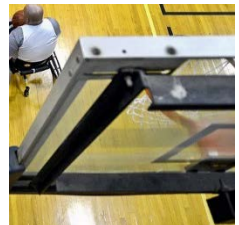


# New Hampshire Disability & Public Health Report 2016



Institute on Disability/UCED



**DPH**

NH Disability &  
Public Health Project

*Alternative formats available on request.*

## **Suggested Citation**

New Hampshire Disability and Public Health Project. (2016). *New Hampshire Disability and Public Health Report*. Durham, NH: Institute on Disability, University of New Hampshire.

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## Acknowledgements

This publication was supported by Grant / Cooperative Agreement Number 2U59DD000954-04 from the U.S. Centers for Disease Control and Prevention (CDC). Its contents are solely the responsibility of the authors and do not necessarily represent the views of CDC.

The publication of the *New Hampshire Disability and Public Health Report* comprises the annual commitment of the NH Disability & Public Health (DPH) project to maintain the surveillance and monitoring activities that were inaugurated with the publication of the 2013 *New Hampshire Disability and Public Health Needs Assessment*. The project staff at the UNH Institute on Disability and the NH Division of Public Health Services gratefully acknowledges the many individuals, families, advocates, agencies, and organizations whose work to date has paved the way for current public health efforts, programs, and initiatives.

This report was prepared by Kimberly Phillips and Sara Rainer at the UNH Institute on Disability. DPH is guided by Principal Investigator, Charles Drum, MPA, JD, PhD, Director of the UNH Institute on Disability. Special thanks are due to Marcella Bobinsky, Acting Director of the NH Division of Public Health Services, and the current members of the Disability Community Planning Group, the project's advisory committee:

Diana Dorsey, Special Medical Services

Debbie Krider, Granite State Independent Living

Martha-Jean Madison, NH Family Voices

Amy Messer, NH Disability Rights Center

David Ouellette, NH Council on Developmental Disabilities

Trinidad Tellez, Office of Minority Health & Refugee Affairs

Patricia Tilley, Bureau of Community Health Services

Carole Totzkay, Emergency Services Unit

Neil Twitchell, Community Health Development Section

## Introduction

### The New Hampshire Disability & Public Health project (DPH)

DPH is a collaboration between the Institute on Disability at the University of New Hampshire and the NH Division of Public Health Services (DPHS) and is funded by a cooperative agreement with the U.S. Centers for Disease Control and Prevention.

### DPH Project Goal

The project goal, to promote and maximize health, prevent chronic disease, and improve emergency preparedness for people with disabilities, is achieved through activities that focus on infusing disability components into new and existing state public health programs and initiatives.

### Using Data to Identify Disability in NH

The data presented throughout this report come from the combined 2013-2014 Behavioral Risk Factor Surveillance System (BRFSS),<sup>1</sup> established by CDC and administered through NH Health Statistics and Data Management at DPHS. 2013 was an exciting year for disability researchers because it was the first time that the BRFSS included questions about specific types of disability. Previously, disability was defined on the BRFSS as a self-report of limitations due to physical, mental, or emotional problems and/or a health problem that necessitated the use of special equipment like a wheelchair, special bed, communication device, or other. This report identified disability based on responses to the following BRFSS questions:

1. Do you have serious difficulty walking or climbing stairs? (“Mobility”)
2. Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions? (“Cognitive”)
3. Are you blind or do you have serious difficulty seeing, even when wearing glasses? (“Visual”)

The three categories of disability type are mutually exclusive. Persons reporting any combination of two or more are included in the “Multiple” disability group.

### Limitations of the BRFSS

The BRFSS is an annual random-digit-dialed telephone survey, meaning any NH resident might be called. However, some groups of people are excluded from the sample. People who are in an institution (e.g., jail, nursing home), people who do not have a landline or cell phone, and people who do not speak English or Spanish are not included. Additionally, some

people who have a disability may not be included because the survey was not made in alternative formats, the individual could not get to the phone in time, or the individual used a special telephone that may have sounded like a fax machine to the caller. Notably, no questions were asked about deafness or hearing impairment as the CDC was not confident they had the technology to get an accurate representation of this population.

### **Data Presentation and Statistical Significance**

This report focuses on NH working-age adults, ages 18 to 64 years. Descriptive analyses were conducted and are presented throughout this report in tables and figures, with supporting text. Statistically significant differences compared to the “no disability” group are shown with green in the bar charts and asterisks in the tables. The percentage shown for each data item presents the closest point estimate from the weighted BRFSS sample, and the confidence interval (CI) indicates that 95% of all samples drawn from the whole population will result in a point estimate somewhere within the given range. Statistical significance is designated at the commonly accepted alpha level .05.

### **Questions?**

Questions or comments about this report or its contents may be directed to

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Electronic copies, as well as project information and disability & public health resources are available at <http://nhdisabilityhealth.org/data>

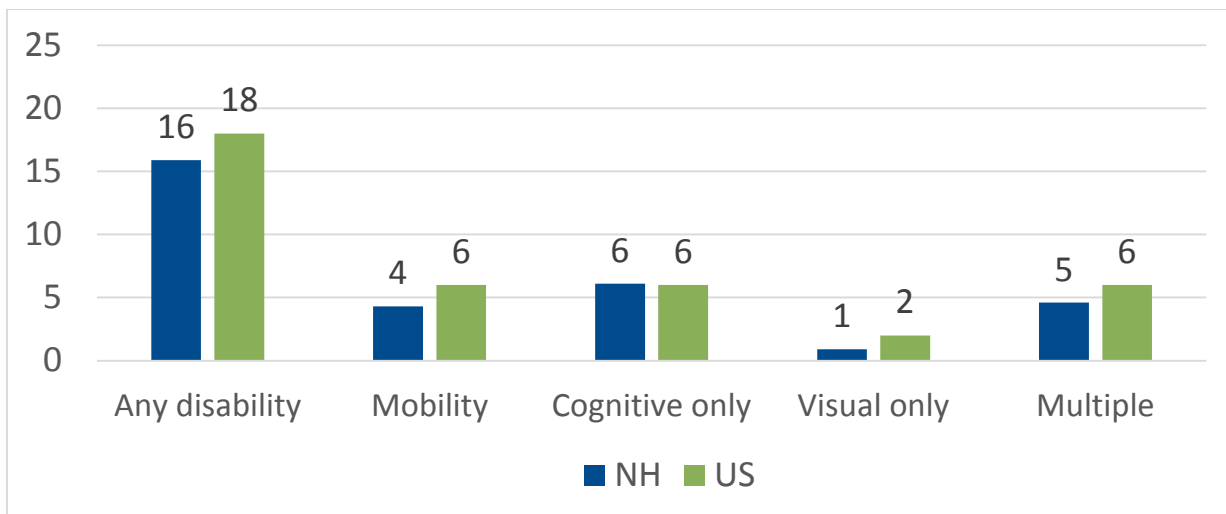


## Prevalence of Disability in New Hampshire

Nearly one in five (18.2%) New Hampshire adults between the ages of 18 and 64 report some type of disability. Prevalence of three mutually exclusive disability types (mobility, cognitive, and visual) from the 2013-14 NH Behavioral Risk Factor Surveillance System (BRFSS) is shown in Table 1. The multiple disabilities category represents any combination of more than one mobility, cognitive, or visual limitations. In addition, the U.S. Census tells us that 2.3% of NH adults have a hearing limitation.

Making public health programs, services, and initiatives inclusive and available for all NH residents means ensuring that they are both physically and culturally accessible to individuals with varying needs and abilities.

**Figure 1. Prevalence of disability, by disability type, NH compared to US (%)**



**Table 1. Prevalence of disability type in NH (new BRFSS questions 2013-14)**

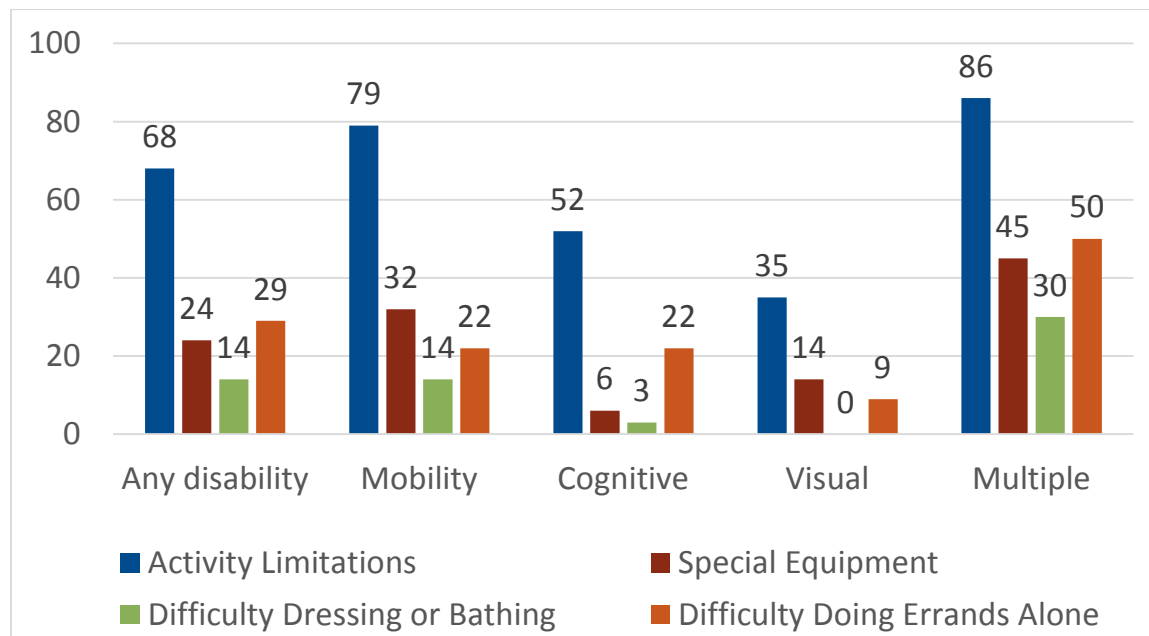
	n (weighted n)	Percent	95% CI
Mobility	467 ( 72,614)	4.3	3.8 – 4.9
Cognitive	450 ( 102,204)	6.1	5.4 – 6.9
Visual	76 ( 15,214)	0.9	0.7 – 1.2
Multiple	426 ( 76,490)	4.6	4.0 – 5.2
Total disability	1419 ( 266,522)	15.9	13.9 – 18.2
No disability	6706 (1,411,998)	84.1	83.0 – 85.2

## Limitations Associated with Disability

Individuals with disabilities experience different degrees and types of limitations and complexities arising from their disability type. For example, some people might need assistance with activities of daily living or self-care. Certain disabilities may require the need for special equipment, such as a wheelchair or medical device. Some individuals experience few or no limitations associated with their disabilities.

Figure 2 shows the prevalence of different types of need associated with disability among NH residents with disabilities. People with multiple disabilities experience the most limitations, followed by people with mobility disabilities only.

**Figure 2. Prevalence of limitations by disability type (%)**



**Table 2. Prevalence of limitations by disability type**

	Activity Limitations	Special Equipment	Difficulty Dressing or Bathing	Difficulty Doing Errands Alone
	%	%	%	%
Any Disability	68.2	24.3	13.6	29.1
Mobility	79.0	31.5	14.4	21.6
Cognitive	52.3	5.5	3.2	21.9
Visual	35.2	14.0	0	8.9
Multiple	85.6	44.8	29.5	50.3

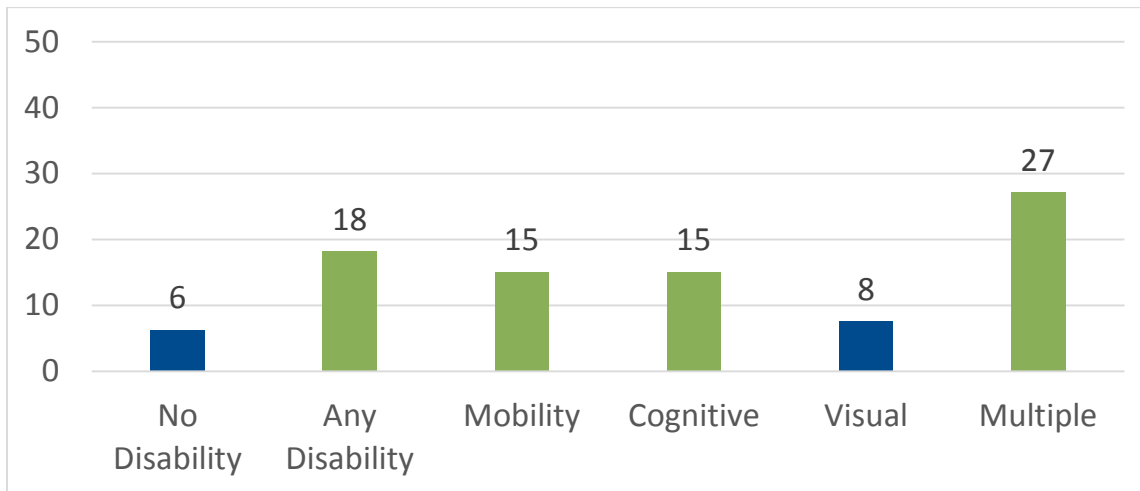
## Social Determinants of Health

Adults with disabilities in NH typically experience poorer outcomes related to social determinants of health such as education, income, and employment than people without disabilities. Efforts to minimize health risk factors among people with disabilities will be more likely to succeed when people with disabilities have equal access and opportunity to participate in education and employment.

### Education

Figure 3 shows that adults of all ages with disabilities are significantly more likely than their same-age peers not to have earned a high school diploma or its equivalent. Among this population, people with multiple disabilities are least likely (27%) to have completed high school. People with visual impairments do not differ from the general population on education level.

**Figure 3. NH adults who did not receive a high school diploma or equivalent (%)**



**Table 3. NH adults who did not receive a high school diploma or equivalent**

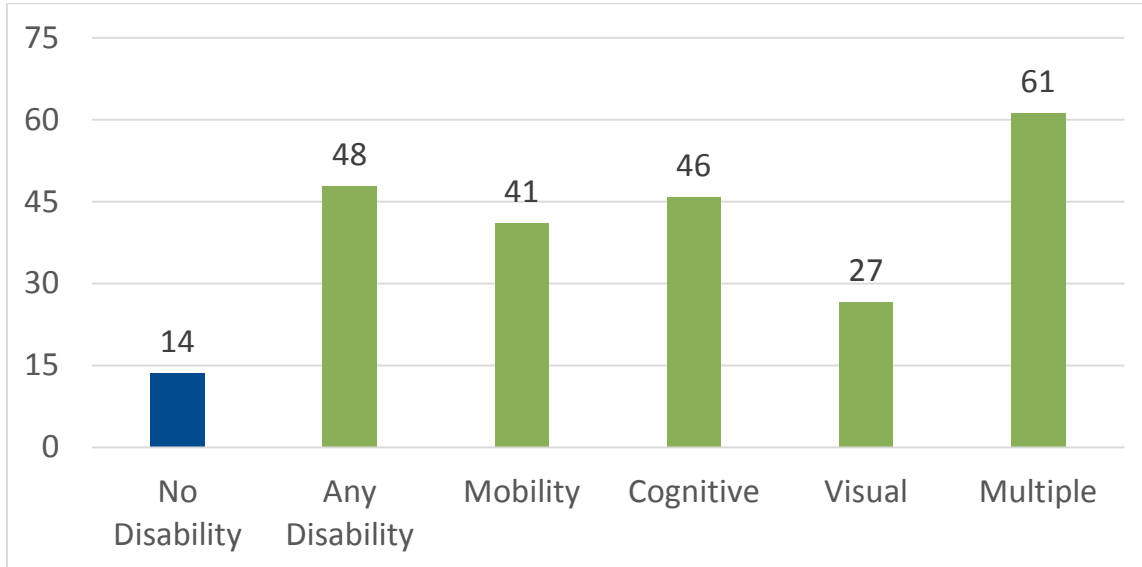
	%	95% CI
No Disability	6.3	5.2 – 7.5
Any Disability	18.2*	15.0 – 21.9
Mobility	15.1*	10.6 – 21.1
Cognitive	15.1*	10.4 – 21.5
Visual	7.6	2.3 – 22.4
Multiple	27.2*	20.4 – 35.2

\*Statistically significantly higher than no disability

## Income

Adults with disabilities are much more likely than adults without disabilities to report low income status. Among this population, people with multiple disabilities are most likely (61%) to have annual household income less than \$25,000, and people with visual impairment are least likely (27%).

**Figure 4. NH adults with annual household income less than \$25,000 (%)**



**Table 4. Annual household income less than \$25,000**

	%	95% CI
No Disability	13.6	12.4 – 14.8
Any Disability	47.9*	43.9 – 51.8
Mobility	41.0*	34.9 – 47.5
Cognitive	45.8*	39.0 – 52.7
Visual	26.6*	15.8 – 41.1
Multiple	61.2*	53.8 – 68.2

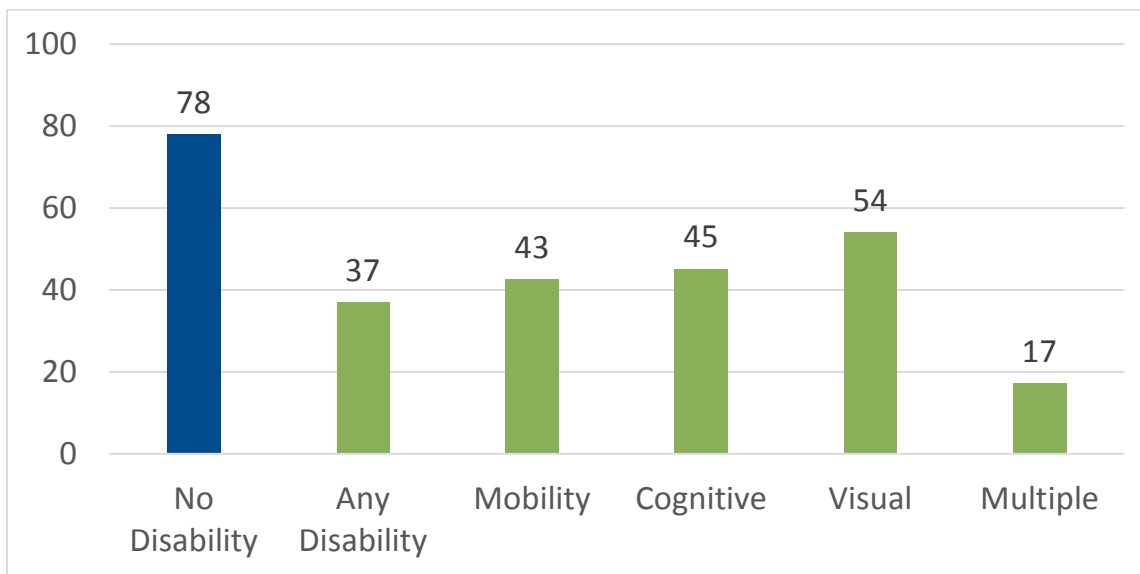
\*Statistically significantly higher than no disability

## Employment

NH adults in all disability categories are significantly less likely to be employed than their peers without disabilities. Figure 5 shows that people with multiple disabilities are least likely to be employed (17%), and people with visual impairment are most likely (54%).

People with disabilities report many barriers to employment, including negative attitudes on the part of supervisors and coworkers, lack of needed accommodations, and fear of losing needed federal assistance.<sup>2</sup> Enacting policies to address such barriers will be useful in facilitating increased participation in the workforce.

**Figure 5. NH adults employed for wages or self-employed (%)**



**Table 5. NH adults employed for wages or self-employed**

	%	95% CI
No Disability	78.1	76.6 – 79.5
Any Disability	37.0*	33.5 – 40.6
Mobility	42.6*	36.8 – 48.7
Cognitive	45.2*	38.8 – 51.8
Visual	54.1*	39.8 – 67.7
Multiple	17.3*	13.0 – 22.7

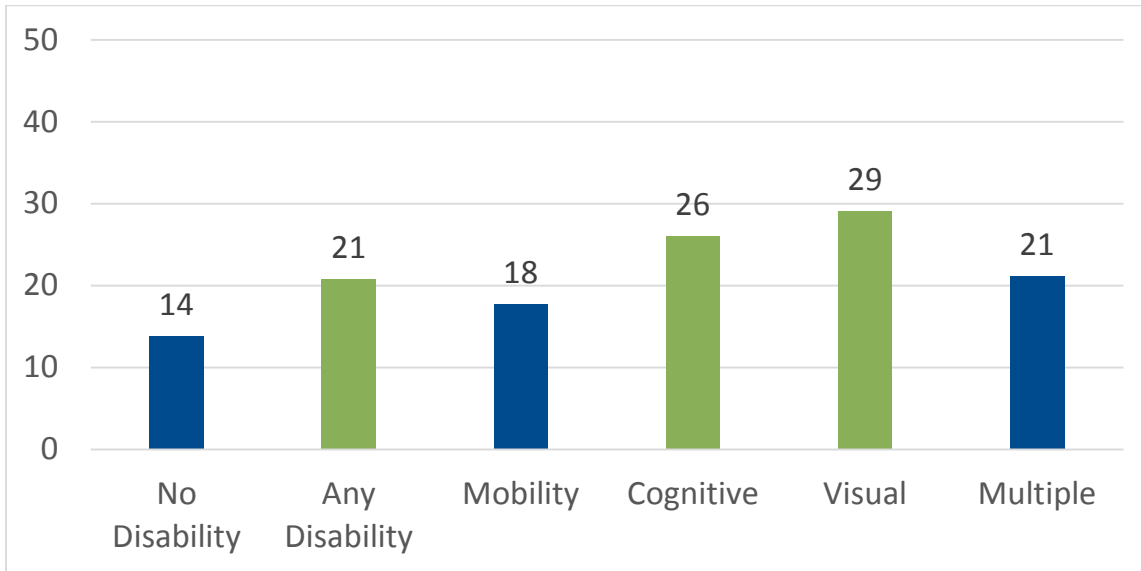
\*Statistically significantly higher than no disability

## Access to Care

### Health Insurance

In NH, people with cognitive and visual disabilities are less likely to have health insurance than adults without disabilities. Interventions and informational campaigns targeting uninsured populations in NH will be more successful if they are accessible to and include people with cognitive or visual impairments.

**Figure 6. NH adults with no health insurance (%)**



**Table 6. NH adults with no health insurance**

	%	95% CI
No Disability	13.8	12.7 – 15.0
Any Disability	20.8*	17.9 – 23.9
Mobility	18.0	13.7 – 23.2
Cognitive	23.0*	18.1 – 28.7
Visual	25.5*	15.5 – 39.0
Multiple	19.6	14.4 – 26.1

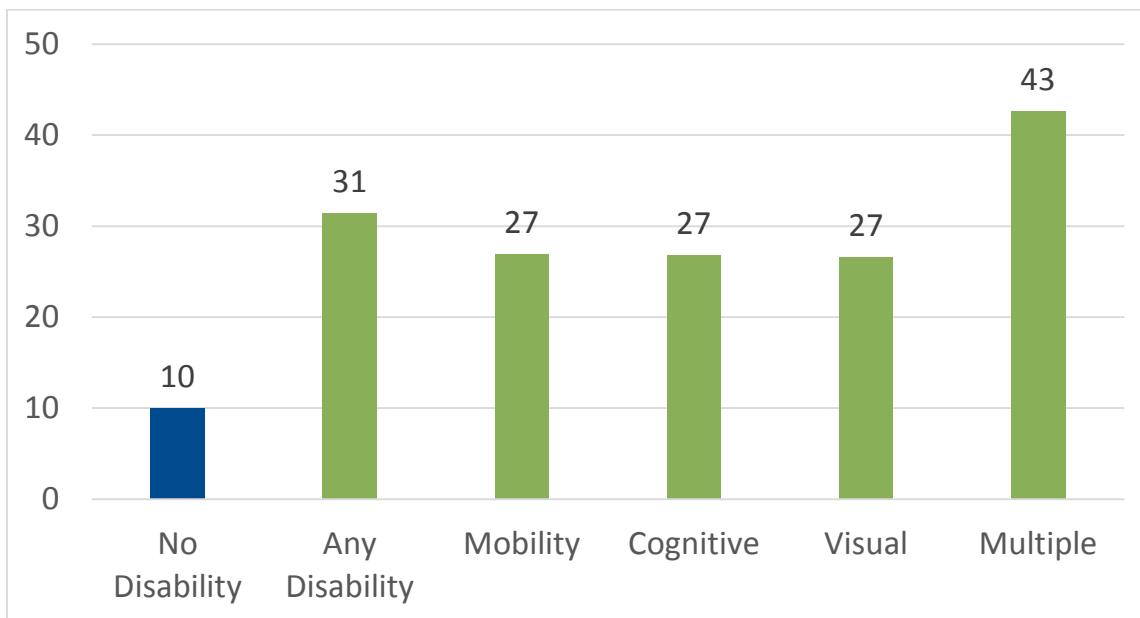
\*Statistically significantly higher than no disability

## Delayed Care Due to Cost

Adults with all types of disabilities are significantly more likely than adults without disabilities to delay needed care due to cost. Adults with multiple disabilities are most likely to delay care, perhaps because they experience the most complex medical needs.

Research is needed to examine specific reasons for financially-motivated delays in care, and policymakers can strive to mitigate all the factors that can contribute. For example, barriers to care may include transportation, exacerbated secondary conditions, and lack of insurance or underinsurance.<sup>3</sup>

**Figure 7. NH adults who delay needed medical care because of cost (%)**



**Table 7. NH adults who delay needed medical care because of cost**

	%	95% CI
No Disability	10.0	9.0 – 11.0
Any Disability	31.4*	28.1 – 34.9
Mobility	26.9*	21.7 – 32.8
Cognitive	26.8*	21.9 – 32.4
Visual	26.6*	16.6 – 39.8
Multiple	42.6*	35.7 – 49.8

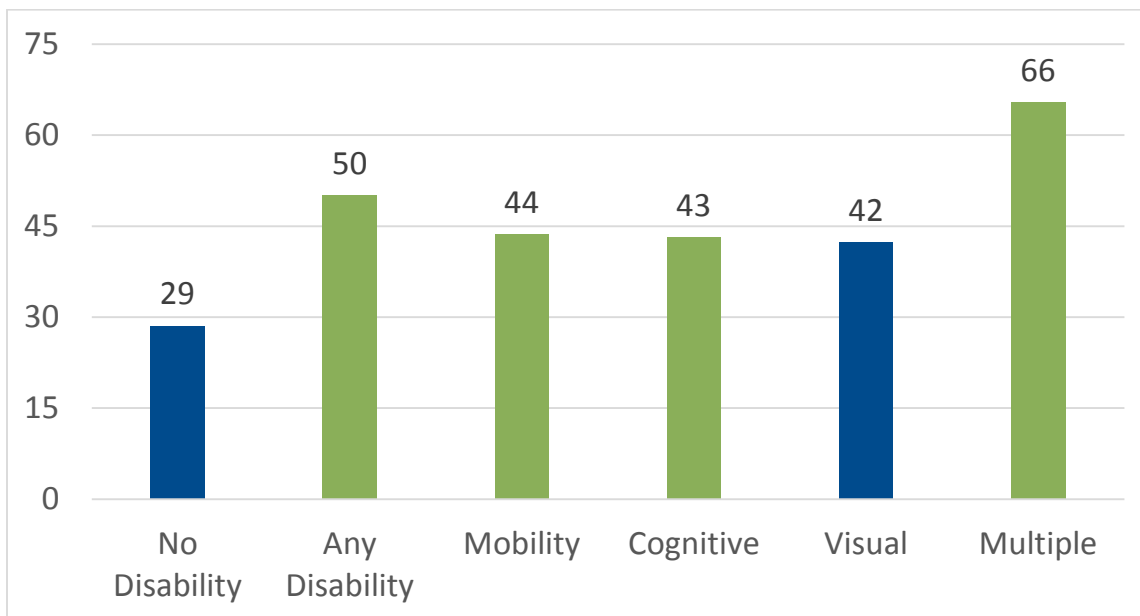
\* Statistically significantly higher than no disability

## Oral Health

Oral health is a necessary component of overall wellness, and adults with mobility, cognitive, and multiple disabilities are significantly less likely to get routine preventive dental care and cleanings than adults with no disability or with only a visual disability. Because preventive adult oral health care is not covered by public health insurance, people with disabilities often must pay out-of-pocket for these services.

Policies promoting affordable, accessible, routine oral health and raising awareness about the existence of such resources will help address this issue.

**Figure 8. NH adults with no dental visit in the last 12 months (%)**



**Table 8. NH adults with no dental visit in the last 12 months**

	%	95% CI
No Disability	28.6	26.4 – 30.8
Any Disability	50.1*	44.7 – 55.6
Mobility	43.6*	35.2 – 52.4
Cognitive	43.2*	33.7 – 53.3
Visual	42.3	25.3 – 61.4
Multiple	65.5*	56.1 – 73.9

\* Statistically significantly higher than no disability



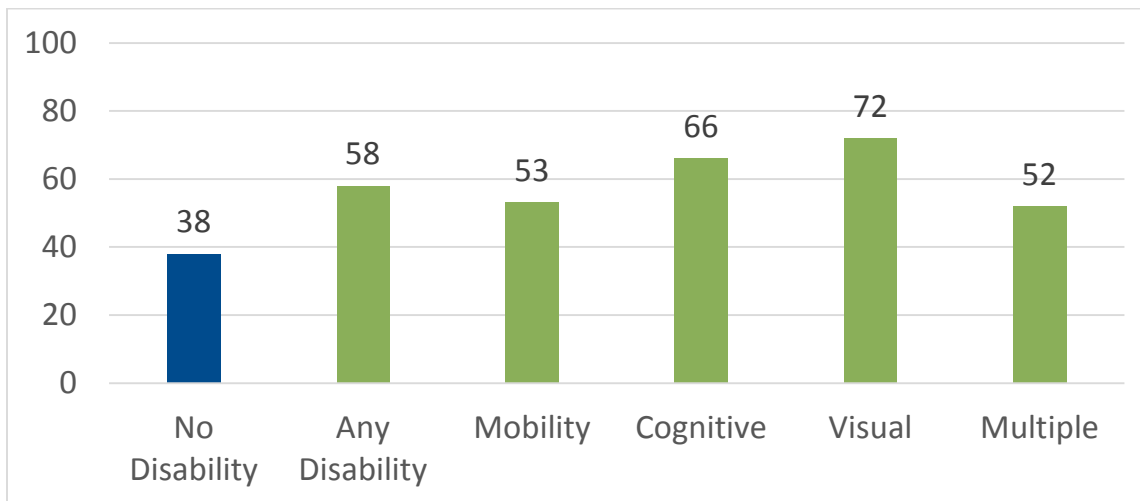
## Health Indicators

### Smoking

Adults with all types of disabilities are more likely to be current smokers than adults without disabilities in NH.

Including people with disabilities in tobacco prevention and cessation initiatives in NH may improve Quit Line utilization among these populations. Intake questionnaires that include disability identifiers will allow for better monitoring and surveillance of Quit Line awareness and utilization.

**Figure 9. NH adults who smoke tobacco everyday (%)**



**Table 9. NH adults who smoke tobacco everyday**

	%	95% CI
No Disability	37.9	35.4 – 40.4
Any Disability	58.3*	53.8 – 62.7
Mobility	53.1*	45.5 – 60.5
Cognitive	65.6*	57.7 – 72.8
Visual	71.9*	55.8 – 83.8
Multiple	52.2*	44.0 – 60.2

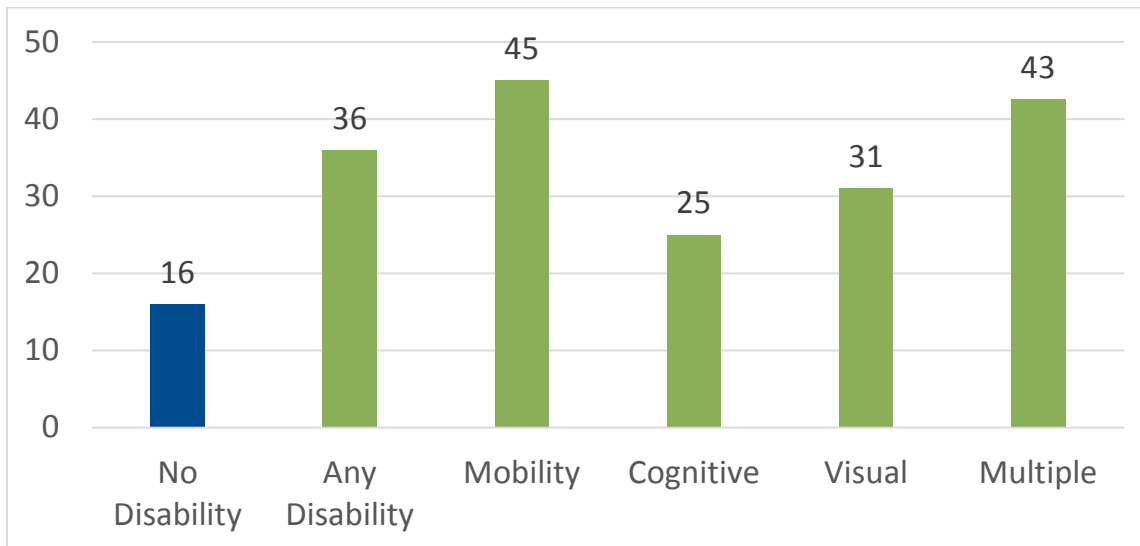
\* Statistically significantly higher than no disability

## Physical Activity

Adults with any disabilities are significantly more likely to be sedentary than adults without disabilities in NH. Adults with mobility limitations (45%) or with multiple disabilities (43%) were most likely to report no exercise in the past 30 days.

To increase levels of physical activity among adults with disabilities, NH can encourage targeted and inclusive health promotion messages, fitness programs, and accessible recreational spaces and facilities.

**Figure 10. NH adults who engaged in no physical activity in the last 30 days (%)**



**Table 10. NH adults who engaged in no physical activity in the last 30 days**

	%	95% CI
No Disability	15.7	14.5 – 16.9
Any Disability	36.2*	32.7 – 39.9
Mobility	45.1*	38.9 – 51.4
Cognitive	25.0*	20.0 – 30.8
Visual	30.6*	18.2 – 46.5
Multiple	43.8*	36.7 – 51.2

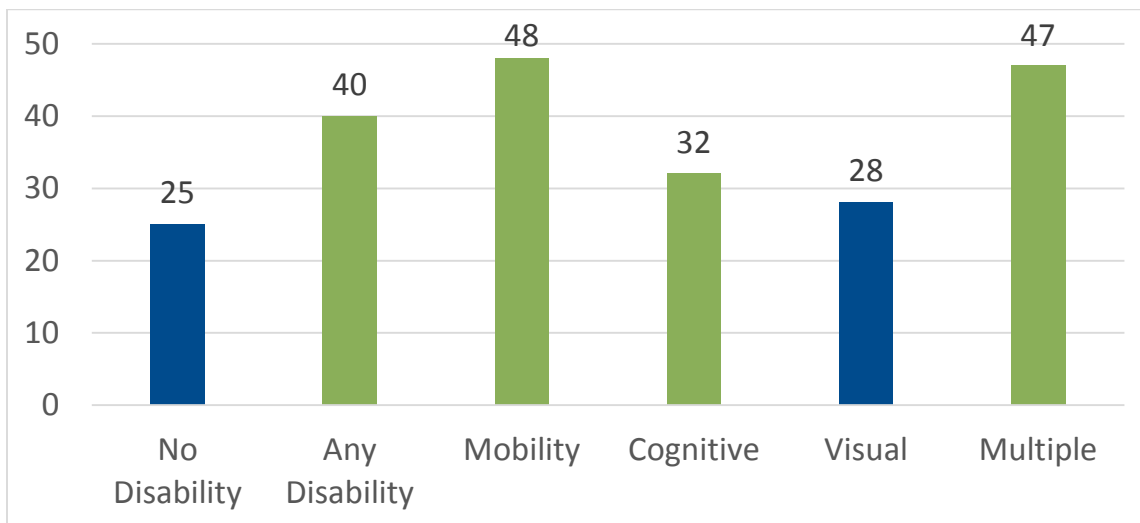
\* Statistically significantly higher than no disability

## Obesity

In NH, adults with mobility, cognitive, and multiple disabilities are more likely to be obese than their same-age peers without disabilities. Several factors potentially contribute to this disparity, such as difficulty chewing or swallowing food, inability to access the built environment, lack of access to healthy food options, medications that affect appetite, or a lack of information about ways to modify diet and activities to suit different tastes and abilities.<sup>4</sup>

Health promotion, weight loss, and nutrition programs can be adapted to become more accessible and to address the types of barriers people with disabilities face regarding healthy eating and active living. Making such adaptations and improving targeted outreach strategies comprise two opportunities to reduce obesity rates among adults with disabilities.

**Figure 11. Prevalence of obesity among NH adults (%)**



**Table 11. Prevalence of obesity among NH adults**

	%	95% CI
No Disability	24.7	23.3 – 26.1
Any Disability	40.3*	36.7 – 44.0
Mobility	48.2*	42.0 – 54.5
Cognitive	31.9*	26.4 – 38.0
Visual	28.1	17.5 – 41.8
Multiple	46.6*	39.4 – 53.8

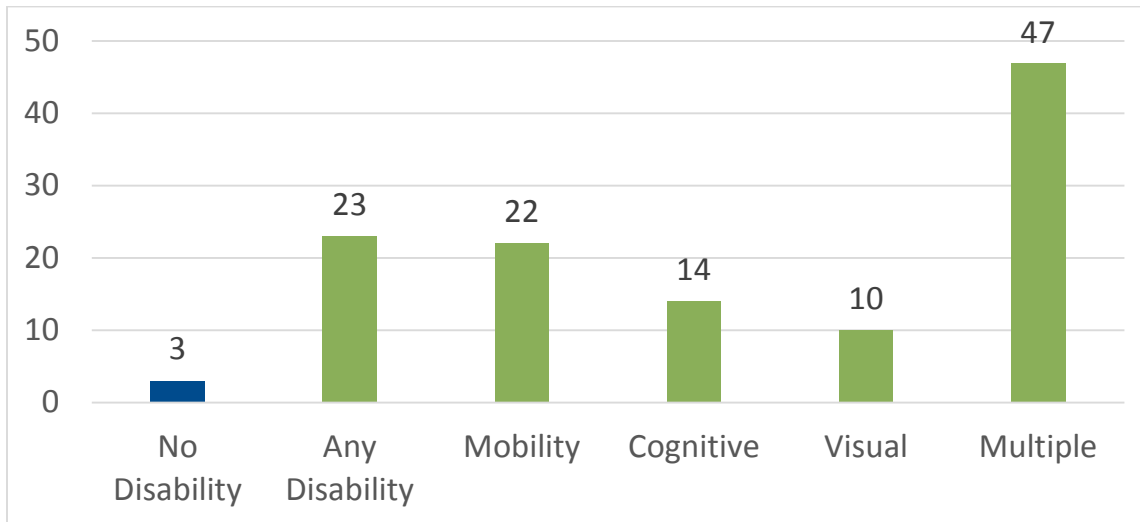
\* Statistically significantly higher than no disability

## Self-reported Health

Adults with disabilities are far more likely than adults without disabilities to report their overall health as “fair” or “poor.” Self-reported health captures the respondents’ perspective and can be a good predictor of future morbidity, mortality, and the need to access health care.<sup>5</sup>

Given that people with disabilities fare less well than people without disabilities on many of the metrics highlighted in the present report, disparities in self-rated health are not surprising. The NH Disability and Public Health Project works to ensure that people with disabilities are included in public health efforts and initiatives in our state in order to realize health equity for people with disabilities in NH. We hope that the surveillance provided in this report inspires others to begin or continue working toward the same end.

**Figure 12. NH adults who report their health as “fair” or “poor”**



**Table 12. NH adults who report their health as “fair” or “poor”**

	%	95% CI
No Disability	3.0	2.4 – 3.7
Any Disability	22.5*	19.5 – 25.9
Mobility	22.2*	17.5 – 27.7
Cognitive	13.6*	9.2 – 19.7
Visual	10.2*	4.9 – 20.2
Multiple	37.3*	30.8 – 44.4

\* Statistically significantly higher than no disability

## References

1. Centers for Disease Control and Prevention (CDC) (2013-2014). *Behavioral Risk Factor Surveillance System*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.
2. Kessler Foundation (2015). *The Kessler Foundation 2015 National Employment and Disability Survey: Report of Main Findings*. West Orange, NJ.  
<http://www.kesslerfoundation.org/KFsurvey15>
3. National Council on Disability. (2009). *The Current State of Health Care for People with Disabilities*. Washington, DC.  
[https://www.ncd.gov/rawmedia\\_repository/0d7c848f\\_3d97\\_43b3\\_bea5\\_36e1d97f973d.pdf](https://www.ncd.gov/rawmedia_repository/0d7c848f_3d97_43b3_bea5_36e1d97f973d.pdf)
4. Fox, M. H., Witten, M. H., & Lullo, C. (2014). Reducing obesity among people with disabilities. *Journal of Disability Policy Studies*, 25(3), 175-185.  
<http://doi.org/10.1177/1044207313494236>
5. Fujiura, G. T., & the RRTC Expert Panel on Health Measurement. (2012). Self-reported health of people with intellectual disability. *Intellectual and Developmental Disabilities*, 50(4), 352-369. <http://dx.doi.org/10.1352/1934-9556-50.4.352>

**Notes:**