



# Epi Data Brief

New York City Department of Health and Mental Hygiene

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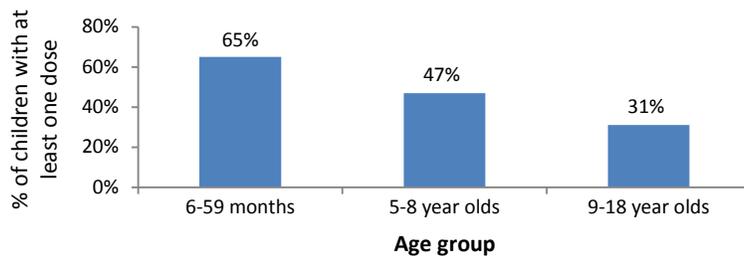
## Influenza in New York City

Influenza is a major cause of illness and death in the United States (US), accounting for approximately 226,000 hospitalizations<sup>1</sup> and 24,000 deaths<sup>2</sup> each year. Up to 10% of adults<sup>3</sup> and 40% of all children<sup>4</sup> in the US are infected with the influenza virus each year. In New York City (NYC), influenza and pneumonia together are the third leading cause of death, accounting for between 2,200 and 3,000 deaths each year, more than cerebrovascular disease, hypertension, or diabetes.<sup>5</sup> Vaccination is the best way to prevent influenza. Beginning in 2010, annual influenza vaccination was universally recommended for everyone ages six months and older.<sup>6</sup>

### Pediatric influenza can be deadly

- Four pediatric deaths (among children 18 years and under) from influenza occurred in NYC during the 2012-13 influenza season;<sup>7</sup> 169 pediatric deaths were reported nationwide.<sup>8</sup>
- In 2012, pediatric influenza vaccination rates in NYC were well below the national goal of 80%.

### Prevalence of influenza vaccination among children and adolescents, New York City, 2012-2013 influenza season\*



\*Between August 1, 2012 and June 30, 2013

Sources: NYC Citywide Immunization Registry; US Census Bureau

#### Data Sources:

**New York Citywide Immunization Registry (CIR)** is a confidential, population-based, computerized information system that collects and consolidates immunization records of people vaccinated at healthcare facilities within New York City. For more information, visit [nyc.gov/health/cir](http://nyc.gov/health/cir).

**United States Census Bureau:** Prevalence of pediatric influenza vaccination was calculated using US Census Bureau 2010 population estimates.

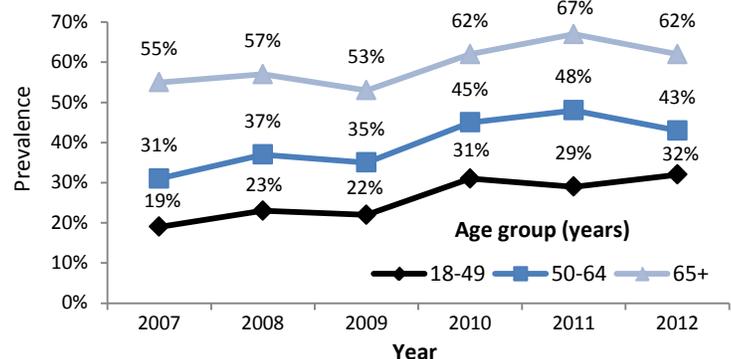
**Community Health Survey (CHS):** The CHS is a survey of about 9,000 adults ages 18 and older, conducted annually by the New York City Health Department. Estimates are age-adjusted to the US 2000 Standard Population, except for age-specific estimates. For survey details, visit [nyc.gov/health/survey](http://nyc.gov/health/survey).

**Pregnancy Risk Assessment Monitoring System (PRAMS):** Data on flu vaccination during pregnancy are from PRAMS, an ongoing population-based survey of new mothers in New York City. For more information, visit [nyc.gov/html/doh/html/data/ms-prams.shtml](http://nyc.gov/html/doh/html/data/ms-prams.shtml).

## NYC influenza vaccination levels are generally rising but have remained below the US Department of Health and Human Services coverage goals

- In 2012, 62% of New Yorkers ages 65 and older reported being vaccinated against influenza in the past year compared with 55% in 2007. These coverage levels are well below the national target of 90% for this age group. Nationally, coverage for this age group was 66%.
- Among 50 to 64 year old New Yorkers, only 43% reported receiving an influenza vaccine in 2012, compared with 48% in 2011. Nationally, coverage for this age group was 45%. Among New Yorkers ages 18 to 49, 32% received an influenza vaccine in the past year. Nationally, coverage for this age group was 31%. The national target for these age groups is 80%.

### Prevalence of influenza vaccination among adults, by age group, New York City, 2007 - 2012



Source: Community Health Survey, 2007 - 2012

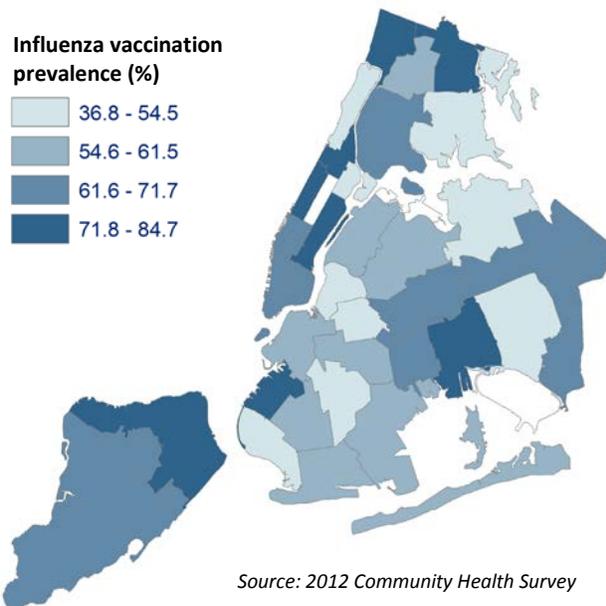
## Vaccination levels vary by race/ethnicity among older adults

- Approximately 76% of Asian New Yorkers ages 65 or older reported receiving an influenza vaccine in 2012. In comparison, 63% of white and Hispanic New Yorkers in this age group reported receiving an influenza vaccine. Among this same age group, only 53% of black New Yorkers reported receiving an influenza vaccine.

## Some neighborhood vaccination levels are much lower than others

- Influenza vaccination prevalence varied by neighborhood, ranging from 37%\* of adults ages 65 and older in Flatbush, Brooklyn, to 85%\* in Sunset Park, Brooklyn.
- Influenza vaccination prevalence has been historically low in Greenpoint, Brooklyn. In addition, the lowest coverage by neighborhood per borough includes Williamsburg/Bushwick, Brooklyn; East Harlem, Manhattan; Jamaica, Queens; and Pelham-Throgs Neck, Bronx.

### Prevalence\* of influenza vaccination among New Yorkers ages 65 and older by neighborhood\*\*



\*Interpret neighborhood prevalence estimates with caution. For most estimates, the Relative Standard Error (a measure of estimate precision) is greater than 30% or the sample size is too small, making the estimate potentially unreliable.

\*\*The United Hospital Fund classifies NYC into 42 neighborhoods, comprised of contiguous zip codes, several of which were combined to create the 34 neighborhoods represented above.

## Vaccination levels are low among pregnant women and people with chronic conditions

- Pregnant women are more susceptible than non-pregnant women to severe illness and hospitalization due to influenza.<sup>6</sup> Influenza infection during pregnancy increases risk of premature labor and delivery.<sup>6</sup> Among women who gave birth between August 2010 and August 2011, 44% reported receiving an influenza vaccine during pregnancy.
- People with chronic health conditions such as asthma and diabetes are at a higher risk of serious medical complications from influenza.<sup>6</sup> Among adults ages 18 and older, 49% of asthmatics and 59% of diabetics reported receiving an influenza vaccine in 2012.

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#### References:

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