

3. Health Screenings and Vaccinations Appendix Data Tables

This chapter presents data on the following indicators related to health screening and vaccinations:

- 3.1. Blood Cholesterol Screening
 - % had blood cholesterol checked (1999-2001, 2008-2010)
- 3.2. Breast Cancer Screening
 - % of women who had mammogram – in last 2 years, in lifetime (1999-2001, 2008-2010)
 - % of women who had clinical breast exam – in last 2 years, in lifetime (1999-2001, 2008-2010)
- 3.3. Cervical Screening
 - % of women who had pap smear – in last 3 years, in lifetime (1999-2001, 2008-2010)
- 3.4. HIV Screening
 - % of adults tested for HIV in lifetime (1999-2001, 2008-2010)
- 3.5. Colorectal Screening
 - % of adults receiving colonoscopy/sigmoidoscopy in last 5 years (1999-2001, 2008-2010)
 - % of adults receiving fecal occult blood test (2002-2007)
- 3.6. Flu Shots
 - % of individuals 65+ receiving flu vaccine in past year (1999-2001, 2008-2010)

Presented for each indicator is an explanation of the indicator, the data, the source of the data, a Healthy People 2020 objective when available, and a comment on whether there are any statistically significant differences between each community in CHNA 18 and Massachusetts.

A note on determining statistical significance:

The 95% confidence interval (95% CI) is a range of values that has a 95% chance of including the observed percentage. Observed rates are subject to statistical variation; even if the observed percentages are identical in two populations, the populations may differ because of random variation. The confidence interval describes the precision of the observed rate as an estimate of the underlying risk, with a wider interval indicating less certainty about this estimate. The width of the interval reflects the size of the population and the number of cases; smaller populations with fewer cases lead to wider confidence intervals.

The **statistical significance** of differences between rates can be estimated based on whether the confidence intervals overlap. For example, if the 95% confidence intervals for the birth rate for a community and state do not overlap, it is safe to conclude that the rates are statistically different (i.e., the difference is very unlikely to be due to sampling error).

3.1 Blood Cholesterol Screening*

% who had blood cholesterol checked: This is the percent of all individuals who reported having their blood cholesterol checked within the past 5 years

Healthy People 2020 objective: Increase the proportion of adults who have had their blood cholesterol checked within the preceding 5 years to 82.1%.

	% had blood cholesterol checked (95% CI)	
	1999-2001	2008-2010
CHNA 18	86.0 (81.6 - 90.4)	91.7 (87.6 - 95.8)
Massachusetts	79.0 (78.1 - 79.9)	84.0 (82.7 - 85.3)
United States	63.0	74.6**

*Data for the CHNA does not include Brookline because the custom report did not allow the addition of Brookline

**Data from 2008 only

Source: BRFSS (MassCHIP custom report); Healthy People 2020 Objectives; MMWR 54(05);117-119

Comment:

Are there any statistically significant differences over time or between the CHNA and Massachusetts?

- CHNA 18 has a higher percentage of residents who reported having a blood cholesterol screening compared to Massachusetts as a whole
 - CHNA 18 and Massachusetts have met the Healthy People 2020 objective
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3.2 Breast Cancer Screening*

% women who had a mammogram: This is the percent of female respondents ages 40 and older who reported that they had a mammogram in the past 2 years and the percent of female respondents ages 40 and older who reported that they have had a mammogram in their lifetime.

% Women who had a clinical breast exam: This is the percent of all women who reported having a clinical breast exam within the past 2 years and the percent of all women who reported having a clinical breast exam in their lifetime. A clinical breast exam when a doctor, nurse, or other health professional feels the breasts for lumps.

	% Women who had a mammogram (95% CI)	
	1999-2001	2008-2010
CHNA 18		
In last 2 years	86.7 (80.3 - 93.2)	89.0 (85.5 - 92.6)
In lifetime	95.8 (92.2 - 99.3)	93.4 (90.2 - 96.6)
Massachusetts		
In last 2 years	82.4 (81.1 - 83.6)	84.2 (83.3 - 85.1)
In lifetime	91.4 (90.5 - 92.3)	94.0 (93.4 - 94.7)
United States**		
In last 2 years	76.1	75.2

*Data for the CHNA does not include Brookline because the custom report did not allow the addition of Brookline

**The US data is for 2002 and 2010 only
Source: BRFSS (MassCHIP custom report)

	% Women who had a clinical breast exam (95% CI)	
	1999-2001	2008-2010
CHNA 18		
In last 2 years	89.1 (84.2 - 94.1)	91.6 (88.3 - 95.0)
In lifetime	92.8 (88.7 - 97.0)	95.1 (92.0 - 98.1)
Massachusetts		
In last 2 years	84.0 (83.0 - 85.0)	85.9 (85.1 - 86.7)
In lifetime	89.9 (89.1 - 90.7)	92.5 (91.9 - 93.1)

*Data for the CHNA does not include Brookline because the custom report did not allow the addition of Brookline

Source: BRFSS (MassCHIP custom report)

Comment:

Are there any statistically significant differences over time or between the CHNA and Massachusetts?

- From 2008-2010 the CHNA had higher rates of mammography screening in the last 2 years compared to Massachusetts
 - The percent of women receiving mammograms has not changed over time in the CHNA
 - The percent of women receiving a clinical breast exam increased in Massachusetts, but this increase was not seen in the CHNA.
 - From 2008-2010, the CHNA had higher rates of clinical breast examination in the last 2 years compared to Massachusetts
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3.3 Cervical Screening*

% of women who had a pap smear: This is the percent of women who reported having a pap test within the past 3 years and the percent of women who reported having a pap test in their lifetime

	% Women who had a pap smear (95% CI)	
	1999-2001	2008-2010
CHNA 18		
In last 3 years	86.2 (81.4 - 91.0)	83.9 (79.3 - 88.5)
In lifetime	94.6 (91.0 - 98.2)	90.6 (86.2 - 94.9)
Massachusetts		
In last 3 years	85.8 (85.0 - 86.7)	84.0 (83.2 - 84.8)
In lifetime	93.7 (93.1 - 94.3)	93.8 (93.2 - 94.4)
United States**		
In last 3 years	86	81.3

*Data for the CHNA does not include Brookline because the custom report did not allow the addition of Brookline

**The US data is for 2004 and 2010 only

Source: BRFSS (MassCHIP custom report); CDC BRFSS Data

Comment:

Are there any statistically significant differences over time or between the CHNA and Massachusetts?

- There are no differences between CHNA 18 and Massachusetts in the percent of women who reported receiving a pap test

3.4 HIV Screening*

% Adults receiving HIV test: This is the percent of respondents between the ages of 18 and 64 who reported that they had ever been tested for HIV. Respondents were told not to include times that HIV testing had been done as part of a blood donation.

	% Adults who have had a HIV test (95% CI)	
	1999-2001	2008-2010
CHNA 18	44.4 (39.2 - 49.5)	41.2 (36.7 - 45.7)
Massachusetts	46.8 (45.9 - 47.8)	42.8 (41.9 - 43.7)
United States**	45.6	40.3

*Data for the CHNA does not include Brookline because the custom report did not allow the addition of Brookline

**The US data is only for the year 2000 and 2010. For the year 2000, this is a median of the results of the BRFSS from every state

Source: BRFSS (MassCHIP custom report); MMWR 52(23);540-545; Kaiser Family Foundation State Health Facts

Comment:

Are there any statistically significant differences over time or between the CHNA and Massachusetts?

- There are no differences in the HIV screening rates between the CHNA and Massachusetts

3.5 Colorectal Screening*

% Colonoscopy: This is the percent of respondents ages 50 and older who reported that they had received a colonoscopy or a sigmoidoscopy within the past 5 years

% FOBT (Fecal Occult Blood Test): This is the percent of respondents ages 50 and older who reported that they had a blood stool test using a home test kit.

	% Colonoscopy / Sigmoidoscopy (95% CI)		% FOBT (95% CI)
	1999-2001	2008-2010	2002-2007
CHNA 18	55.1 (47.8 - 62.5)	70.5 (66.4 - 74.6)	34 (27.9 - 41.1)
Massachusetts	40.0 (38.7 - 41.4)	63.4 (62.5 - 64.3)	34.3 (33.1 - 35.5)
United States	48.6**	65.2***	17.2***

*Data for the CHNA does not include Brookline because the custom report did not allow the addition of Brookline

**The US data is for 2002 only

***The US data is for 2010 only

Source: BRFSS (MassCHIP custom report); BRFSS (MassCHIP Instant Topics); CDC BRFSS

Comment:

Are there any statistically significant differences over time or between the CHNA and Massachusetts?

- Rates of Colonoscopy/Sigmoidoscopy have increased over time in both the CHNA and Massachusetts
- CHNA 18 has higher rates of colonoscopy screening compared to Massachusetts

3.6. Flu Shots

% Received Flu Shot: This is the percent of individuals ages 65 and older who reported receiving a flu vaccine within the past year

Healthy People 2020 objective: 90% percent of non-institutionalized adults, ages 65 and older vaccinated against seasonal influenza

Flu Shots*

	% Received Flu Shot (95% CI)	
	1999-2001	2008-2010
CHNA 18	73.2 (64.8 - 81.5)	81.8 (77.6 - 86.1)
Massachusetts	68.1 (66.3 - 69.8)	73.0 (71.9 - 74.0)
United States**	64.9 (64.0 – 65.8)	72.0 (71.6 – 72.5)

*Data for the CHNA does not include Brookline because the custom report did not allow the addition of Brookline

**Data from 2000 and 2009 only

Source: BRFSS (MassCHIP Custom Report); MMWR 51(45);1019-1024; MMWR 60(01);38-41

Comment:

Are there any statistically significant differences over time or between the CHNA and Massachusetts?

- Between 1999-2001 and 2008-2010 the percent of the elderly, ages 65 and older, who reported being vaccinated against seasonal influenza increased in Massachusetts, but not in CHNA 18
- CHNA 18 has a higher percent of elderly adults vaccinated against seasonal influenza than Massachusetts, but CHNA 18 has not reached the Healthy People 2020 objective