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NEW YORK CITY COUNCIL

COMMITTEE ON HEALTH

OVERSIGHT HEARING:

NEW YORK CITY'S EFFORTS TO COMBAT THE FLU

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Good afternoon Chairperson Rivera and members of the Committee on Health. I am Dr. Benjamin Mojica, Senior Assistant Vice President and Deputy Chief Medical Officer for the New York City Health and Hospitals Corporation (HHC). Thank you for the opportunity to discuss HHC's efforts to prepare for the flu season and our activities to promote influenza vaccination, particularly among those who are most at risk for complications of the disease.

As you know, influenza and pneumonia remain one of the leading causes of death in New York City with almost 2,600 deaths annually. Nationwide, there are approximately 36,000 deaths a year from the flu, 90 percent of which occur in people over the age of 65. Fortunately, a sufficient supply of influenza vaccine is available this year and vaccinations have been effective in preventing flu transmission and reducing the mortality rate associated with complications from the virus.

In recent years we have seen the challenges inherent in preparing for flu season. The influenza vaccination is produced annually in anticipation of what viral strains may be in circulation for that particular season. The influenza viruses, of which there are many, mutate quickly and rapidly create new strains. Subsequently, the influenza vaccine cannot be stockpiled, and the vaccine supply is subject to the vagaries and challenges of vaccine production. In recent years,

problems with vaccine production resulted in manufacturing and distribution delays and severe shortages. This year, we are pleased to report that we have received most of the more than 200,000 doses of vaccine ordered for the season and anticipate delivery of the rest of the vaccines before the end of next month.

Flu shots are available at all HHC facilities at no cost for children 18 and under, and at low cost for adults. The best time to get vaccinated is in October or November, but anyone can still get vaccinated in the winter months since influenza viruses usually reach peak levels during late December through March. An annual flu shot is recommended for the following groups:

- Persons at high risk for influenza-related complications and severe disease, including:
 - children aged 6-59 months;
 - pregnant women;
 - persons aged 50 years and older;
 - persons of any age with certain chronic medical conditions; and
- Persons who live with or care for persons at high risk, including:
 - household contacts who have frequent contact with persons at high risk and who can transmit influenza to those persons at high risk; and
 - healthcare workers.

Every year, HHC prepares for the flu vaccination season by working to:

- Ensure access to the flu vaccine;
- Increase public awareness and outreach;
- Increase provider education; and
- Rigorously monitor vaccine utilization.

Ensure access to the flu vaccine

To ensure that our facilities have vaccines for our patients and employees, we increased the amount of vaccines purchased this year, and have established a small cache of vaccines reserved for distribution to facilities in the event that they may experience a shortage. We have also established a central inventory system which provides us with information on the vaccine levels in HHC's healthcare facilities.

This year, the influenza vaccine has been available to HHC's patients and employees since the beginning of this month. We anticipate that vaccines will be available through April 30, 2008 or later.

In order to reduce the likelihood of transmission of influenza between employees and patients, HHC has taken steps in recent years to increase the level of vaccination among our employees. We strive to make it easy and convenient for

employees to get vaccinated. The vaccine has been made available to employees since the beginning of October in designated sites including the facilities' employee health clinic. In addition, for the next two-weeks, the vaccine will be made available to employees at their worksite in all shifts or tours through Sunday, November 4th. This process will eliminate the potential barrier of vaccine inaccessibility to employees. Small group discussions among employees are being conducted to inform employees about the benefits of vaccination and correcting previously held myths or misinformation about the influenza vaccine. We are also providing incentives to employees to promote vaccination. These include gifts to employees who receive the vaccine during the intensive two-week vaccination period and an opportunity to win a \$100 gift card through a lottery for employees who receive the influenza vaccine by Sunday, November 4, 2007.

Studies have shown that wide immunization of healthcare workers can be very effective in preventing flu cases, especially among patients in fragile health who may be more vulnerable to infection and the secondary illnesses that can accompany influenza.

Increase public awareness and outreach

Every year in October, HHC conducts a month-long "Take Care New York" campaign. In addition to offering flu shots, the campaign urges all New Yorkers to

get screened for cancer, heart disease, diabetes and other serious chronic illnesses. A central part of our mission is to reduce the health disparities that continue to plague the communities we serve, and early detection and treatment is a key factor in keeping people healthy. This month, HHC hospitals have conducted health screenings and have conducted educational events. Outreach efforts have been promoted through radio ads in Spanish and English, movie theatre advertisements in more than 130 locations, and public service announcements in local newspapers.

We have also worked with HHC's health plan, MetroPlus to remind patients about the need to be vaccinated. Post card reminders have been sent informing patients, particularly those at increased risk of complications from the flu, of the importance of getting their flu shot.

Increase provider education

It has been shown that a provider's advice to patients about the need for the vaccine is effective in convincing the patient to receive the vaccine and increasing vaccination rates. To this end, in collaboration with our colleagues in the New York City Department of Health and Mental Hygiene, learning sessions for our providers on influenza and the influenza vaccine are being conducted. A series of Continuing Medical Education (CME) accredited program are now underway and are designed to provide clinicians and others in the health care team the latest

information on the prevention and management of influenza and the current recommendations on the use of the vaccine.

In addition, easy access to information on influenza vaccine has been facilitated through the CME website. This site is accessible to all of our clinicians and has the current recommendations on the use of influenza vaccine from the Centers for Disease Control and Prevention. Additional information on influenza during the season will be provided through the website.

Rigorously monitor vaccine utilization

Every year we closely monitor the utilization levels for the influenza vaccines and keep a watchful eye on those patients residing in long-term care facilities. We share this information with administrators and providers in HHC's facilities as a guide for them to direct their efforts in targeted ways throughout the flu season. We have set high expectations this year, and through the intensive efforts of HHC's dedicated staff, fully expect to meet our goals which include the use of approximately 200,000 doses of influenza vaccine.

This concludes my written testimony. I would be happy to answer any questions you may have.



THE CITY OF NEW YORK
DEPARTMENT OF HEALTH AND MENTAL HYGIENE

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Testimony

of

Jane R. Zucker, M.D., M.Sc.
Assistant Commissioner for Immunization
New York City Department of Health and Mental Hygiene

before the

New York City Council Health Committee

regarding

New York City's Efforts to Combat the Flu

October 23, 2007

250 Broadway, 16th Floor
New York City

Good afternoon Chairman Rivera and members of the Health Committee. I am Dr. Jane Zucker, Assistant Commissioner for the Bureau of Immunization at the New York City Department of Health and Mental Hygiene (DOHMH). On behalf of Commissioner Frieden, thank you for the opportunity to testify regarding the Department's efforts to combat seasonal flu.

Each year nearly 3,000 New Yorkers die from flu and pneumonia, and thousands more are hospitalized as a result of these preventable conditions. Anyone can get the flu, however those most vulnerable to its complications are adults age 65 and older and children younger than two years old.

In 2005-06, an estimated 59% of adults 65 years of age and older in NYC reported receiving a flu vaccine. This represents an 8% increase in the coverage rate from that of 2004-05, the season in which nearly half the adult flu vaccine supply was pulled from the market as a result of a manufacturing failure. In previous seasons, flu vaccination coverage was between 63% and 64% for persons 65 and older. There are racial and ethnic disparities in coverage: 64% coverage was reached among Caucasians, but there was only 47% coverage among African Americans. Coverage rates among Latinos was 59% and Asians was 63%. Data on neighborhood coverage levels for the 2005-06 season indicate that neighborhoods with the lowest coverage remain Central Brooklyn and Harlem.

New Yorkers can call 311 or visit the DOHMH website to find out where to get a flu shot. The Department's flu shot locator provides referrals based on age and zip code, and in addition to DOHMH clinics, senior centers, and Health and Hospitals Corporation sites, we have expanded the listings to include private sites and links to other websites, such as the American Lung Association. This year our locator provides referrals to more than 730 sites throughout the five boroughs.

In order to increase immunization coverage and reduce vaccine-preventable hospitalizations and deaths, the Department made immunizing New Yorkers a part of the DOHMH Take Care New York (TCNY) health policy agenda. In recognition of the importance of preventing flu, the Department has a comprehensive strategic plan that focuses on six main areas: provider education, clinic services, media and advertising, community outreach, vaccine distribution, and legislative change.

The Department encourages all New Yorkers to have a medical home, and accordingly the Immunization Program encourages patients to seek flu shots at their regular doctor's office. To ensure that providers are well informed, the Department publishes an annual City Health Information newsletter regarding flu, sponsors grand rounds and lectures, and distributes Influenza Action Kits along with a more detailed Influenza Resource Guide. The Department promotes best practices for improving vaccination coverage— from practical recommendations that can be used in small private offices such as chart stickers, to tools for promoting vaccination in hospital and large clinic settings. DOHMH places particular emphasis on the importance of flu shots for health care workers in medical settings and staff in long term care facilities.

The Department also provides direct clinical services through walk-in Immunization Clinics in each of the five boroughs to ensure that all New Yorkers have access to free flu shots during flu season. We began providing flu vaccine as soon as we received our supply in mid-September and as of October 12th we have already vaccinated over 2200 people in our clinics.

The federal Vaccines for Children (VFC) program covers children up to age 19 and includes those covered by Medicaid, as well those who are uninsured or underinsured and seen in Federally Qualified Health Centers. Approximately 80% of infants and two-thirds of children younger than 19 in New York City are eligible to receive flu vaccine through the VFC program. In the 2006-07 flu season, approximately 75,000 children 6 through 23 months of age received a flu shot, and we are optimistic about our ability to increase pediatric vaccination rates this year through the distribution of VFC vaccine.

DOHMH also partners with the Department for the Aging (DFTA), the Visiting Nurse Service of New York (VNS), the New York City Housing Authority and community organizations to facilitate flu shot events. Each year, letters are sent to all DFTA senior centers inviting them to hold flu clinics, and this year approximately 400 clinics have already been scheduled. DOHMH provides vaccine to VNS for additional community based outreach activities and to the Department of Homeless Services to reach the homeless population. Finally, the Department leads the New York City Adult Immunization Coalition, which meets quarterly, and is comprised of medical and professionals partners dedicated to promoting flu vaccination.

To increase community awareness of the importance of flu vaccination and to promote community demand for flu vaccine, DOHMH sends educators to health fairs, Community Board meetings, and senior centers. We place promotional advertisements in supermarket circulars and in community newspapers. To reduce racial and ethnic disparities in immunization rates, the Department also engages in specific outreach to populations in neighborhoods with low coverage rates. For example, in Central Brooklyn we worked closely with the Brooklyn Flu Steering Committee to develop educational materials. We targeted intervention strategies to both community residents and medical professionals, including coordinating with the Provident Clinical Society to educate its physician members. In addition to many of the past year's initiatives, DOHMH is planning new community outreach activities, including collaboration with groups such as the New York Academy of Medicine's Harlem Community and Academic Partnership.

Radio public services announcements have begun and we will soon release a new campaign that includes subway advertisements and billboards. We are enhancing our flu season media and advertising with the addition of new posters and health bulletins targeting Spanish-speaking and African American New Yorkers.

Despite these efforts, flu vaccine coverage in New York City has not increased from the 2001 level of 63% for three of the last four years (not including the 2004-05 shortage season). This rate falls far short of the National Healthy People 2010 goal of

90% for persons 65 and older. Barriers to expanded immunization coverage include supply issues, exemplified by the flu vaccine shortage in 2004-05, and misperceptions about the safety of vaccine.

Vaccine supply problems have significantly complicated the delivery of vaccine and limited the number of available doses, every year since 2000 (with one exception in 2003). These issues are largely related to national and international problems of vaccine production and are outside of the Department's control. For those years, instead of promoting vaccination, DOHMH was forced to spend valuable time and resources redistributing vaccine to facilities serving the most vulnerable populations and by running large flu clinics for those who could not otherwise obtain vaccinations from their regular doctor. I'm happy to report that for the 2007-08 flu season the Department received enough vaccine in time to fully implement our agenda. Nationwide, approximately 132 million doses of vaccine are expected to be available for distribution.

Despite our efforts to increase immunization rates and prevent the spread of flu, flu remains a serious public health issue in New York City. DOHMH conducts year-round flu surveillance and responds to outbreaks of flu in the City, including those occurring in populations that are at high risk for complications secondary to flu infection (e.g., in long-term care facilities). These outbreaks occur every season, and the Department actively provides guidance to facilities on curtailing outbreaks, makes site visits to assess infection control practices, and collects data to help prevent outbreaks in the future.

The Department participates in the Centers for Disease Control and Prevention's Influenza Sentinel Provider Network program, in which designated providers report on the number of flu cases they see in their respective practices. This system was initiated in NYC during the 2001-02 flu season with the recruitment of twenty medical practices and has since expanded to include 70 additional practices, exceeding the CDC goal of one sentinel per 250,000 residents.

DOHMH engages in laboratory surveillance, communicating weekly with the approximately 40 New York City laboratories performing testing for flu. The Department also tracks flu-associated deaths. This information is used to prepare the weekly flu activity report posted on the DOHMH website and is sent to all participating New York City sentinel providers, the New York State Department of Health, and the CDC.

Looking ahead, a tremendous opportunity exists to more fully develop our immunization infrastructure. New York State law does not currently allow pharmacists to administer flu and pneumonia immunizations. Allowing pharmacists to provide immunizations has become the standard of care, and is permitted in 46 states. Pharmacies offer a natural entry point for targeting those who are at high-risk for flu and its complications. People at elevated risk – for example, those with chronic conditions such as diabetes – regularly see their pharmacist to refill their prescriptions, providing an opportunity for flu vaccination, and pharmacists are licensed health care professionals whose training curriculum includes all the critical skills that, with appropriate

certification, makes them well-qualified professionals for provision of immunizations to adults. The City strongly supports legislation (A2140/S1312) to enable licensed pharmacists to administer immunizations to adults.

Now is the time for people to get vaccinated, and the Department welcomes the opportunity to partner with the Council in an effort to increase vaccination rates. We encourage you to get a flu shot at a senior center in your district, and to send out a list of clinics or senior center flu shot sites to your constituents. We have promotional brochures and posters for you to take back to your district office, and are happy to help you order additional materials.

Thank you again for your interest in this issue. I am pleased to answer any questions you may have at this time.

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AMERICAN LUNG ASSOCIATION®

of the City of New York, Inc.

**Testimony of
Michael Seilback, Senior Director of Public Policy & Advocacy,
American Lung Association of the City of New York
Regarding
New York City's Efforts to Combat the Flu**

October 23, 2007

For more than 100 years, the American Lung Association of the City of New York has worked to prevent lung disease and promote lung health among the residents of the five boroughs. In that regard, on behalf of the organization, I am pleased to provide the following testimony regarding efforts in New York City to combat the flu.

Influenza, more commonly known as "the flu," is a serious infectious disease that spreads easily from person to person, primarily when an infected individual coughs or sneezes. Influenza can be transmitted even before symptoms appear and for many days after the symptoms begin. Typical influenza symptoms include abrupt onset of high fever, muscle and joint pain, chills, a dry cough, headache, runny nose, and a sore throat. Often, in early stages, these symptoms are confused with that of a cold, and the severity of the illness is underestimated.

Each year, an estimated 2.6 million New Yorkers get the flu, causing illness and even death in certain high-risk populations, such as adults and children with heart, kidney and lung conditions, including asthma. Annually, the flu causes 192 million days spent in bed, 70 million lost working days and 346 million days of restricted activity. Nationally, an average of 36,000 people die from the flu and its complications.

To a large extent, these deaths are preventable. Given the impact of the flu on the nation's health and productivity, extensive resources and strategies have been developed to protect our health by preventing the flu.

The best tool against getting the flu is the flu shot. A yearly influenza vaccination is up to 92 percent effective in preventing influenza and reducing the severity of the influenza. Although mild side effects are possible, a person cannot get influenza from the vaccine.

However, despite longstanding immunization recommendations for people with chronic lung diseases like asthma, only 40 percent of adults and 10 percent of children are actually immunized. This leaves the vast majority of people with asthma at increased risk for serious complications and illness from influenza infection.

The Lung Association is actively advocating for improved influenza immunization rates, especially among the more than one million New York City residents, including 300,000 children, living with asthma.

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To assist with the immunization effort, the American Lung Association has compiled a searchable database of local flu shot clinics, the *Flu Clinic Locator*, which is available at www.lungusa.org. The American Lung Association's *Flu Clinic Locator*, and our partnership with the New York City Department of Health and Mental Hygiene on this topic is designed to encourage flu vaccination now, before the flu season swings into high gear.

In addition to those with asthma, the Centers for Disease Control and Prevention recommends annual influenza vaccinations for children, adults over 50, residents of long-term care facilities, women who may be pregnant during influenza season and health care workers.

Despite this last recommendation, less than one in three health care workers in New York City are vaccinated against influenza. Given that these individuals are on the front lines of public health and are the most likely to come in contact with the disease, their vaccination is essential to break the chain of infection. We urge the Council to ensure that New York City's health care workers are required to receive influenza vaccines.

Lastly, we urge the Council to keep pressure on our New York State legislators to pass legislation, which would give pharmacists the ability to provide flu and pneumonia immunizations. Allowing pharmacists to immunize is quickly becoming the standard of care in this country, but sadly New York lags behind as one of only seven states nationwide that do not allow pharmacists to administer vaccinations.

As a safe and cost-effective way to prevent illness and save lives, vaccinations must be as widely available as possible. Enabling pharmacists to administer flu and pneumonia immunizations is an effective way to prevent these respiratory diseases and drastically increase the amount of people who receive influenza immunizations.

The American Lung Association of the City of New York is pleased to work with the New York City Council and our elected leadership to ensure that we increase immunizations, decrease the incidence of influenza and allow New York City residents to breathe easier.

Thank you.

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**Testimony of Dr. Ruth Finkelstein, Director of the
Division of Health Policy
Of The New York Academy of Medicine**

***New York City Council Committee on Health
Oversight Hearing Regarding
New York City's Efforts to Combat the Flu***

***October 23, 2007
New York City***

Thank you for the opportunity to discuss New York City's efforts to combat the flu. On behalf of The New York Academy of Medicine we appreciate the City Council Health Committee's interest in this issue which has been the subject of important research at the Academy and has led the Academy to directly engage our local community to increase immunization rates.

The New York Academy of Medicine, founded in 1847, is an independent non-profit which uses research, education, community engagement and evidence-based advocacy to improve the health of people living in cities, especially disadvantaged and vulnerable populations. The impact of these initiatives reaches into neighborhoods in New York City, across the nation, and around the world. We look forward to working with the City Council on this and many other issues of mutual importance.

Every year, 10% to 20% of the American population falls ill with influenza and on average 36,000 persons die from influenza-related complications. Immunization reduces the illness and death that results from influenza and respiratory tract infections that result from the underlying influenza. Influenza immunization rates among the elderly, the population that accounts for 90% of influenza-related deaths, rose steadily

for a number of years, but have now leveled off at between 60 and 70%. In New York City, the City Health Department reports a city-wide rate of immunization of 60% for adults aged 65 and over.

Efforts to increase vaccination rates have historically targeted individuals at high-risk for complications due to influenza, including the elderly and those with certain chronic health conditions. Despite recommendations from the Advisory Committee on Immunization Practices (ACIP), vaccination coverage among high-risk populations has been generally low. We systematically reviewed 56 studies, published between 1990 and 2006, evaluating programs in different settings, from within medical settings to venue-based and community-based approaches, in an effort to identify programs that successfully increased immunization rates. In the US, the Healthy People 2010 (HP2010) goals included 90 percent vaccination coverage for adults aged ≥ 65 years and 60 percent for high-risk adults aged 18-64 years. Only a handful of the studies we reviewed managed to meet those goals. Interventions that increased vaccination coverage to HP2010 goals included advertising, provider and patient mailings, registry-based telephone calls, patient and staff education, standing orders coupled with standardized forms, targeting syringe exchange customers, and visiting nurses.

Of the 56 studies we examined, more than half of the studies occurred in primary care settings, one in four were large-scale regional programs (i.e., Medicaid, etc.), 7% were in tertiary care facilities or hospitals, 3% were targeted to nursing homes or long term care facilities, and 3% included active community engagement. Thus, most studies examined vaccination within the context of primary care settings or large-scale regional programs. In short, these programs targeted people already connected to the health care system. An important limitation of these types of approaches is their inability to reach those people who are not engaged in the health care system.

Data from several sources, including the National Health Interview Study, suggest that immunization rates are lower in racial/ethnic minority groups than Whites, a disparity that exists for all age groups, including elderly persons covered by Medicare and populations specifically targeted by public health interventions. Of particular concern is what is known as "hard-to-reach" (HTR) populations. While no uniform definition of HTR population exists, HTR populations have typically been defined from the perspective of the absence of regular linkage with the health care system. Although data are limited, hard-to-reach (HTR) groups such as the housebound elderly, disenfranchised groups, people living in disadvantaged urban communities, undocumented immigrants, and substance users may be less likely than individuals receiving routine health care services to receive influenza immunization.

While failure to be immunized is related to lack of health insurance and to having a regular provider, other barriers to accessing care may include: culturally derived attitudes and belief systems; negative experiences with past treatment; language and other barriers in patient-provider relationships; and, legal status (e.g., undocumented immigrants). Some groups harbor substantial myths about and distrust of the medical system; previous research has shown that their attitudes appear to be strong predictors of being immunized.

Members of HTR groups may be at increased risk of morbidity and mortality secondary to influenza because of increased incidence and prevalence of medical conditions for which influenza vaccine is recommended (e.g., asthma, diabetes), and reduced immune system activity due to lifestyle factors.

As noted above, a number of interventions have been shown to be effective for increasing vaccination coverage among the general population, including provider-based interventions, and interventions aimed at increasing community demand and enhancing access to immunization services. Studies on how best to immunize HTR populations

are sparse, however. Existing research suggests, however, that most interventions are strengthened by multiple approaches, particularly those that are community-based.

In light of the limited data available addressing vaccine access among HTR populations, we at the New York Academy of Medicine sought to fill this gap. We assessed the barriers to influenza vaccination in disadvantaged areas of East Harlem and the Bronx. Of 760 total respondents, 62% had received influenza vaccination at some point in their life. Having access to routine medical care, receipt of health or social services, having tested positive for HIV, and current interest in receiving influenza vaccination were significantly associated with having received influenza vaccination in the previous year. Of participants surveyed, 80% were interested in receiving an influenza vaccination at the time of survey. Among participants who had never previously received influenza vaccination in the past, 73% were interested in being vaccinated. In summary, we found that participants who are unconnected to health or social services or government health insurance are less likely to have been vaccinated in the past although these persons are willing to receive vaccine if it were available.

Because HTR populations experience significant barriers to vaccination, especially the lack of access to primary health care, we worked to increase interest in receiving influenza vaccination in a non-traditional urban setting.

The Harlem Community and Academic Partnership, a network of community-based organizations and health leaders affiliated with The Academy, carried out Project VIVA (Venue Intensive Vaccines for Adults). Project VIVA was a set of intervention activities aimed at increasing acceptance of influenza vaccination among HTR populations in East Harlem and the Bronx. Activities targeted the individual, community organization, and neighborhood-levels and included disseminating project information, presentations at community meetings, and providing street-based and door-to-door vaccination during two influenza vaccine seasons. We attended 35 community meetings

and distributed more than 100,000 promotional flyers, vaccination myths cartoons, vaccine/influenza information sheets and 2,200 vaccine doses.

Project VIVA increased interest in receiving influenza vaccine post-intervention. Individuals living in intervention neighborhoods were more interested in receiving influenza vaccine compared to their interest before the intervention. Specifically, members of HTR populations, persons reporting a prior influenza vaccine, and persons medically indicated to receive vaccine were more likely to be interested in receiving vaccine.

Community participation and leadership was critical to the success of Project VIVA. The Community Based Participatory Research (CBPR) methods used here, including community members leading the planning and implementation of the intervention, helped to ensure that community priorities were incorporated and contributed to our ability to gain access to members of HTR populations to deliver immunization. Specific factors contributed to the success of the rapid vaccination intervention: extensive outreach activities, the selection of staff with personal knowledge of the project neighborhoods, and the readily recognizable project staff wearing highly visible, and consistent, attire. These factors allowed us to gain access to populations unlikely to report to a private or government-sponsored health clinic to receive immunization. Our findings demonstrate the feasibility of delivering vaccine to members of HTR populations in non-traditional urban settings through the use of a CBPR framework.

Targeting underserved neighborhoods through a multilevel community intervention increased interest in influenza vaccination, particularly among the HTR. Given the research and community work we've done, The Academy recommends the City Council consider providing grants to community-based organizations and health providers to run targeted, culturally sensitive outreach programs with hard-to-reach

populations. In addition, the City Council and City Health Department should consider providing support to allow existing health outreach programs to expand their services to provide vaccinations.

In addition, the Council should consider that unlike most states, New York does not currently allow pharmacists to administer flu immunizations. While this is the province of lawmakers in Albany, the Council should consider examining whether permitting pharmacists to administer immunizations would increase flu vaccination rates and its impact on patient care.

New York City has taken important steps to increase vaccination rates and we applaud the New York City Department of Health and Mental Hygiene's efforts to track flu vaccination rates, increase provider awareness and undertake public education. Efforts to expand immunizations amongst the hard-to-reach populations will require creative and intensive efforts and must involve community organizations who can prepare for and promote vaccination in non-traditional settings and at times convenient to HTR populations.

Current strategies for vaccination all-too-often miss the hard-to-reach population. This population cannot be ignored and the strategies we implement today, and the lessons we learn, will be vital if, and when, we face a pandemic influenza. Thank you for the opportunity to testify and I look forward to any questions you might have.