

## **Indicator:** Influenza Immunization for Seniors

**Data Years:** 2003, 2005, 2007–2008, 2009–2010, 2011–2012, 2013

**Indicator Description:** Age-standardized prevalence rate of population age 65 and older who reported being immunized against influenza in the last 12 months (per 100)

**Rationale:** Influenza is common and affects people of all ages worldwide. Elderly people and those with chronic conditions face a greater risk of complications and death from influenza.<sup>1</sup> The National Advisory Committee on Immunization recommends vaccination for influenza for all persons age 6 months and older, in particular those at high risk of influenza-related complications or hospitalization and those capable of spreading influenza to high-risk people.<sup>2</sup>

**Data Source:** Canadian Community Health Survey (CCHS), Statistics Canada

**Income Disaggregator:** Self-reported adjusted household income from the CCHS

**Denominator Description:** CCHS respondents age 65 and older

### Exclusions:

1. Non-response categories (“refusal,” “don’t know” and “not stated”)
2. Respondents from the 3 territories (as income quintile data is unavailable)

**Numerator Description:** CCHS respondents age 65 and older who reported being immunized against influenza in the last 12 months

**Survey Weight:** Person level

**Method of Age-Standardization:** Direct age-standardization to the Canada 2011 standard population

**Age Groupings for Standardization:** 65–69; 70–74; 75–79; 80–84; 85–89; 90–94; 95–99; 100+

**Geographic Assignment:** Respondent’s province of residence according to postal code in the CCHS

**Geographic Coverage:** All 10 provinces (territories excluded)

**Interpretation:** Higher rates are desirable.

**Case Selection Criteria:** Respondents who reported having a flu shot less than 1 year ago

Variable: Flu\_162

Response: Less than 1 year ago

**Survey Question:** “When did you have your last seasonal flu shot?” (Flu\_Q162)

### Percentage Missing Due to Income:

	2003	2005	2007–2008	2009–2010	2011–2012	2013
<b>Percentage Missing*</b>	22.5	22.3	21.7	22.5	18.0	16.0

**Note**

\* Percentage missing refers to the proportion of CCHS respondents who did not report income for this indicator and are therefore excluded from analyses based on self-reported adjusted household income quintiles.

### Data Source Description:

*Canadian Community Health Survey:* The CCHS is a cross-sectional survey that collects information related to health status, health care utilization and health determinants for the community-dwelling Canadian population on an ongoing basis. The primary purpose of data collection is health surveillance and population health research. The CCHS target population is Canadians age 12 and older in all provinces and territories. Excluded from the sampling frame are individuals living on Indian reserves and Crown lands, institutional residents, full-time members of the Canadian Armed Forces and residents of certain remote regions (Région du Nunavik and Région des Terres-Cries-de-la-Baie-James). Altogether, these exclusions represent less than 3% of the target population.<sup>3</sup>

*Note:* Results from the 2009–2010 CCHS may not be comparable to those from other cycles, because the survey results for this year likely over-estimate the proportion of respondents who received the seasonal flu shot by capturing respondents who received the H1N1 vaccine but not the seasonal flu shot. The H1N1 vaccine was first administered in Canada in 2009 as a separate vaccination from the seasonal flu vaccine, but it was not until the 2010 CCHS cycle that the word “seasonal” was added to collect data on the 2 types of vaccines (seasonal and H1N1). After 2010, the seasonal and H1N1 vaccines were combined into 1 vaccination.<sup>4</sup>

*Sample Size:* 130,000 (prior to 2007); 65,000 (2007 onward)

### References

1. Organisation for Economic Co-operation and Development. *Health at a Glance 2011: OECD Indicators*. Paris, France: OECD; 2011.
2. Public Health Agency of Canada. Statement on seasonal influenza vaccine for 2014–2015. <http://www.phac-aspc.gc.ca/naci-ccni/flu-grippe-eng.php#tab5>. Updated 2014. Accessed February 12, 2015.
3. Statistics Canada. Canadian Community Health Survey—Annual Component (CCHS). <http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=3226>. Updated July 30, 2014. Accessed February 2, 2015.
4. Statistics Canada. Health system performance—3.2. Accessibility. <http://www.statcan.gc.ca/pub/82-221-x/2012002/def/def3-eng.htm>. Updated May 13, 2013.