



# NYC Vital Signs

## Influenza and Pneumococcal Vaccination Among New York City Adults

Influenza (flu) and pneumonia, together, are the third leading cause of death in New York City. Each year, these diseases cause countless missed days of school and work, thousands of hospitalizations, and more than 2,000 deaths, many of which are preventable.

Vaccination is the best way to prevent influenza. Beginning with the 2010-2011 influenza season, vaccination is universally recommended for everyone aged six months and older. Vaccinating school-aged children is especially important for reducing the spread of influenza and can help protect the elderly and others at risk for serious complications from the flu.

This season's vaccine protects against three strains of influenza: 2009 H1N1, an H3N2 virus, and an influenza B virus. The vaccine is available by needle injection or in

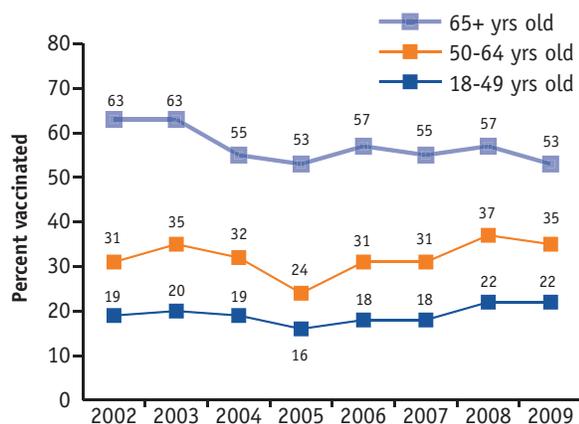
a nasal spray (for healthy people aged two to 49 years).

In addition to receiving annual influenza vaccination, all people aged 65 years and older should get a one-time pneumococcal polysaccharide vaccination (PPSV) to protect against *Streptococcus pneumoniae*, a known complication of influenza, especially among older adults. PPSV is also recommended for everyone aged two years and older with long-term health conditions or other risk factors.

This report examines influenza and PPSV vaccination rates among adult New Yorkers, including those with certain long-term health conditions and older adults who are at risk of serious complications from influenza, highlights disparities, and offers recommendations to ensure that all New Yorkers get their influenza vaccinations.

### NYC influenza vaccination rates are low and have remained stagnant

Influenza vaccination among adult New Yorkers



Source: CHS 2002-09

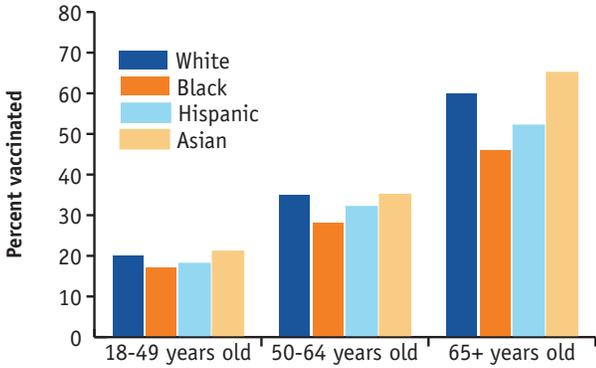
- The percent of New Yorkers aged 65 years and older who reported receiving an influenza vaccination in the past year fell from 63% in 2002 to 53% in 2009.
- Fewer than two in five (35%) 50- to 64-year-old New Yorkers reported a past-year vaccination against influenza in 2009.\*
- Annual influenza vaccination has been recommended since 2000 for people aged 50 and older. Starting with the 2010-2011 season, vaccination is now universally recommended for everyone aged six months and older. In 2009, before this recommendation was in place, only 22% of 18- to 49-year-olds said they were vaccinated the previous year.

Data presented in this report are taken from the New York City Community Health Survey (CHS) conducted annually since 2002 by the Bureau of Epidemiology Services, NYC Department of Health and Mental Hygiene. CHS is a representative telephone survey of approximately 10,000 New York City adults aged 18 years and older that provides self-reported citywide, borough and neighborhood estimates of health outcomes and health-related behaviors. Estimates presented in this report are not age-adjusted. For full survey details, visit [nyc.gov/health/survey](http://nyc.gov/health/survey). Data on state and national influenza and pneumococcal trends among adults are from the Centers for Disease Control's Behavioral Risk Factor Surveillance System 2002-2009.

\*Data from 2006-2009 indicate that between 80%-90% of older adults reporting a flu shot in the past year received it during the previous flu season (September-March).

## Black New Yorkers report the lowest influenza vaccination rates

**Influenza vaccination among New Yorkers aged 18 and older by race and ethnicity**



Source: CHS 2006-08

- White and Asian New Yorkers of all ages reported the highest influenza vaccination levels among adult New Yorkers.
- Fewer than half of black New Yorkers aged 65 years or older (46%) reported receiving an influenza vaccination in the past year, compared to 60% of whites and 65% of Asians in that age group.

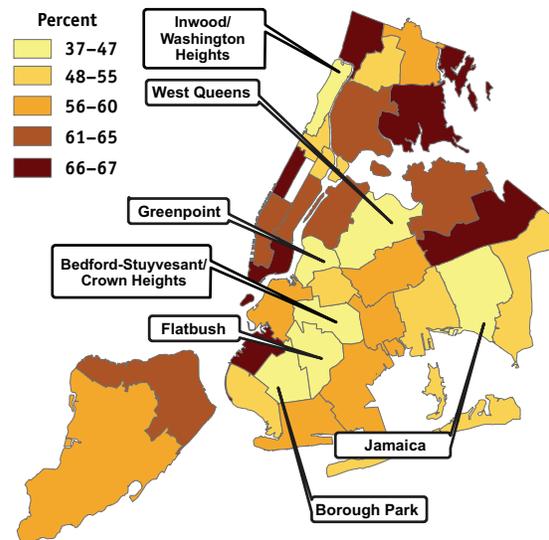
### Where can New Yorkers get influenza and pneumococcal vaccinations?

Influenza and pneumococcal polysaccharide vaccinations are available from family and internal medicine doctors, pediatricians, and other primary-care providers. Many pharmacies now offer vaccinations for adults, and many employers offer free or low-cost vaccinations. New Yorkers who do not have a regular doctor can call 311 to find out how to get medical care and to find a clinic offering vaccinations at low or no cost. Influenza vaccination services can also be located online using the Flu Locator available at [www.nyc.gov/flu](http://www.nyc.gov/flu).

## Some neighborhood influenza vaccination levels are much lower than others

- Influenza vaccination levels vary significantly by neighborhood, ranging from 37% of adults aged 65 years and older in Flatbush, Brooklyn, to 67% on the Upper West Side of Manhattan and in Lower Manhattan.
- In addition to Flatbush, extremely low influenza vaccination levels are found in Inwood/Washington Heights in Manhattan, in Borough Park, Greenpoint, and Bedford-Stuyvesant/Crown Heights in Brooklyn, and in Jamaica, Queens and West Queens.
- Racial and ethnic demographics of some neighborhoods may contribute to low influenza vaccination levels. Residents of areas with high proportions of black adults (>70%), such as Bedford-Stuyvesant/Crown Heights and Flatbush in Brooklyn, are less likely to report receiving influenza vaccine.

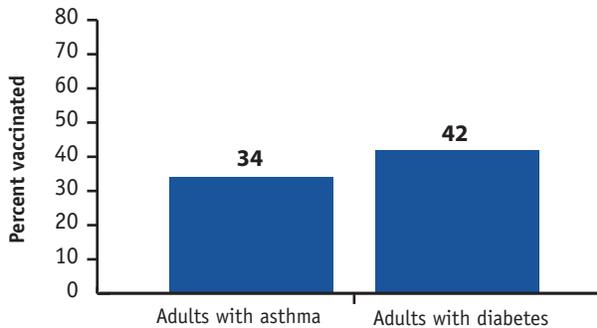
**Influenza vaccination among New Yorkers aged 65 years and older by neighborhood**



Source: CHS 2007-08

## Too few New Yorkers at high risk of complications from influenza are getting vaccinated

**Influenza vaccination among New Yorkers ages 18 to 64 years with asthma and diabetes**



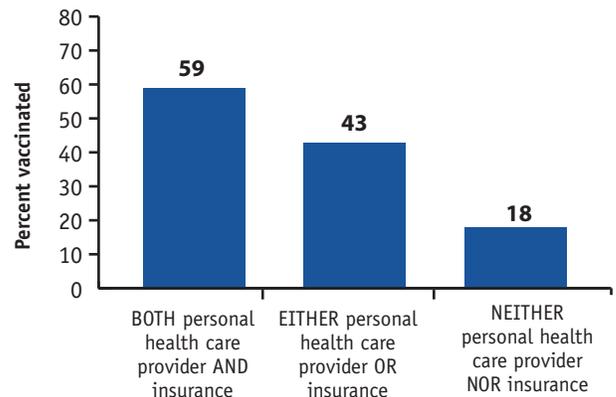
Source: CHS 2009

- In addition to all older adults, it is important for New Yorkers younger than 65 years who are at higher risk of complications from the flu—such as those with diabetes and asthma—to be protected by vaccination.
- In 2009 among adults aged 18 to 64 years, only 34% of those with asthma and 42% of those with diabetes reported receiving a flu shot in the past year. Thus, more than six in ten with asthma and nearly six in ten with diabetes did not get a recommended annual influenza vaccination.

## New Yorkers with both a regular health care provider and insurance are much more likely to get vaccinated against influenza

- New Yorkers aged 65 years and older with a personal health care provider and insurance are more than three times as likely to report past-year vaccination against influenza as those without a regular health care provider or insurance (59% vs. 18%).
- Only 6 in 10 (59%) of Central Brooklyn residents surveyed say their doctors recommend influenza vaccination. Those whose doctors do recommend vaccination were three and a half times more likely to get vaccinated than those whose doctors did not.\*

**Influenza vaccination among New Yorkers aged 65 and older with and without a personal health care provider and insurance**

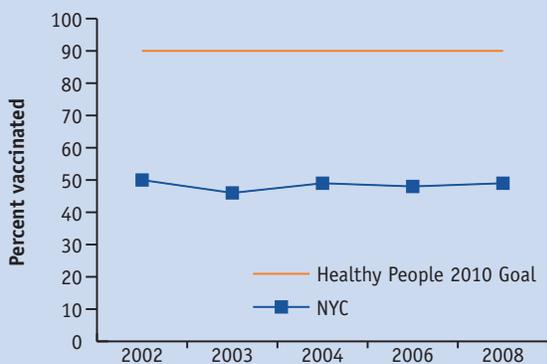


Source: CHS 2002-2008

\*Noyes P, Wake E, Mansu M, Graham R, Fraser Y, Crichlow K, Zucker JR, Hunter V, Karpati A. Flu Shots Save Lives: Why Aren't More Central Brooklyn Residents Getting Vaccinated? New York: New York City Department of Health and Mental Hygiene, 2006.

## Pneumococcal polysaccharide vaccination (PPSV) rates are too low among older New Yorkers

**PPSV rates among New Yorkers aged 65 and older**



Source: CHS 2002-04, 2006 and 2008  
Pneumococcal vaccination status not asked on 2005 and 2007 CHS

- Pneumococcal polysaccharide vaccination (PPSV) is recommended once for adults aged 65 years and older. Levels among older New Yorkers remained at or around 50% between 2002 and 2008. These levels are well below those in New York State (65%) and the U.S. (67%) overall, as well as the national Healthy People 2010 goal (90%).
- Pneumococcal vaccination was less common in 2008 among Asian (40%) and Hispanic (41%) New Yorkers aged 65 years and older than among blacks (48%) and whites (54%) in the same age group.

# Recommendations

## EVERYONE aged six months and older should get an annual influenza vaccination.

- Vaccination is now universally recommended for people aged six months and older.
- Vaccination is the best way to protect against flu. It is especially important for people most at risk of serious complications from the flu and those who live with or care for them. These include: pregnant women; children younger than five years, especially those younger than two years; people aged 50 years and older, especially those aged 65 years and older; residents of long-term-care facilities; health care workers; American Indians/Alaska Natives; and people with certain long-term health conditions, including:
  - Diabetes
  - Asthma and other lung disease
  - Heart, kidney or liver disease
  - Hematologic diseases, such as sickle cell anemia
  - Morbid obesity (BMI > 40)
  - Weakened immune system from illness or medication (for example, HIV/AIDS or cancer)
  - Neuromuscular disorders that may cause breathing problems or create oral secretions
- For more information, visit [www.nyc.gov/flu](http://www.nyc.gov/flu) or call 311 and ask for Health Bulletin #81: *Get Vaccinated—Influenza Makes You Miserable*.

## HEALTH CARE PROVIDERS should recommend influenza vaccination to all patients.

- Patients whose health care providers recommend influenza vaccination are more likely to get vaccinated.
- Protect patients and set an example: Every health care provider should get an annual flu vaccination!
- For expert practice guidelines and helpful resources to support influenza vaccination efforts, see City Health Information: Influenza: Prevention and Control, 2010-2011, at: <http://www.nyc.gov/html/doh/downloads/pdf/chi/chi29-6.pdf>.

## EVERYONE AGED 65 YEARS AND OLDER should receive a one-time pneumococcal polysaccharide vaccination (PPSV) to protect against pneumococcal pneumonia.

- PPSV is also recommended for people aged 18 to 64 years who smoke cigarettes or have asthma, and people aged two years or older who have any of the following health problems: lung disease, heart disease, receiving medication or radiation treatment that compromises immunity, HIV infection or AIDS, cancer, diabetes, kidney disease, sickle cell anemia, or liver disease.
- If you belong to one of these groups, talk to your health care provider about PPSV right away. Vaccination is available year-round.