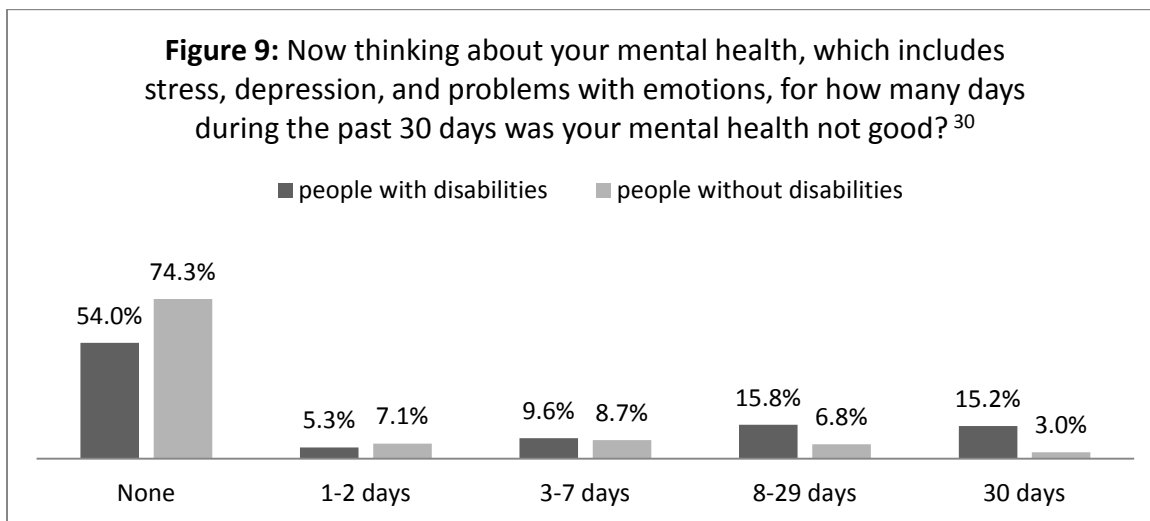
²⁵ North Carolina State Center for Health Statistics. Behavioral Risk Factor Surveillance System (BRFSS). Available at: www.schs.state.nc.us/schs/brfss/2010/

²⁶ The World Health Organization. Violence against adults and children with disabilities. Available at: www.who.int/disabilities/violence/en/

²⁷ North Carolina State Center for Health Statistics. Child Health Assessment and Monitoring Program (CHAMP). Available at: www.schs.state.nc.us/schs/champ/2011/topics.html

MENTAL HEALTH

People with disabilities often are at greater risk for secondary health conditions including mental health disorders or depression.²⁸ Depression is also the leading cause of disability worldwide and is a major contributor to the global burden of disease.²⁹ Forty one percent of adults with disabilities have had a health professional tell them that they have a depressive disorder (including depression, major depression, dysthymia or minor depression) compared to twelve percent of adults without disability.



Additional Survey Results

- 41.4 percent of adults with disabilities reported ever having been told that they have a depressive disorder, including depression, major depression, dysthymia or minor depression compared to 11.7 percent of adults without disabilities.³⁰
- 36.8 percent of adults with disabilities reported feeling so depressed that nothing could cheer them up within the past 30 days.³⁰
- 29.5 percent of adults with disabilities reported their mental health condition kept them from work or doing other usual activities during the past 30 days, compared with 4.8 percent in adults without disabilities.³⁰

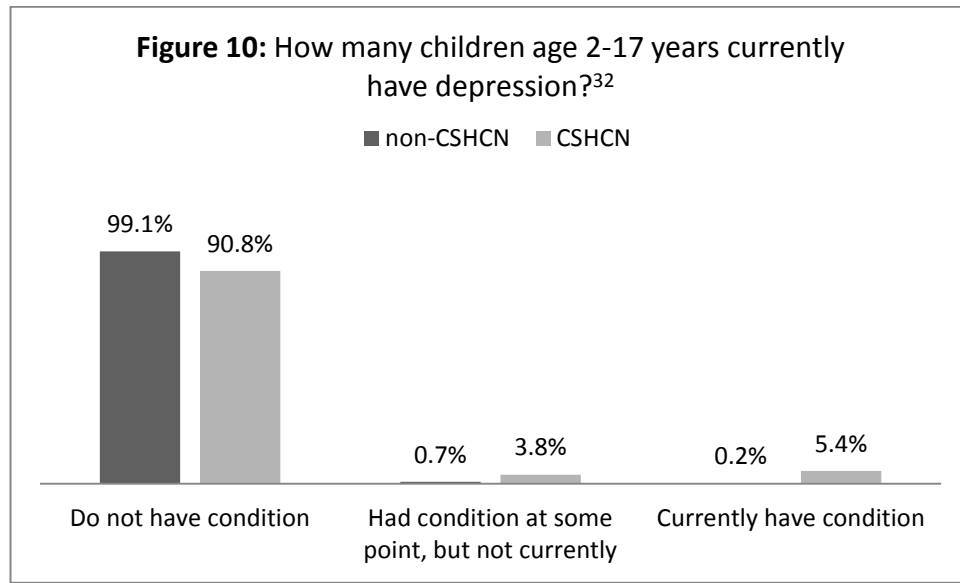
²⁸ www.cdc.gov/ncbddd/disabilityandhealth/relatedconditions.html

²⁹ www.who.int/mediacentre/factsheets/fs369/en/

³⁰ North Carolina Center for Health Statistics. 2013 BRFSS Survey Results: North Carolina. Available at: www.schs.state.nc.us/data/brfss/2013/

Children with Special Health Care Needs

Mental disorders among children are described as serious changes in the ways children typically learn, behave, or handle their emotions. Symptoms usually start in early childhood, although some of the disorders may develop throughout the teenage years.³¹ It is estimated that 13 to 20 percent of children living in the United States experience a mental disorder in a given year.



Additional Survey Results

- 52.7 percent of parents of CSHCN report that their child needs or uses more medical, mental health, or educational service than most children of the same age, compared with 2.6 percent of parents of non-CSHCN.³³
- 37.9 percent CSHCN have emotional, developmental, or behavioral problems which require treatment or counseling, compared with 3.1 percent of non-CSHCN.³³

³¹The Centers for Disease Control and Prevention. Children's Mental Health, New Report. Available at: www.cdc.gov/ncbddd/childdevelopment/documents/cmh-feature20130514.pdf

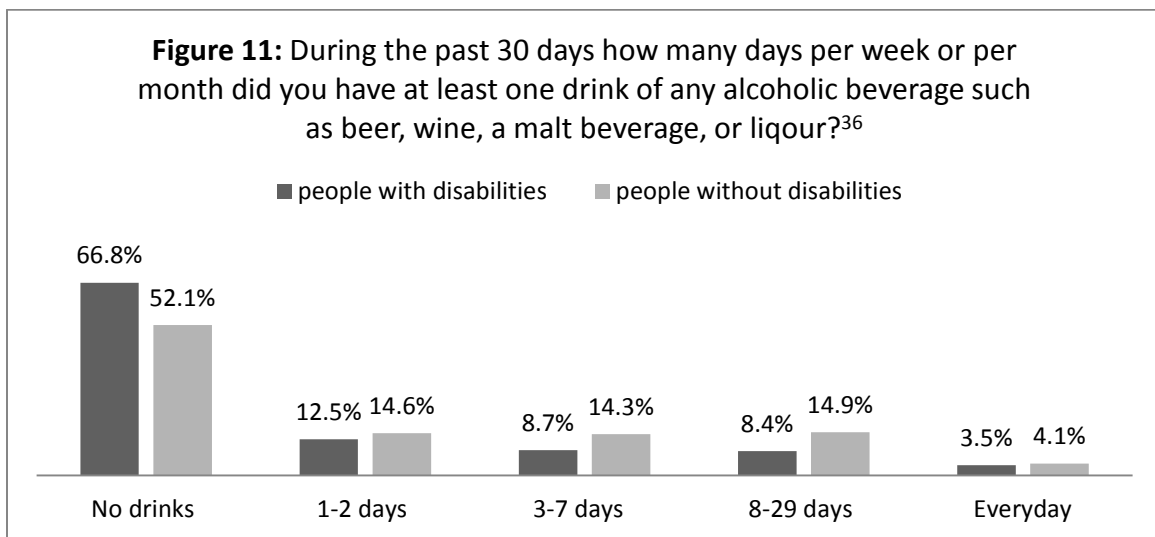
³²The Data Resource Center for Children and Adolescent Health. 2011/12 National Survey of Children's Health. Available at: www.childhealthdata.org/browse/survey/results?q=2433&r=35&g=461

³³ North Carolina State Center for Health Statistics. Child Health Assessment and Monitoring Program (CHAMP). Available at: www.schs.state.nc.us/schs/champ/2011/topics.html

SUBSTANCE ABUSE

People with disabilities are disproportionately at greater risk of substance abuse due to multiple risk factors such as “medication and health problems, societal enabling, a lack of identification of potential problems, and a lack of accessible and appropriate prevention and treatment services”.³⁴ Substance abuse rates for individuals with traumatic brain injury, spinal cord injuries, and/or mental illness approach or exceed 50 percent for individuals experiencing compared to 10 percent of the general population.

In addition, it has been found that people who report having a disability may be more likely to have experienced an Adverse Childhood Experience such as living with someone who abuses alcohol or drugs.³⁵ However, fewer adults with disabilities report alcohol consumption or abuse than adults without disabilities.



Additional Survey Results

- 34.5 percent of adults with disabilities lived with an alcoholic or drug abuser before the age of 18, compared with 24.5 percent of adults without disabilities.³⁶
- 31.1 percent of adults with disabilities lived with an alcoholic or problem drinker before the age of 18, compared with 21.1 percent of adults without disabilities.³⁶

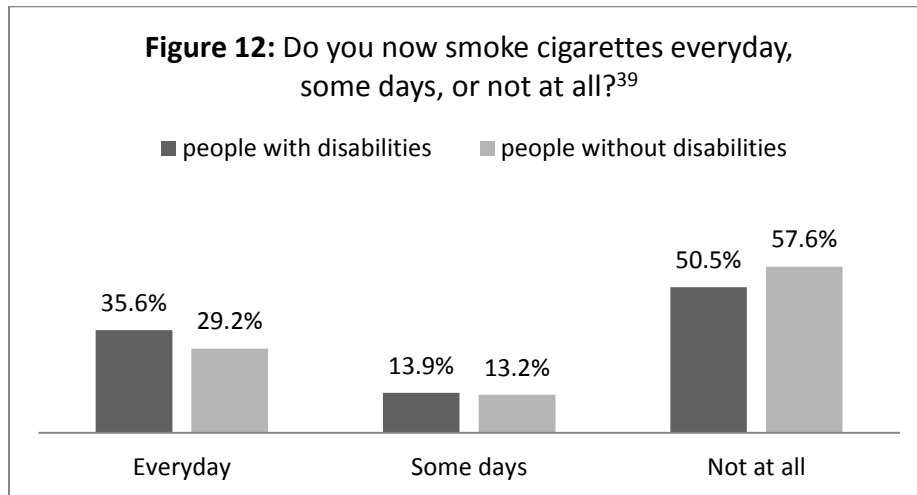
³⁴ National Rehabilitation Information Center. Volume 6, Number 1, January 2011, Substance Abuse & Individuals with Disabilities. Available at: www.naric.com/?q=en/publications/volume-6-number-1-january-2011-substance-abuse-individuals-disabilities

³⁵ The Centers for Disease Control and Prevention. Injury Prevention & Control : Division of Violence Prevention. Available at: www.cdc.gov/violenceprevention/acestudy/

³⁶ North Carolina State Center for Health Statistics. Behavioral Risk Factor Surveillance System (BRFSS). Available at: www.schs.state.nc.us/schs/brfss/2012/

TOBACCO USE

Cigarette smoking kills almost one in five adults each year. In 2010, approximately 17 percent of deaths were from smoking.³⁷ The percentage of adults who smoke cigarettes is higher among people with disabilities than people without disabilities. In North Carolina, 29 percent of adults with disabilities reported smoking cigarettes on a daily basis compared to 18 percent of adults without disabilities.³⁸



Additional Survey Results

- 26.5 percent of adults with disabilities have smoked a cigarette (even one or two puffs) within the last 5 years.³⁹

Children with Special Health Care Needs

Eight in 10 adult smokers report that they began smoking before age 18. In addition, teen smokeless tobacco users are more likely than nonusers to become adult cigarette smokers. 22.5 percent of middle and high school students reported being current tobacco users in 2011.⁴⁰

³⁷The Centers for disease Control and Prevention. Cigarette Smoking Among Adults with Disabilities. Available at: www.cdc.gov/ncbddd/disabilityandhealth/smoking-in-adults.html

³⁸North Carolina Center for Health Statistics. 2013 BRFSS Survey Results: North Carolina. Available at: www.schs.state.nc.us/data/brfss/2013/nc/all/rfsmok3.html

³⁹North Carolina Center for Health Statistics. 2013 BRFSS Survey Results: North Carolina. Available at: www.schs.state.nc.us/data/brfss/2013/nc/all/topics.htm

⁴⁰The Centers for Disease Control and Prevention. Surveillance Summary: Youth Tobacco Use—United States, 2011. Available at: www.cdc.gov/tobacco/data_statistics/surveys/yts/pdfs/YTS_SS_2011_v6_508tagged.pdf

APPENDIX I: Disparities and Adult-specific Data on Disability

Table 1.

DISPARITIES: Disability and Health Data System, 2011 BRFSS Survey Results, North Carolina Demographic Overview⁴¹

| | | % of People with Disabilities | % of people without Disabilities | Disparity |
|-------------------|------------------------------------|----------------------------------|--|-----------|
| Income level | <\$15,000 | 26.0 | 10.7 | 15.3 |
| | \$15,000 to <\$25,000 | 26.9 | 19.8 | 7.1 |
| | \$25,000 to <\$35,000 | 11.8 | 12.8 | -1 |
| | \$35,000 to <\$50,000 | 11.3 | 15.0 | -3.7 |
| | \$50,000+ | 24.0 | 41.8 | -17.8 |
| Education level | Finished some high school or less | 22.3 | 14.4 | 7.9 |
| | Graduated high school | 62.1 | 59.4 | 2.7 |
| | Graduated college | 15.7 | 26.2 | -10.5 |
| Marital status | Married/member of unmarried couple | 47.6 | 57.3 | -9.7 |
| | Divorced or separated | 18.8 | 11.6 | 7.2 |
| | Widowed | 8.3 | 5.7 | 2.6 |
| | Never married | 25.3 | 25.4 | -0.1 |
| Employment status | Employed | 33.0 | 61. | -28.2 |
| | Out of work | 12.1 | 8.1 | 4 |
| | Unable to work | 28.2 | 1.7 | 26.5 |
| | Other | 26.7 | 28.9 | -2.3* |

⁴¹ Centers for Disease Control and Prevention. Disability and Health Data System (DHDS). North Carolina Demographic Overview. Available at: dhs.cdc.gov/profiles/profile?profileId=8&geoTypeId=1&geoids=37

Table 2.

DISPARITIES: Disability and Health Data System, 2011 BRFSS Survey Results, North Carolina Health Overview⁴²

| | | % of People with Disabilities | % of people without Disabilities | Disparity |
|---|---|--|---|------------------|
| Health risks and behaviors | Drank alcohol in the past 30 days | 37.3 | 49.1 | -11.9 |
| | Drove while alcohol-impaired in the past 30 days (2010) | 1.4 | 1.6 | -0.2* |
| | Binge drank in the past 30 days | 11.3 | 14.5 | -3.1 |
| | Always use a seatbelt | 89.1 | 90.6 | -1.4* |
| | Ate fruit 1 or more times per day | 57.1 | 60.2 | -3.1* |
| | Ate vegetables 1 or more times per day | 75.5 | 79.1 | -3.6* |
| | Obese based on body mass index | 40.6 | 26.2 | 14.4 |
| | At risk for HIV (age 18-64) | 9.2 | 4.9 | 4.3 |
| | Tested for HIV (age 18-64) | 61.1 | 47.9 | 13.2 |
| | Sufficient aerobic physical activity | 8.3 | 50.2 | -11.9 |
| | Meets aerobic and muscle strengthening physical activity guidelines | 5.6 | 19.9 | -4.3 |
| | Currently smoke cigarettes | 28.8 | 19.2 | 9.6 |
| | Smokers who attempted to quit in the past 12 months | 42.5 | 56.9 | -14.4 |
| | Use smokeless tobacco | 5.6 | 3.6 | 2.0 |
| Prevention and screenings | Clinical breast exam in the past 2 years (age 40+) (2012) | 69.1 | 81.5 | -12 |
| | Mammogram in the past 2 years (age 40+) (2012) | 75.3 | 82.7 | -7.4 |
| | Pap test in the past 3 years (2012) | 79.5 | 87.9 | -8 |
| | Fecal occult blood test in the past year (age 50+) (2010) | 15.4 | 15.0 | 0.4 |
| | Sigmoidoscopy or colonoscopy in the past 10 years (age 50+) (2011) | 68.6 | 67.8 | 0.8* |
| | Cholesterol check in the past 5 years (age 20+) (2011) | 80.1 | 78.2 | 1.9* |
| | Routine check-up in the past year (2012) | 75.4 | 71.7 | 4 |
| | Teeth cleaned in the past year (2010) | 55.1 | 71.8 | -16.7 |
| | Visited a dentist in the past year (2012) | 56.6 | 67.3 | -10.7 |
| | Ever had a pneumonia vaccine (2012) | 37.2 | 24.2 | 13 |
| | Received a flu vaccine in the past 12 months (2012) | 44.7 | 39.6 | 5.1 |
| Barriers and costs of health care | Could not see a doctor due to cost in the past 12 months | 32.2 | 15.2 | 17.0 |
| | Do not have a personal doctor | 19.9 | 26.5 | -6.6 |
| | Have health care coverage | 77.3 | 79.3 | -2.0* |

DS = Data suppressed. Estimates were suppressed if the standard error was $\geq 3\%$ of the estimate or if the unweighted total population was less than 50.

*The different between the two values is not statistically significant (the p-value is greater than 0.05).

⁴² Centers for Disease Control and Prevention. Disability and Health Data System (DHDS). North Carolina Health Overview. Available at: dhds.cdc.gov/profiles/profile?profileId=8&geoTypeId=1&geoids=37

APPENDIX II: Child-specific Data on Disability

Table 1.

2011 North Carolina Statewide CHAMP Survey Results⁴³

| | | % CSHCN | % non- CSHCN |
|--|---------------------------|----------------|-------------------------|
| Would you say that in general the health of (CHILD) is: | Excellent | 35.3 | 66.2 |
| | Very good | 34.5 | 22.7 |
| | Good | 21.7 | 9.2 |
| | Fair or Poor | 8.5 | 2 |
| Does (CHILD) have any kind of health care coverage? | Yes | 96.8 | 93.8 |
| | No | *** | 6.2 |
| During the past 12 months, has (CHILD) had a preventive care visit or Well Child check-up? | Yes | 93.3 | 88.6 |
| | No | 6.7 | 11.4 |
| During the past 12 months, about how many days did (CHILD) miss school because of illness or injury? | No days | 14.1 | 28.8 |
| | < 1 week | *** | 49.5 |
| | 1 to 2 weeks | 29.8 | 17.7 |
| | 2 or more weeks | 9.5 | 4 |
| Parent Reaction to Child Weight: How would you describe your child's weight? | Very/Somewhat overweight | 17.3 | 7.5 |
| | Healthy weight | 68.4 | 83.3 |
| | Somewhat/Very underweight | 14.3 | 9.1 |

⁴³North Carolina State Center for Health Statistics. Child Health Assessment and Monitoring Program. 2011 CHAMP Topics. Available at: www.schs.state.nc.us/schs/champ/2011/topics.html

Table 2.

2011 North Carolina Statewide CHAMP Survey Results: Children with special health care needs⁴⁴

| | | Does (CHILD) currently need or use more medical care, mental health or educational services than is usual for most children of the same age? | Does (CHILD) currently need or use medicine prescribed by a doctor, other than vitamins? | Is (CHILD) limited or prevented in any way in his/her ability to do the things most children of the same age do? | Does (CHILD) need or get special therapy, such as physical, occupational or speech therapy? | Does (CHILD) have any kind of emotional, developmental or behavioral problem for which he/she needs treatment or counseling? |
|-------------------------------|------------------|--|--|--|---|--|
| | | % Yes | % Yes | % Yes | % Yes | % Yes |
| Gender | Male | 12.8 | 21.2 | 5.5 | 7.2 | 11.6 |
| | Female | 11 | 19.6 | 5.2 | 3.9 | 6.7 |
| Race | White | 14 | 20.9 | 5.7 | 5.5 | 8.4 |
| | African American | 6.3 | 15.6 | *** | 4.4 | 6.1 |
| | Other Minorities | 13.2 | *** | 10.5 | 8.1 | 17.3 |
| Hispanic | Yes | *** | 14 | *** | *** | *** |
| | No | 12 | 21.2 | 5.6 | 5.6 | 9.6 |
| Age Groups | Under 5 | 7.3 | 8.5 | *** | 2.9 | *** |
| | 5 through 10 | 10.8 | 18 | 4.5 | 10.1 | 9.9 |
| | 11 through 13 | 16.6 | 35.2 | 5 | 4.8 | 12.2 |
| | 14 through 17 | 15.9 | 28.2 | 8.2 | *** | 16.2 |
| Parent Education | H.S. or Less | 8.3 | 20.5 | 5.8 | 7.7 | 9.9 |
| | Some College | 16.1 | 24.2 | 8 | 5.1 | 13.5 |
| | College Grad. | 12 | 18.2 | 3.6 | 4.5 | 6.4 |
| School | Public School | 14.6 | 25.5 | 6 | 7.4 | 13.4 |
| | Private/Home | 6.5 | *** | *** | *** | *** |
| Grade | Not In School | 9 | 9.5 | 5.6 | 5.9 | *** |
| | K-5th | 9.9 | 19.6 | 3.4 | 7.7 | 8.7 |
| | 6th-8th | 18.2 | *** | 5.1 | 6.3 | 13.8 |
| | 9th-12th | 14.8 | 29 | 8 | *** | 14.4 |
| Health Insurance ² | Private | 9.7 | 14.8 | 2.5 | 4.5 | 3.8 |
| | Public | 15.7 | 27.9 | 8.4 | 6.9 | 14.7 |
| | Other | 8.9 | 15.8 | *** | *** | *** |
| | No health insur. | *** | *** | *** | *** | *** |

*** Estimate suppressed because it did not meet statistical reliability standards.

- 9th-12th grade includes those in college or other post high school education.
- Health Insurance categories: PRIVATE = State Employee Health Plan, Blue Cross/Blue Shield of NC or other private health insurance plan purchased from an employer or directly from insurance company. PUBLIC = Medicaid, Carolina ACCESS, Health Check or NC Health Choice. OTHER = military, CHAMPUS, TRI CARE, Indian Health Services or other type not otherwise listed.

⁴⁴ North Carolina State Center for Health Statistics. Child Health Assessment and Monitoring Program. Children with Special Health Care Needs. Available at: www.schs.state.nc.us/schs/champ/2011/topics.html#cshcn

Table 3.

2011 CHAMP CSHCN Overview (ages 1-17)⁴⁵

| | | % CSHCN | % Non-CSHCN |
|--|---|---------|-------------|
| Disability indicators | Does child currently need or use more medical care, mental health or educational services than is usual for most children of the same age? | 52.7 | 2.6 |
| | Does child currently need or use medicine prescribed by a doctor, other than vitamins? | 87.5 | 5.2 |
| | Is child limited or prevented in any way in his/her ability to do the things most children of the same age do? | 23.2 | 1.6 |
| | Does child need or get special therapy, such as physical, occupational or speech therapy? | 18.9 | 2.9 |
| | Does child have any kind of emotional, developmental or behavioral problem for which he/she needs treatment or counseling? | 37.9 | 3.1 |
| Would you say that in general the health of child is: | Excellent | 35.3 | 66.2 |
| | Very good | 34.5 | 22.7 |
| | Good | 21.7 | 9.2 |
| | Fair or Poor | 8.5 | 2.0 |
| During the past 12 months, about how many days did child miss school because of illness? | No days | 18.3 | 29.3 |
| | < 1 week | *** | 50.8 |
| | 1-2 weeks | 30.5 | 16.2 |
| | >2 weeks | 8.0 | 3.6 |
| Preventative care visits | During the past 12 months, has child had a preventative care visit or Well Child check-up? | 93.3 | 88.6 |
| Care coordination | Does anyone help you arrange or coordinate child's care among different doctors or services that he/she uses? | 29.5 | 21.6 |
| Written plan (2010) | Has child's doctor or health care provider ever given you or your child a written plan to help them manage their condition as they become an adult? | 45.4 | 31.4 |
| Asthma | Has a doctor ever told you that child has asthma? (ages 1+) | 29.9 | 12.8 |
| Asthma- ER visits (2010) | During the past 12 months, has child had to visit a hospital emergency room or urgent care clinic because of his/her asthma? (ages 1+) | 35.3 | 26.5 |
| Chronic health conditions (2010) | Has a doctor or health professional ever told you that child has diabetes or high blood sugar? | 2.3 | 0.2 |
| | Has a doctor or health professional ever told you that child has high blood pressure? (ages 3+) | 3.1 | 0.3 |
| | Has a doctor or health professional ever told you that child has a permanent hearing loss or hearing impairment? | 4.0 | 1.1 |

*** This estimate was suppressed because it did not meet statistical reliability standards

⁴⁵ North Carolina State Center for Health Statistics. Child Health Assessment and Monitoring Program (CHAMP). Available from: www.schs.state.nc.us/schs/champ/2011/topics.html#gh

Table 4.**2013 YRBS Disability Overview⁴⁶**

| | | % Middle School | % High School |
|---|---|------------------------|----------------------|
| Disability | Percent of students who consider themselves to have a disability | 10.6 | 9.8 |
| Activity limitations due to disability | Percent of students who are limited in any way in any activities because of disability or health problem | 9.0 | 11.1 |
| Disability and learning, remembering, concentrating | Percent of students who have trouble learning, remembering or concentrating because of disability or health problem | 11.8 | 13.4 |

⁴⁶ North Carolina Healthy Schools. Youth Risk Behavior Survey. High School and Middle School 2013 Survey Results. Available from: www.nhealthyschools.org/data/yrbs/