



City Health Information

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The New York City Department of Health and Mental Hygiene

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INFLUENZA PREVENTION AND CONTROL, 2009-2010

- **Adults aged >50 years, especially those ≥ 65 years, should be vaccinated against seasonal influenza.**
- **Pregnant women should receive inactivated vaccines for both seasonal influenza and novel H1N1 influenza.**
- **Children aged 6 months to 18 years should be vaccinated against seasonal influenza and novel H1N1 influenza.**
- **Adults with chronic health conditions may need vaccines for both seasonal influenza and novel H1N1 influenza, depending on their age.**
- **Many health care personnel in New York State are now required to receive an annual influenza vaccination.**
- **Initiate vaccination efforts as soon as vaccine is received and continue until vaccine expires, making sure that all at-risk patients are protected.**

Every year, seasonal influenza viruses cause community transmission. Seasonal influenza viruses primarily affect the respiratory tract and can have fatal complications, causing an average of 36,000 deaths and 226,000 hospitalizations annually in the United States (US).^{1,2} During the 2009 spring outbreak, novel H1N1 influenza was detected in New York City (NYC), resulting in nearly 1,000 hospitalizations and 54 deaths.³ Both seasonal and novel H1N1 influenza are expected to circulate during the 2009-2010 influenza season.

Annual influenza vaccination is the most effective way of preventing influenza and its complications.⁴ Community-level benefits of immunization include reduced absenteeism and illness^{5,6} and a decreased incidence of influenza in children born to immunized women.⁷ Despite these benefits, immunization rates in NYC are below the Healthy People 2010 goals.^{8,9}

The Centers for Disease Control and Prevention Advisory Committee on Immunization Practices (ACIP) 2009-2010 guidelines for seasonal influenza recommend coverage for 83% of the US population,

and call for full implementation of the 2008-2009 recommendation to immunize all children aged 6 months through 18 years.⁴ Age and risk groups previously recommended for annual vaccination against seasonal influenza have not changed in the past year, but are different from the priority groups for novel H1N1 influenza, as stated in the ACIP guidelines for novel H1N1 influenza vaccination (Table 1).¹⁰



TABLE 1. PRIORITY GROUPS FOR INFLUENZA VACCINATION

Seasonal Influenza	Novel H1N1 Influenza
<ul style="list-style-type: none"> Children aged 6 months through 18 years, especially <5 years 	<i>Initial priority groups</i>
<ul style="list-style-type: none"> Pregnant women 	<ul style="list-style-type: none"> Pregnant women
<ul style="list-style-type: none"> Adults aged ≥50 years, especially ≥65 years 	<ul style="list-style-type: none"> Children and young adults aged 6 months through 24 years
<ul style="list-style-type: none"> Residents of long-term care facilities (aged ≥6 months) 	<ul style="list-style-type: none"> Household contacts and caregivers of children <6 months of age
<ul style="list-style-type: none"> Health care workers 	<ul style="list-style-type: none"> Health care and emergency medical services personnel
<ul style="list-style-type: none"> Adults with chronic health conditions (Table 2) 	<ul style="list-style-type: none"> Adults aged 25 through 64 years with chronic health conditions (Table 2)
<ul style="list-style-type: none"> Household contacts and caregivers of children aged <5 years, especially <6 months; adults aged ≥50 years; and adults with chronic health conditions (Table 2) 	<p><i>Once these groups have been vaccinated, the following should be considered for vaccination:</i></p> <ul style="list-style-type: none"> Adults aged 25 through 64 years who do not have underlying health conditions
<ul style="list-style-type: none"> Anyone who wishes to reduce the risk of becoming ill with influenza or transmitting it to others 	<p><i>then</i></p> <ul style="list-style-type: none"> Adults aged ≥65 years

Visit www.nyc.gov/flu for updated recommendations.

INFLUENZA IN CHILDREN

Influenza is responsible for increased visits to clinics, emergency departments, and hospitals, and excess use of antibiotics among children.^{11,12} Infants and young children are at greater risk for hospitalization than older children, with rates similar to those for other high-risk groups, including people aged ≥65 years.⁴ However, mortality associated with influenza in children is uncommon; during the 2008-2009 US influenza season, there were 68 pediatric deaths linked to seasonal influenza and 49 pediatric deaths associated with novel H1N1 influenza (as of September 19, 2009).¹³ Children with ACIP-defined high-risk conditions such as asthma (**Table 2**) are at greater risk for influenza-related hospitalization.^{4,12} Among young children, vaccination against seasonal influenza is more effective when 2 doses are received in the first year of vaccination compared with just one dose.¹⁴⁻¹⁶ In NYC, only 31% of children aged 6 to 23 months and 28% aged 24 to 35 months were fully protected with the recommended 2 doses last year.¹⁷

INFLUENZA IN HIGH-RISK ADULTS

People aged 65 years and older

The highest mortality rates associated with seasonal influenza are seen in people aged 65 years and older.¹ In 2007, approximately 1,100 elderly New Yorkers died of influenza-

INFLUENZA IN PREGNANCY

Pregnancy increases the risk of influenza-related complications and hospitalization^{4,18}: a pregnant woman's risk of influenza-related hospitalization is more than 4 times higher than that for nonpregnant women.¹⁹ Vaccinating pregnant women also provides immunity to their newborn children.⁷ All women who will be pregnant during influenza season should be vaccinated against both seasonal and novel H1N1 influenza with inactivated vaccine.^{4,10} Women who are known to be pregnant should be immunized with a vaccine containing no more than 1.25 µg of mercury per 0.5-mL dose²⁰ (**Table 3**), but there is no need to test for pregnancy.

related illnesses.²¹ Vaccination rates among New Yorkers in this age group are 49%, 56%, 63%, and 59% for blacks, Latinos, Asians, and whites, respectively, and are below national goals.⁸ People aged 65 years and older who do not have high-risk conditions (**Table 2**) are not among the initial priority groups for novel H1N1 influenza vaccination, because current studies indicate the risk for novel H1N1 influenza infection in this age group is lower than the risk in younger age groups.¹⁰

TABLE 2. CHRONIC MEDICAL CONDITIONS

- Chronic pulmonary disease such as asthma and COPD
- Chronic cardiovascular, renal, and hepatic disease, except hypertension
- Hematologic disease, such as sickle cell anemia
- Metabolic disorders, such as diabetes
- Immunosuppression, including HIV-related or caused by medication or malignancy
- Neuromuscular disorders, spinal cord injury, seizure disorders, or cognitive dysfunction that may compromise the handling of respiratory secretions or that increase the risk of aspiration
- Long-term aspirin therapy in patients <19 years of age because of the risk for Reye syndrome

Adults with other risk factors

Certain illnesses, including asthma and diabetes, increase the risk of influenza-related complications and hospitalizations.²² New York City coverage rates for adults with asthma (40%) and diabetes (52%) are below the Healthy People 2010 goals of 60% for people with these conditions.⁸ People with any of these conditions should be vaccinated against both seasonal and novel H1N1 influenza.^{4,10}

Health care workers

Health care workers (HCWs) and others who can transmit influenza to those at high risk should also be immunized.⁴ See box at right for information on immunization for health care workers in New York State.

ADMINISTERING VACCINE

Timing of Vaccination

Vaccination season is not the same as influenza season, which peaks in early winter. For both seasonal and novel H1N1 influenza, begin to vaccinate as soon as you receive vaccine and continue vaccinating until vaccine expires. Community and hospital influenza testing showed that seasonal and novel H1N1 influenza were in circulation in NYC as late as June 2009.²³ Because many children will need two doses of vaccine at least 4 weeks apart, it is important to begin vaccination early.

Seasonal Influenza Vaccine

Order enough seasonal influenza vaccine from the manufacturer in time for delivery early in influenza season. The 2009-2010 trivalent seasonal influenza vaccine contains the A/Brisbane/59/2007 (H1N1)-like, A/Brisbane/10/2007 (H3N2)-like, and B/Brisbane 60/2008-like strains. To learn how to obtain seasonal influenza vaccine, visit www.nyc.gov/flu or call the Provider Access Line at 866-692-3641/866-NYC-DOH1.

INFLUENZA VACCINE INFORMATION FOR HEALTH CARE WORKERS

An amendment to the New York State Public Health Law passed in August 2009 requires that certain health care workers must receive an annual influenza vaccine, unless there is a medical contraindication. The new regulation applies to facilities licensed under Article 28 (hospitals, diagnostic and treatment centers) as well as to agencies licensed under Article 36 (home care services) and programs certified under Article 40 (long-term home health, including AIDS home care and hospice). Affected entities should develop strategies to ensure that their staff has access to influenza vaccine and that they document administered doses. Health care workers not affected by this amendment should also protect themselves and their patients against influenza with annual vaccination. Only 38% of NYC health care workers were immunized in 2007.²⁴

On October 16, 2009, a temporary restraining order regarding mandatory immunization of health care workers was issued. For updated information, visit www.health.state.ny.us/diseases/communicable/influenza/providers.htm or call 1-800-808-1987.

For all eligible children and adolescents, seasonal vaccine must be ordered through the Vaccines for Children (VFC) program (212-447-8175). Store vaccines correctly to ensure full potency. See www.immunize.org/catg.d/p3035.pdf for a sample checklist.

Children younger than age 9 need 2 doses of seasonal influenza vaccine separated by at least 4 weeks (28 days) in their first vaccination year or 2 doses in their second year if they only received one dose in the previous year (**Table 3**).

Novel H1N1 Influenza Vaccine

Novel H1N1 influenza vaccine is distinct from the trivalent seasonal influenza vaccine and will not protect against seasonal A or B strains. Novel H1N1 influenza vaccine is a licensed product manufactured in the same way as seasonal influenza vaccines. It is available as inactivated (injectable, intramuscular) vaccine and a live attenuated (intranasal) vaccine, just like seasonal influenza vaccine.

Individuals aged 10 years and older should receive one dose of novel H1N1 influenza vaccine; children aged 6 months through 9 years should receive 2 doses of novel H1N1 influenza vaccine.

The NYC Department of Health and Mental Hygiene (DOHMH) will distribute novel H1N1 influenza vaccine at no cost to providers. Vaccine orders will include some ancillary supplies, including needles, syringes, alcohol preps, and sharps containers. Because vaccine is being distributed at no charge by the government, you may bill only for vaccine administration.

To order novel H1N1 influenza vaccine, providers must first register their facility with the Citywide Immunization Registry (CIR), either via www.nyc.gov/html/doh/html/cir or by calling 212-676-2323.

Tips for Increasing Vaccination Coverage in Your Practice

- Protect yourself and your patients. Be a role model: get vaccinated and have your staff do the same.
- Make vaccinations easy for families: consider evening and weekend hours for the convenience of working parents.
- Prominently display educational materials about immunization for parents in the waiting room (see **Resources**).
- Use every office visit as an opportunity to vaccinate—recommending vaccination to your patients will increase the vaccination rate.²⁵
- Inform parents that their children need to receive both novel H1N1 and seasonal influenza vaccines.

CPT CODES FOR INFLUENZA AND PNEUMOCOCCAL VACCINATION

90470	H1N1 immunization administration (intramuscular, intranasal), including counseling when performed.
90655	Influenza virus vaccine, split virus, preservative free, for children 6-35 months of age, for intramuscular use.
90656	Influenza virus vaccine, split virus, preservative free, for use in individuals 3 years of age and above, for intramuscular use.
90657	Influenza virus vaccine, split virus, for children 6-35 months of age, for intramuscular use.
90658	Influenza virus vaccine, split virus, for use in individuals 3 years of age and above, for intramuscular use.
90660	Influenza virus vaccine, live, for intranasal use.
G0008	Administration of intramuscular influenza virus vaccine.
90473	Administration of intranasal or oral influenza virus vaccine.
90732	Pneumococcal polysaccharide vaccine, 23-valent, adult or immunosuppressed patient dosage, for use in individuals 2 years or older, for subcutaneous or intramuscular use.
G0009	Administration of pneumococcal vaccine.

THE CITYWIDE IMMUNIZATION REGISTRY

The New York Citywide Immunization Registry (CIR) is a computerized filing system that keeps immunization records of people vaccinated in NYC. The CIR:

- Identifies patients who are due for an immunization.
- Provides an official printout of an immunization record.
- Maintains the security and confidentiality of patient information.

You must report immunizations for children (<19 years of age). Reporting for patients 19 years and older is voluntary with the patient's consent. However, all providers who administer novel H1N1 influenza vaccines will be required to report these doses to the CIR, regardless of the age of the recipient. Providers who will be receiving novel H1N1 influenza vaccine from the Bureau of Immunization are required to register with the CIR. Providers administering seasonal influenza vaccine should also encourage their adult patients to participate in the CIR to ensure availability of future vaccination records.

To register, visit the CIR Web site: www.nyc.gov/html/doh/html/cir or call 212-676-2323 for more information.

- Take time to discuss any concerns that parents may have about vaccination.
- Give patients and parents the Vaccine Information Statement (VIS) to read before they are vaccinated (www.immunize.org/VIS).
- Have those who refuse vaccine sign a Refusal to Receive Vaccination form, available at www.nyc.gov/html/doh/downloads/pdf/imm/immiv-refusal.pdf.
- Use recall/reminder tools such as e-mails and postcards to help maintain vaccination schedules.
- Use standing orders for large practices, ambulatory care centers, inpatient facilities, emergency departments, and long-term care facilities. Keep track of vaccines for each patient.
- Use the Vaccine Administration Record for Adults or a preventive services flow sheet to record vaccines (www.nyc.gov/html/doh/downloads/pdf/imm/imm-var.pdf).
- Go to the Citywide Immunization Registry at www.nyc.gov/html/doh/html/cir to register and track the immunization status of your patients (see box).
- The Primary Care Information Project provides information on electronic health records software (www.nyc.gov/pcip).

Available Vaccines⁴

For seasonal influenza, trivalent inactivated influenza vaccines (TIV) and live attenuated influenza vaccine (LAIV) are available for the 2009-2010 season (**Table 3**). Vaccines for novel H1N1 influenza include inactivated products and a live attenuated vaccine.

TABLE 3. APPROVED SEASONAL INFLUENZA VACCINES, 2009-2010 SEASON

Vaccine	Trade Name	Ages	Package	Dose (mL)	Route	Thimerosal	Mercury ($\mu\text{g}/\text{dose}$)
Inactivated							
TIV	Afluria® (CSL Biotherapies)	≥ 18 years	Multidose vial	0.5	IM	Yes	24.5
		≥ 18 years	Single-dose syringe	0.5	IM	No	
TIV	Fluzone® (Sanofi Pasteur)	6-35 months	Single-dose syringe	0.25	IM	No	
		≥ 36 months	Single-dose syringe	0.5	IM	No	
		≥ 36 months	Single-dose vial	0.5	IM	No	
		≥ 6 months	Multidose vial	Age-dependent	IM	Yes	25
TIV	Fluvirin® (Novartis)	≥ 4 years	Single-dose syringe	0.5	IM	Trace	<1
		≥ 4 years	Multidose vial	0.5	IM	Yes	25
TIV	Fluarix® ^a (GlaxoSmithKline)	≥ 18 years	Single-dose syringe	0.5	IM	No	
TIV	FluLaval™ (GlaxoSmithKline)	≥ 18 years	Multidose vial	0.5	IM	Yes	25
Live, attenuated							
LAIV	FluMist® (MedImmune)	2-49 years	Single-dose dispenser	0.2	Intranasal	No	

Vaccination Schedule:**TIV**

- Ages 6 through 35 months: 0.25 mL
- Ages 3 through 8 years: 0.5 mL

Children aged 6 months through 8 years receiving TIV for the first time or those who only received 1 dose in their first year of vaccination should receive 2 doses at least 4 weeks apart the following year. In subsequent years, only 1 dose is recommended.

- Ages 9 years and older: one 0.5-mL dose

LAIV

- Ages 2 through 49 years: 0.2 mL

Children aged 2 through 8 years receiving LAIV for the first time or those who received only 1 dose in their first season of vaccination should receive 2 doses at least 4 weeks apart the following year and 1 dose in subsequent years.

- Ages 9 years and older: one 0.2-mL dose

^aContains latex in the tip cap and the rubber plunger.

IM = intramuscular injection. Adults and older children should be vaccinated in the deltoid muscle; the preferred site for infants and younger children aged 6 through 35 months is the anterolateral aspect of the thigh. Recommended needle lengths: adults and older children, ≥ 1 in. (>25 mm) (longer needles may be needed, depending on the patient's size); children with adequate deltoid muscle mass, 7/8 in. to 1.25 in.; children aged <12 months, 7/8 in. to 1 in.

Sources: ACIP recommendations and product prescribing information.

Note about thimerosal: In July 1999, the Public Health Service agencies, the American Academy of Pediatrics, and vaccine manufacturers agreed that thimerosal, a mercury-containing preservative, should be reduced or eliminated in vaccines as a precautionary measure. Thimerosal is no longer used in routinely recommended childhood vaccines, except for the vaccines listed above.²⁶ The Institute of Medicine reviewed a large number of epidemiologic studies related to thimerosal and autism, and has concluded that the evidence does not support a causal relationship between thimerosal-containing vaccines and autism.²⁷ New York State Public Health Law §2112 prohibits the administration of vaccines containing more than trace amounts of thimerosal to women who know they are pregnant and children younger than 3 years of age, with certain exceptions. For further information on the Public Health Law regarding thimerosal, visit www.health.state.ny.us/regulations/public_health_law/section/2112/information_for_physicians/update_to_state_law_restricting_thimerosal.htm.

None of the available vaccines should be given to patients with known anaphylactic hypersensitivity to eggs.

TIV and inactivated novel H1N1 influenza vaccines are given as intramuscular injections. Minor illness with or without fever is not a contraindication, but people with moderate to severe acute febrile illness should defer vaccination until their illness improves. A history of Guillain-Barré syndrome (GBS) within 6 weeks following a dose of TIV is considered a precaution for use of TIV. Ocular and respiratory symptoms (ocular soreness/itchiness, hoarseness, facial edema, difficulty breathing, difficulty swallowing, cough, chest tightness) have been reported after vaccination with TIV. These symptoms can recur, but many people have been revaccinated without incident. TIV is recommended for vaccinating household members, HCWs, and other close contacts of severely immunosuppressed persons who are receiving care in a protective environment.

LAIV is licensed for use only in healthy people aged 2 through 49 years and should not be given to pregnant women or to patients with asthma or recurrent wheezing, altered immunocompetence, underlying medical conditions predisposing to complications (Table 2), or a history of GBS. When considering LAIV for children aged 2 to 4 years, screen for possible reactive airway disease; if hyperreactivity is found, use TIV.

PNEUMOCOCCAL DISEASE AND INFLUENZA

Pneumococcal disease is a serious complication of influenza that leads to more than 6,000 deaths annually in the US. At least half of these cases involve adults for whom vaccination is recommended.²⁸ However, pneumococcal polysaccharide vaccine (PPSV) coverage rates among New Yorkers 65 years and older have been persistently below national goals and are now only 48%, 41%, 40%, and 54% for blacks, Latinos, Asians, and whites, respectively.⁸ Determine which of your patients should receive PPSV and recommend that they get vaccinated. Most patients will need only one dose of PPSV.

Administer PPSV to patients:

- Aged 65 years and older.
- Aged 2 through 64 years with chronic cardiovascular (except hypertension), hepatic, or pulmonary disease (eg, asthma); diabetes; cochlear implants; functional or anatomic asplenia (including those with sickle cell disease).
- Aged 19 through 64 years who smoke cigarettes.²⁹
- Aged ≥2 years who have compromised immunity, including those with HIV, leukemia, lymphoma, Hodgkin's disease, multiple myeloma, generalized malignancy, chronic renal failure, nephritic syndrome; dialysis patients; people receiving immunosuppressive therapy; organ or bone marrow transplant patients.

People who received a first dose of PPSV before age 65 need to receive a second dose after turning 65, if more than 5 years have elapsed since the previous dose.

ADVERSE EVENTS

All vaccines can be associated with minor reactions, including pain and redness at the injection site, headache, fatigue, or a vague feeling of discomfort.³⁰

Report any clinically significant adverse event that occurs after administration of any vaccine licensed in the United States. If you report through the CIR Online Registry, the report will be immediately forwarded to the Vaccine Adverse Event Reporting System (VAERS). You can also report directly to VAERS through its Web site, www.vaers.hhs.gov/default.htm.

INFLUENZA REPORTING AND SURVEILLANCE

The NYC Health Department, along with many partners, actively monitors influenza activity. Recommendations may change, and regular updates on levels of influenza activity are posted on the Health Department's Health Alert Network (HAN), which providers can sign up to receive at NYC MED, www.nyc.gov/health/nycmed, or at the DOHMH influenza Web site, www.nyc.gov/flu.

Influenza Reporting Requirements

The DOHMH requests that providers report as follows:

1. Report laboratory-confirmed influenza A cases in hospitalized patients (including seasonal influenza A [H3N2 and H1N1], as well as novel H1N1 influenza and influenza A, subtype unknown). Providers should report these cases in one of two ways:
 - a. Online via Reporting Central (formerly known as e-URF, or electronic universal reporting form). Go to <https://a816-healthpsi.nyc.gov/ReportingCentral/main.action> and follow the instructions for reporting a case of a reportable condition.
 - b. Using the form found at www.nyc.gov/html/doh/downloads/pdf/cd/h1n1-reportform.pdf. Complete ALL requested information and fax the form back to the DOHMH at 212-788-4268.
2. Report nosocomial cases or clusters to the DOHMH at 212-788-9830. Clusters occurring in Article 28 facilities must also be reported to the New York State Department of Health.

Join the NYC Health Department's Influenza Surveillance Program

Become part of an active surveillance system for influenza-like illness; in less than 30 minutes a week, you can participate as a sentinel physician in an important national public health initiative. The data you provide will help us monitor the impact of influenza in NYC.

Please call Beth Nivin at 212-442-9050 (e-mail bnivin@health.nyc.gov) or Alaina Stoute at 212-788-4150 (e-mail astoute@health.nyc.gov).

3. Report suspected or confirmed pediatric influenza deaths in children <18 years of age.
4. Include influenza on the death certificate if it is a suspected or confirmed cause of death.

Reporting recommendations may change. Visit the Health Department Web page for updated information (www.nyc.gov/flu).

SUMMARY

Every visit is an opportunity to vaccinate against influenza. To protect against seasonal and novel H1N1 influenza, start vaccinating as soon as influenza vaccine becomes available, and continue to vaccinate until vaccine expires. Join the Health Alert Network (www.nyc.gov/health/nycmed), and check the DOHMH Web site frequently for updated influenza surveillance information and clinical guidance. ♦

For information on outpatient treatment and prophylaxis of influenza-like illness, see "Outpatient Clinical Management of Influenza 2009-2010," soon to be available at www.nyc.gov/html/doh/downloads/pdf/chi/chi28-suppl6.pdf.

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Obtain the latest influenza information and recommendations on the Health Department's Web site at www.nyc.gov/flu.

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DOHMH JOB OPENINGS: We seek doctors, nurses, administrators, social workers, and other public health professionals. Visit www.nyc.gov/health/careers to view openings.

RESOURCES

NYC Department of Health and Mental Hygiene

- Provider Access Line, 9:00 AM to 5:00 PM:
866-692-3641/866-NYC-DOH1
After business hours: 212-764-7667
- Influenza Web site: www.nyc.gov/health/flu
- Health Alert Network (HAN):
<https://a816-healthpsi.nyc.gov/han/nychan>
(or 1-888-692-6339)
- E-mail questions to DOHMH: nycflu@health.nyc.gov
- Provider information:
www.nyc.gov/html/doh/html/imm/immpinf.html
- Educational materials in multiple languages:
www.nyc.gov/html/doh/html/imm/flu-ptk5.shtml
(call 311 for bulk supplies)

New York State Department of Health

- Bureau of Communicable Disease Control:
518-473-4439
- Nosocomial Report Form DOH 4018:
www.health.state.ny.us/forms/doh-4018.pdf

Other Organizations

- Centers for Disease Control and Prevention:
1-800-232-2522 or www.cdc.gov/flu (influenza information)
- Immunization Action Coalition: www.immunize.org
(influenza information)
- National Foundation for Infectious Diseases:
www.nfid.org

Continuing Education Activity

Influenza Prevention and Control, 2009-2010

SPONSORED BY

THE NEW YORK CITY DEPARTMENT OF
HEALTH AND MENTAL HYGIENE (DOHMH)
CITY HEALTH INFORMATION
OCTOBER 2009 VOL. 28(6):49-56

Objectives

At the conclusion of this activity, participants should:

1. Describe indications for the use of influenza vaccine.
2. List valid contraindications to the use of influenza vaccine.
3. List targeted populations for pneumococcal polysaccharide vaccine (PPV23).

CME Accreditation Statement

The New York City Department of Health and Mental Hygiene (NYC DOHMH) is accredited by the Medical Society of the State of New York to sponsor continuing medical education for physicians. The NYC DOHMH designates this educational activity for a maximum of 1.0 AMA PRA Category 1 credit.[™] Physicians should only claim credit commensurate with the extent of their participation in the activity.

CNE Accreditation Statement

The New York City Department of Health and Mental Hygiene is an approved provider of continuing nursing education by the New York State Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation. This CNE activity has been awarded 1.0 contact hours. It has been assigned code 6WXLFX-PRV-096.

Participants are required to submit name, address, and professional degree. This information will be maintained in the Department's CME/CNE program database. If you request, the CME/CNE Program will verify your participation and whether you passed the exam.

We will *not* share information with other organizations without your permission, except in certain emergencies when communication with health care providers is deemed by the public health agencies to be essential or when required by law. Participants who provide e-mail addresses may receive electronic announcements from the Department about future continuing education activities as well as other public health information.

Participants must submit the accompanying exam by October 31, 2010.

CME/CNE Activity Faculty:

Jane R. Zucker, MD, MSc
Edward Wake
Denise Ungaro, RN, BSN

All faculty are affiliated with the NYC DOHMH. The faculty does not have any financial arrangements or affiliations with any commercial entities whose products, research, or services may be discussed in these materials.

CME/CNE Activity Influenza Prevention and Control, 2009-2010

October 2009

1. Which of the following individuals have a contraindication for influenza vaccine?

- A. People 6 months and older receiving chemotherapy for cancer.
- B. Healthy people aged 19 to 49 years.
- C. People who may have a non-anaphylactic reaction to consuming eggs.
- D. Health care workers who treat patients in the Intensive Care Unit.
- E. All of the above.
- F. None of the above.

2. Which of the following is true?

- A. Priority groups for vaccination are the same for seasonal influenza and novel H1N1 influenza.
- B. New York State Public Health Law requires that health care personnel who work in Article 28, 36, and 40 facilities receive influenza vaccine.
- C. Household members and other contacts of children under 5 years of age should receive annual influenza vaccination.
- D. Pregnant women should be vaccinated against both seasonal and novel influenza.
- E. B, C, and D.
- F. All of the above.

3. Which of the following individuals need to receive 2 doses of seasonal influenza vaccine within one influenza vaccination season?

- A. Pregnant women.
- B. Children age 6 months through 18 years who have not previously received influenza vaccine.
- C. Children 9 through 18 years receiving long-term aspirin therapy.
- D. All children 9 through 18 years of age.
- E. Children age 6 months through 8 years who have not previously received influenza vaccine.
- F. None of the above.

4. Which of the following individuals are NOT indicated to receive PPSV?

- A. A 67-year-old who received PPSV at age 61.
- B. A healthy 25-year-old male who smokes cigarettes.
- C. A healthy 68-year-old without prior history of PPSV immunization.
- D. A 45-year-old with hypertension.
- E. All of the above.
- F. None of the above.

5. Initial priority groups for novel H1N1 influenza vaccine include all of the below EXCEPT:

- A. All people aged 6 months through 24 years.
- B. Pregnant women.
- C. Household contacts and caregivers for children <6 months of age.
- D. People aged ≥65 years.
- E. All of the above.
- F. A, B, and C.

6. How well did this continuing education activity achieve its educational objectives?

- A. Very well.
- B. Adequately.
- C. Poorly.

7. Will the content learned from this activity impact your practice?

- A. Yes.
- B. No.
- C. Not applicable.

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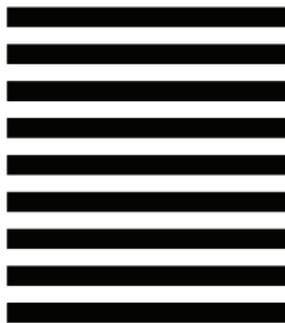
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Continuing Education Activity

This issue of *City Health Information*, including the continuing education activity, can be downloaded from www.nyc.gov/html/doh/html/chi/chi.shtml.

Instructions

Read this issue of *City Health Information* for the correct answers to questions. To receive continuing education credit, you must answer 4 of the first 5 questions correctly.

To Submit by Mail

1. Complete all information on the response card, including your name, degree, mailing address, telephone number, and e-mail address. PLEASE PRINT LEGIBLY.
2. Select your answers to the questions and check the corresponding boxes on the response card.
3. Return the response card or a photocopy of the card postmarked **no later than October 31, 2010**.

Mail to: CME/CNE Administrator; NYC Department of Health and Mental Hygiene, 2 Lafayette Street, CN-65, New York, NY 10277-1632.

To Submit Online

Visit www.nyc.gov/html/doh/html/chi/chi.shtml to complete this activity online. Once logged into NYC MED, use the navigation menu in the left column to access this issue of *City Health Information*. Your responses will be graded immediately, and you can print out your certificate.