INTERPRETING THE TABLES

Montana BRFSS, 2014

Each table presents a set of prevalence estimates weighted to represent the proportion of the non-institutionalized adult population age 18 years and older in Montana, unless a demographic sub-group is specified. Weighting adjusts for different probability of selection by the random dialing procedures and the varied demographic characteristics of the respondents (see Methods, page 5). As a result, for the table below, it is appropriate to state: **"Among Montana adults age 65 years or older, 70.3% have ever received a pneumococcal vaccination.**" For this question, only adults who were over 65 were included in the analysis.

The survey questions that the tables are based on appear in the footnote of the table. For the full question and response categories from which the data were derived, see the "Questionnaires" link: www.dphhs.mt.gov/publichealth/brfss.

Weighted data are used in all calculations of prevalence. The weighted population estimate in the footnote provides the estimated number of adults in Montana who are characterized by a particular risk factor or behavior. The unweighted sample size (UnWt. N) is the number of respondents who gave a particular response and is given only as an indicator of sample size. It is not appropriate to use unweighted numbers to compute prevalence estimates of risk factors and health conditions. Unless stated differently within the table, estimates do not include respondents who refused to answer the question, said "Don't know/Not Sure" or the response is missing.

The tables also contain 95% confidence intervals (CI) for each estimate. The 95% CI is the range of values within which the true value falls with 95% certainty. The column headings of LL represent the lower limit and UL represent the upper limit of the 95% confidence interval. The confidence interval associated with the prevalence estimate for adults age 65 years or older who have ever received the pneumonia vaccine ranges from 67.7 to 72.7. The small width of this confidence interval indicates that the estimate is fairly precise.

Table 10: Immunization, Montana Adults, 2014

	Ever Received Pneumococcal Vaccine (ages 65+) §				
		95% CI		UnWt.	P
	Wt. %	LL	UL	N	Value
All Adults:	**70.3**	67.7	72.7	1,873	
Sex:					
Male	**67.4**	63.6	71.1	701	NS
Female	**72.7**	69.2	75.9	1,169	
Age:					
65+	**70.3**	67.7	72.7	1,873	
Education:					
<High School	**73.3**	64.4	80.7	142	NS
High School	**71.1**	66.7	75.0	600	
Some College	**65.6**	60.4	70.6	513	
College Degree +	**73.4**	69.5	77.1	614	
Income:					
<$15,000	**NSD$^{\Delta}$**			158	NS
$15,000 - $24,999	**69.7**	63.7	75.0	431	
$25,000 - $49,999	**74.8**	70.2	78.9	546	
$50,000 - $74.999	**74.0**	67.1	79.9	207	
$75,000 +	**65.0**	57.1	72.2	211	
Race/Ethnicity:					
White, non-Hispanic	**71.1**	68.5	73.6	1,677	
AI/AN*	**NSD$^{\Delta}$**			110	
Disability:					
Disability	**76.5**	72.6	79.9	843	**<0.001**
No Disability	**66.3**	62.9	69.6	1,023	

§ Have you ever had a pneumonia vaccination (age 65 years and older)? Total Sample Size: 2,364, Weighted Prevalence Estimate: 101,400.

* American Indian or Alaska Native only.

Δ Not Sufficient Data to report a reliable estimate.

NS Not significant.

Risk factors or health conditions may be more or less common among Montana adults of various demographic groups. In general, where confidence intervals for two subgroups do not overlap, the subgroups can be said to be statistically different. However, it is possible for the confidence intervals to overlap and the subgroups to still be statistically different. The annual report tables now contain p values, the results of further analysis to determine

the statistical significance between subgroups. Chi square tests were run for dichotomous groups (sex, race/ethnicity, disability) and tests for trend were run for ordinal groups (age, education, income). The results are considered statistically significant if the p value is less than 0.01. P values that are not significant are reported as such, represented by NS (not significant).

The SAS statistical software package for survey data analysis was used to compute prevalence estimates (expressed as percentages), associated 95% confidence intervals, and statistical tests for significance.

Following CDC guidance, data are considered unreliable if the total number of respondents, the denominator, is less than 50 or if the relative standard error, the standard error divided by the mean, is greater than 30%. In tables where NSD is presented, it means that there was “not sufficient data” to report, i.e., either too few respondents in the population subgroup that answered the question or the relative standard error was too high to provide a reliable estimate.

The survey results that follow are the major demographic trends of health status, health care access and utilization, health risk behavior, and chronic health conditions. Respondents who indicated "don't know," "not sure," or "refused" were excluded from the calculation of prevalence estimates. Therefore, the sample sizes used to calculate the estimates in this report vary. Tables 23-27 contain a summary of the 2014 health indicators for the state and health planning regions in Montana.

Important Changes Beginning in 2011

Due to methodology changes, the 2014 BRFSS estimates should not be compared to BRFSS estimates from before 2011; 2011 is the baseline for future estimates. Any trend lines produced from BRFSS data should show a break between 2010 and 2011 data. The methodological changes of adding cell phones and using a larger number of sociodemographic categories to weight the data greatly improves the accuracy, coverage, validity, and representativeness of BRFSS data. For more information on these changes, please visit the CDC website: http://www.cdc.gov/surveillancepractice/reports/brfss/brfss.html.