

# Health Behaviors of New Hampshire Healthcare Workers NH BRFSS



## Introduction

Healthcare workers (HCWs) are presumed to have good health behaviors because they are more knowledgeable than others about the consequences of certain choices affecting their health and because they serve as role models for patients.<sup>1,2,3</sup>

With the addition of industry and occupation questions on the New Hampshire Behavioral Risk Factor Surveillance System (BRFSS) survey, health behaviors of HCWs can be explored and compared with behaviors of other working adults in New Hampshire. Insight into risk prevalence within this population, which is generally considered well educated and in good social standing, may reveal how public health messages are perceived and followed and whether public health goals are achievable.

*Healthy People 2020 (HP 2020)* is a set of national health objectives created by the United States Department of Health and Human Services with a mission to identify health improvement priorities, increase awareness and understanding, and provide measurable objectives.<sup>4</sup> Some *HP 2020* goals are applicable at the state level, and can serve as benchmarks for state-specific public health actions.

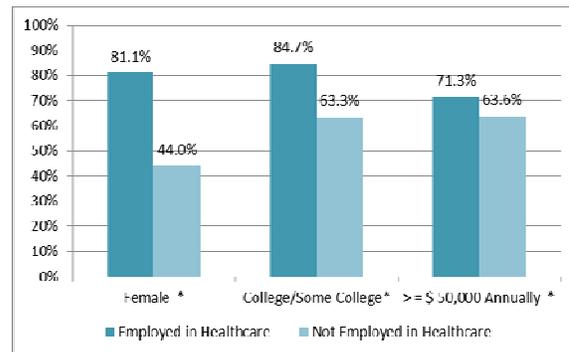
In 2011, the New Hampshire Division of Public Health Services developed a plan to address the most significant health issues in the state. The State Health Improvement Plan (SHIP) was accompanied by a set of measurable objectives.<sup>5</sup> These objectives, when applicable, are also reported.

## Background

Respondents who identified themselves as nurses, therapists, physicians, aids, and various technicians were considered working in the

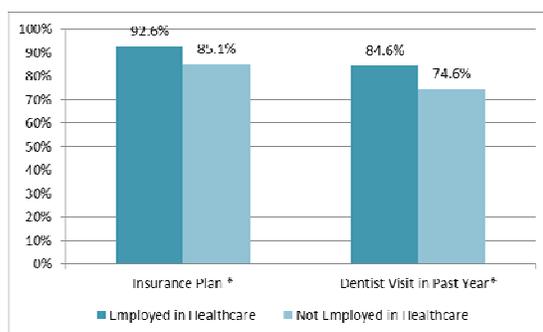
healthcare industry (healthcare worker, or HCW). Healthcare workers reported approximately the same age as those not working in the field (44.6 vs. 44.4 years of age); HCWs were more likely to be females (81.1% vs. 44.0% and having higher education and household income when compared with the rest of the employed respondents. HCWs more often reported having health insurance and a visit to a dentist during the past 12 months.

### Proportion of respondents (sex, education and household income) by current occupation, NH BRFSS, 2011-2012



*HP 2020 goal is to increase the proportion of persons with medical insurance to 100%.*

### Proportion of respondents with health insurance and dental visit by current occupation, NH BRFSS, 2011-2012



## Risk Behaviors

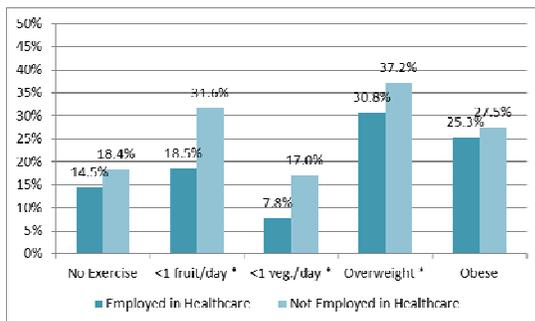
The prevalence of obesity has been increasing among all populations and age groups. To achieve and maintain healthy weight, the Centers for Disease Control and Prevention recommend getting regular physical activity and developing healthy eating habits.<sup>6</sup> Comparing HCWs to other occupations, HCWs were significantly less likely to be overweight and reported higher consumption of fruits and vegetables. There were no differences in prevalence of reported obesity and leisure time physical activity during the past month.

HP 2020 goal is to reduce the proportion of:

- adults engaged in no leisure-time physical activity to 32.6%
- adults who are obese to 30.5%

New Hampshire SHIP aims to reduce the proportion of adults considered obese from 25.5% to 24% by 2015 and 23% by 2020.

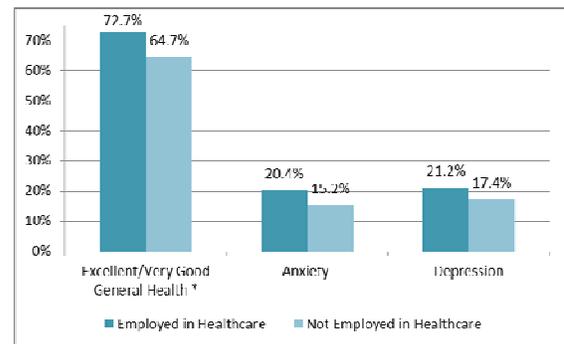
Proportion of respondents with no leisure time physical activity, low consumption of fruits and vegetables, overweight, and obesity by current occupation, NH BRFSS, 2011-2012



## General and Mental Health

When asked about depression and anxiety, more HCWs reported these conditions, though the differences were not statistically significant compared with the rest of the workers. In contrast, statistically significantly more HCWs reported excellent or very good general health compared with the rest of the employed adults.

Proportion of respondents with excellent/very good general health, depression, and anxiety by current occupation, NH BRFSS, 2011-2012



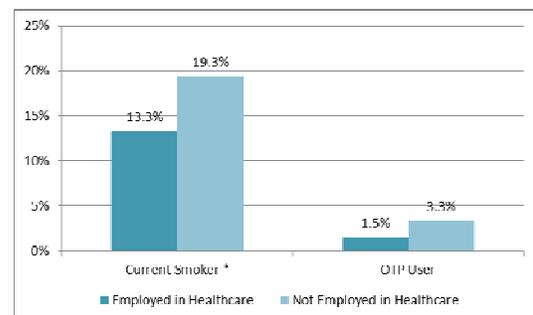
When questioned about various risk behaviors, those working in healthcare were statistically significantly less likely to report smoking and other tobacco product (OTP) use, heavy drinking, binge drinking, drinking and driving, and not always using a seatbelt.

HP 2020 goal is to reduce the proportion of:

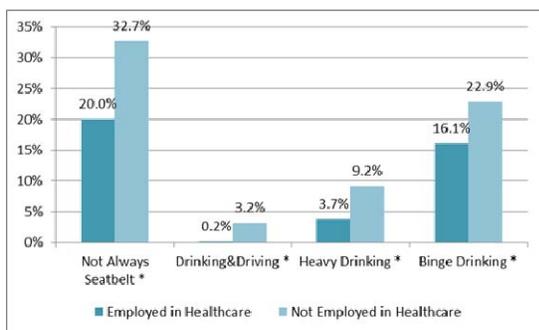
- adults who smoke to 12.0%
- adults who use other tobacco products to 0.3%

New Hampshire SHIP aims to reduce cigarette smoking by adults from 19.4% in 2011 to 16.0% by 2015 and 12.0% by 2020.

Proportion of respondents with selected behaviors by occupation, NH BRFSS, 2011-2012



**Proportion of respondents with selected behaviors by occupation, NH BRFSS, 2011-2012**

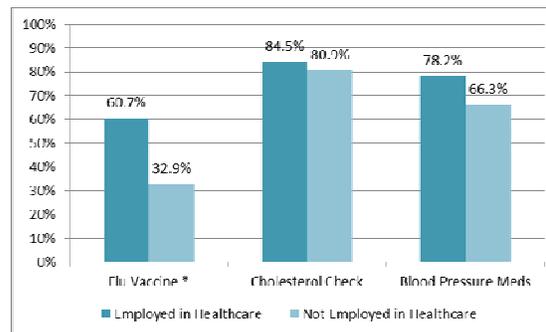


The Advisory Committee on Immunization Practices recommends a routine annual influenza vaccination for all persons aged 6 months and older.<sup>7</sup> Influenza vaccination is particularly important for healthcare workers, including practitioners as well as those not directly involved in patient care, as they all can transmit infectious agents to and from patients. New Hampshire healthcare professionals and support staff were significantly more likely to report an influenza vaccination during the past year when compared with the rest of the working respondents. They were also more likely to report being tested for blood level cholesterol in the past 5 years and, when diagnosed with hypertension, to take blood pressure medications.

*HP 2020 goal is to increase the proportion of:*

- *health care personnel who are vaccinated annually against seasonal influenza to 90.0%*
- *non-institutionalized adults (general population) aged 18-64 years who are vaccinated annually against seasonal influenza to 80.0%*
- *adults who have had their cholesterol checked within the preceding five years to 82.1%*
- *adults with hypertension who are taking the prescribed medication to lower their blood pressure to 69.5%*

**Proportion of respondents with influenza vaccine, cholesterol screening, and blood pressure medications when diagnosed with high blood pressure by occupation, NH BRFSS, 2011-2012**

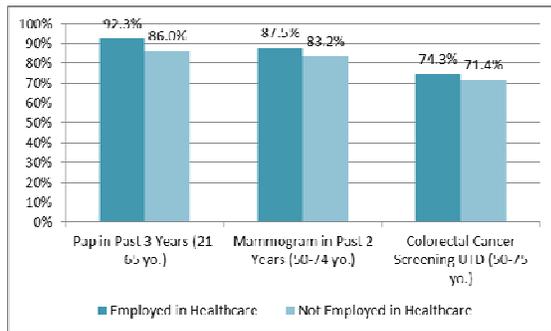


The U.S. Preventive Services Task Force currently recommends the use of screening mammography for breast cancer every 2 years in women ages 50-74 years, screening for colorectal cancer using fecal occult blood testing, sigmoidoscopy, or colonoscopy in adults beginning at age 50 years and continuing until age 75 years, and screening for cervical cancer in women ages 21-65 years with cytology (Pap smear) every 3 years or, for women ages 30-65 years who want to lengthen the screening interval, screening with a combination of cytology and human papillomavirus (HPV) testing every 5 years.<sup>8</sup> Though healthcare professionals reported recommended screenings more often, the differences were not statistically significant.

*HP 2020 goal is to increase the proportion of:*

- *women who receive a cervical cancer screening based on the most recent guidelines to 93.0%*
- *women who receive a breast cancer screening based on the most recent guidelines to 81.1%*
- *adults who receive a colorectal cancer screening based on the most recent guidelines to 70.5%*

**Proportion of respondents with recommended cancer screenings by occupation, NH BRFSS, 2011-2012**



**Discussion**

In conclusion, all New Hampshire workers are reaching (or surpassing) the goals of *HP 2020*, which is not unexpected, considering the younger and healthier status of the active workforce in general. In addition, New Hampshire HCWs reported more promising prevalence of health behaviors when compared with the rest of the employed New Hampshire adults. This is in part due to higher education achievement, higher income, and knowledge about positive health behaviors. Improvements can be gained in the area of nutrition, physical activity, and tobacco use regardless of occupation. In order to meet *HP 2020* goals, HCWs specifically need to improve their influenza vaccination coverage, currently at 60.7% which is lower than preferred vaccination coverage among adults in general (80.0%). The increase in influenza vaccination can be achieved through comprehensive immunization policies in healthcare settings.

In the future, similar analyses can measure health behaviors of additional occupational groups, and findings can guide targeted worksite interventions.

**Technical Notes**

The BRFSS is a random-digit dialed telephone-based survey of non-institutionalized adults age 18 years and older that assesses self-reported

health status and associated risk behaviors among New Hampshire residents. Since 2011, questions related to the respondent’s current occupation and industry were included allowing for assessment of how behaviors relate to one’s profession. This data brief compares behaviors of health professionals and health care support staff with the rest of the currently employed (for wages or self-employed) New Hampshire adults.

The combined 2011/2012 data set, with 6,682 records containing data on occupation, was utilized for analyses. Estimates related to cholesterol (2011), blood pressure (2011), cancer screening (2012), dental care (2012), and fruit and vegetable consumption (2011) are based only on one year of data as these topics were assessed only in one of the two BRFSS years analyzed. Non-overlapping 95% confidence intervals determined the statistical significance, that is represented by \* on the graphs. Relative Standard Error was > 0.3 (estimates with numerators <= 30 and statistically unreliable) for drinking & driving, other tobacco product use, and HIV risky behaviors among HCWs.

**References**

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