
Adult Pneumococcal Immunization

Description

- Proportion of people aged 65 years and older, or 18 years and older with a chronic condition, immunized for pneumococcal disease

Specific Indicators

- Proportion of adults age 65 years and older who ever had immunization against pneumococcal disease
- Proportion of adults between 18 and 64 years with a chronic condition who ever had immunization against pneumococcal disease
- Proportion of adults age 65 years and older with a chronic condition who ever had immunization against pneumococcal disease

Method of Calculation

$$\frac{\text{Number of people (65+) and older who ever had pneumococcal immunization}}{\text{total population (65+)}} \times 100$$

$$\frac{\text{Number of adults (18-64 years) who had a chronic condition and had pneumococcal immunization}}{\text{total population (18-64 years) with a chronic condition}} \times 100$$

$$\frac{\text{Number of adults (65+) with a chronic condition who had pneumococcal immunization}}{\text{total population (65+) and older with a chronic condition}} \times 100$$

Basic Categories

- Sex: male, female
- Geographic areas: PHU and Municipalities
- Chronic disease = asthma, chronic bronchitis or emphysema, diabetes, heart disease, cancer, or effects of a stroke, disease of liver and lung

Data Sources

- Numerator & Denominator: Rapid Risk Factor Surveillance System (RRFSS)
- Original source: Public Health Unit

- Distributed by: Public Health Unit

Suggested citation (see Data Citation Notes):

RRFSS [month, year – month, year], Extracted: [month,year]

RRFSS Survey Questions as of Feb 2003

I2: Have you EVER had a pneumonia vaccination?

Chronic Condition is defined as follows:

cd1b=1 (ever diagnosed with asthma)

cd1c=1 (still have asthma)

cd1d=1 (have diabetes)

cd5=1 (heart disease)

cd6=1 (lung disease)

cd7=1 (kidney or liver disease)

cd8=1 (anemia or hemoglobinopathy)

cd9=1 (cancer, an immunodeficiency, or immunosuppression due to and underlying disease and/or therapy)

Analysis Check List

- For RRFSS:
 - For RRFSS analysis, questions may be asked seasonally, and weights may need to be recalculated to reflect this.
 - The unweighted numerator should be 5 or more and the denominator should be 30 or more. The acceptable CV range is 0.0% - 16.5%. Marginal range is 16.6% - 33.3% and should be released with a warning cautioning user of the high sampling variability associated with the estimate. Unacceptable CVs are >33.3% and should not be released
 - Refer to the RRFSS analysis orientation manual and the RRFSS manual of operations

Indicator Comments

- This is a supplemental indicator because it is not available for all health units. Pneumococcal immunization coverage data are not available from the CCHS. Data are only available from the RRFSS through participating health units.
- There are two types of pneumococcal vaccine: conjugate vaccine recommended for children less than 5 and those over 50 years of age the meet high risk criteria (protects against 13 types of pneumococci) and polysaccharide vaccine recommended for all individuals 65 years of age and older (protects against 23 types of pneumococci).^{1,2} The RRFSS question “Have you EVER had a pneumonia vaccination?” is not specific to the type of vaccine.
- Polysaccharide vaccine is also recommended to all individuals 2 to 64 years of age with the following conditions: asplenia, splenic dysfunction, sickle cell disease, chronic cardiorespiratory disease (except asthma), cirrhosis, alcoholism, chronic renal disease, nephrotic syndrome, diabetes mellitus, chronic CSF leak, HIV infection and other conditions associated with immunosuppression (Hodgkin’s disease, lymphoma, multiple myeloma, induced immunosuppression for organ transplantation).³
- Some of these conditions cannot be identified through RRFSS. The chronic conditions included in this indicator provide an estimate of the population for whom the immunization is recommended.
- Immunization data for adults is not available from Panorama or any other immunization provincial database in use in Ontario.

Corresponding Health Indicator(s) from Statistics Canada

None

Cross-References to Other Sections

None

Ontario Public Health Standards (OPHS): Requirements for programs, services and accountability

“The role of boards of health is to support and protect the physical and mental health and well-being, resiliency and social connectedness of the health unit population, with a focus on promoting the protective factors and addressing the risk factors associated with health outcomes. The Ontario Public Health Standards (OPHS) define the responsibilities of boards of health in an integrated health system and are informed by the core public health functions, which include assessment and surveillance, health promotion and policy development, health protection, disease prevention and emergency management. The boards of health are responsible for programs and services in all core functional areas as well as demonstrating accountability to the ministry, and monitoring and measuring effectiveness, impact and the success of their programs and services.⁴”

This indicator relates to the following Ontario public health standards:

- Immunization
- Infectious and Communicable Diseases Prevention and Control
- School health

health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/protocols_guidelines/Ontario_Public_Health_Standards_2018_en.pdf

References

1. Heymann DL. Control of Communicable Diseases Manual. American Public Health Association, 2015.
2. Public Health Agency of Canada. Final Report of Outcomes from the National Consensus Conference for Vaccine-Preventable Diseases in Canada. *CCDR* 2007;33S3:1-56. Available at: <http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/08vol34/34s2/index-eng.php>
3. National Advisory Committee on Immunization. Canadian Immunization Guide, 2017. Ottawa, ON: Public Health Agency of Canada. Available at <https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-1-key-immunization-information/page-13-recommended-immunization-schedules.html>
4. Minister of Health and Long-Term Care. Ontario Public Health Standards 2018. Toronto, ON: Queen's Printer for Ontario, 2018. Available at: http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/default.aspx

Acknowledgements

Lead Author(s)	Vidya Sunil, HKPR District Health Unit
Contributing Author(s)	Core Indicators Immunization work group
CIWG Reviewers	Sherri Deamond
External Reviewers	Lindsay Whitmore, Ottawa Public Health

Changes Made

Date	Type of Review- Formal Review or Ad Hoc?	Changes made by	Changes
June 2008	Formal Review	Infectious Disease subgroup of Core Indicators	<ul style="list-style-type: none"> • Changed name from "Pneumococcal Vaccination" • Added specific indicators for those with chronic conditions (percent of adults between 18 and 64 years with a chronic condition who ever had a pneumonia vaccination, and percent of adults age 65 years and older with a chronic condition who ever had a pneumonia vaccination) • Added related outcomes from draft Ontario Public Health Standards • Updated indicator comments and references
January 27, 2009	Formal Review	Infectious Disease subgroup of Core Indicators	<ul style="list-style-type: none"> • Incorporated reviewer comments.
January 30, 2012	Ad hoc	Sherri Deamond on behalf of CIWG	<ul style="list-style-type: none"> • Added "Changes Made" and "Acknowledgements" sections
August 2018	Formal Review	Immunization subgroup	<ul style="list-style-type: none"> • Updated background information based on new Ontario Public Health Standards • Revised Analysis checklist • Revised RRFSS survey questions • Changed the indicator name to pneumococcal immunization as opposed to pneumococcal vaccination

			<ul style="list-style-type: none">• Updated indicator comments with information available from Publicly funded immunization schedules for Ontario• Updated information from National Advisory Committee on Immunization (NACI)• Updated references
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