## **CONTAINING EPIDEMICS**

## An effective school- and community-based campaign vaccinated the City against H1N1.

A lmost all the schoolchildren were calm and uncomplaining, the New York City Health Department Pandemic Influenza Coordinator remembered. Traveling from school to school in the fall of 2009, she was also impressed by the smooth routine— "assembly lines of students" getting nasal sprays or injections of H1N1 flu vaccine.

It was a sharp contrast to the spring before, when New Yorkers terrified of "swine flu" thronged New York City's emergency rooms—44,678 patients from May 15 to June 15, compared with 4,267 during the same period the year before. On the peak day, 2,500 came. There were five times as many pediatric ER visits as normal. The hospitals surged to manage the three S's of healthcare planning—staff, stuff and space—in the rush, which experts call a "medical surge."

The City's H1N1 response began on a late-April Thursday, when a Queens prep school nurse reported over 100 students complaining of aches, sore throats and fever. Friday afternoon, Health Department investigators took throat and nasal swabs at the school. Saturday, while those same investigators interviewed other students' families, the NYC Public Health Lab tested the samples. Sunday, the federal Centers for Disease Control and Prevention confirmed H1N1. The Health Department closed the school, and later, dozens more.

# H1N1 taught New York City some critical lessons.

Officials stressed that most cases were mild; they urged handwashing and bed rest. But the frightening media stories had gotten out first and upstaged the reassuring public health messages. In May, when two middle-aged New Yorkers died, every cough rang an alarm.

The fear was worse than the flu. Of those thousands of hospital visits daily, only 40 to 50 people were sick enough to admit. Of the nearly 1 million who fell ill, 47 died. The "case-to-fatality ratio" was equal to that of an ordinary flu season.

H1N1 taught New York City some critical lessons: The response required streamlined decision-making and greater coordination between lines of authority, especially with information and messaging.

Knowing that the flu usually makes an encore appearance a few months later, the Health Department worked through the summer to

prepare for the fall. A vaccine became available. The plan: a massive school-based campaign to administer it. Faculty, school nurses and parents were ready. Across the city, kids lined up for their vaccines.

When more vaccine was produced, New York City made it available to everyone over 4 years old through pharmacies and Points of Dispensing—temporary sites where the Health Department provides medications to the public during a public health emergency.

Rapidly vaccinating kids would not only help prevent them from getting sick, but also protect others in their families and communities who may be more likely to contract this flu strain. Families live in communities. Communities make up a nation. The vaccine and the broad effort to deliver it helped protect a nation.

> 3,500 city staff and more than 2,500 volunteers administered H1N1 vaccines citywide.

> > 1+1=2

1,232 schools 49,986 VACCINES at 58 community Points of Dispensing

202,089

VACCINES at





#### Impact

- From October 28, 2009, to January 8, 2010, the Health Department visited 1,232 elementary schools and provided 202,089 H1N1 vaccines to students.
- From November through December 2009, the Health Department vaccinated almost 50,000 more people at 58 Points of Dispensing.
- CDC Public Health Emergency Preparedness supported the development of the Health Department's Incident Command Structure. This structure has been increasingly used to manage routine disease outbreaks.

### **Critical Need**

- Staff funded by preparedness grants are essential to maintain lab and surveillance capability, as well as the capabilities to distribute vaccines and antibiotics to the public.
- The Health Department engaged the NYC Department of Education in citywide pandemic flu planning prior to the vaccination campaign. Relationships built between the two departments helped make the campaign a success. Such planning and coordination is costly.

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NYC Public Health and Healthcare Preparedness and Response REPORT

