## H1N1 Hospitalizations Rise Again in Georgia

BY HEIDI SPLETE

he 2009 influenza A(H1N1) virus has not disappeared, and Georgia has seen a surge in hospitalizations among adults due to H1N1 flu over the past several weeks, a federal official reported during a teleconference.

Most new hospitalizations related to the H1N1 flu in Georgia have occurred in adults with chronic conditions, such as diabetes, heart disease, and asthma, said Dr. Anne Schuchat, director of the Centers for Disease Control and Prevention's National Center for Immunization and Respiratory Diseases.

"We are continuing to see people with serious illness from the pandemic H1N1 virus," Dr. Schuchat said. Disease rates in most parts of the United States are, on average, lower than they were last fall, but individuals continue to get sick, become hospitalized, and die, she emphasized.

No states are currently reporting widespread activity, but three states—Georgia, Alabama, and South Carolina—are reporting regional flu activity, and the rate of laboratory-confirmed hospitalizations for H1N1 illness in Georgia has returned to levels similar to those seen last fall.

Early in March, Georgia public

health officials requested the CDC's help in investigating the cause of the surge in hospitalizations, and this investigation is ongoing.

"The findings we have so far suggest the value of vaccination, particularly among adults with chronic illness or advanced age, who are more likely to become severely ill if they encounter the H1N1 virus," Dr. Schuchat said. "We don't have any evidence that the H1N1 virus has changed."

"The CDC strongly urges people with underlying health conditions and those over 64 years to get vaccinated. We have an excellent safety record now for the H1N1 vaccine," she added.

U.S. Surgeon General Regina Benjamin emphasized the continuing need to educate the public about the value of H1N1 vaccination, especially minority groups, who are more likely to have the chronic medical conditions that put people at increased risk. "The flu season is not over yet," Dr. Benjamin said. "Vaccination is the best protection."

Dr. Schuchat confirmed that the H1N1 virus will be part of a trivalent influenza vaccine that will be available this fall. The CDC recommends vaccination with the current H1N1 vaccine now for protection in the months ahead until the trivalent vaccine becomes available, Dr. Schuchat said.

## Pandemic Influenza A(H1N1): Lessons Learned Thus Far

BY BRUCE JANCIN

KEYSTONE, COLO. — Two large waves of 2009 influenza A(H1N1) have swept across the country, and now viral respiratory disease experts are assessing what the health care community did right—and wrong—to improve response should a third wave hit.

Topping the list of mistakes was the poor distribution of vaccine. The H1N1 vaccine was quickly developed, successfully tested, and manufactured in impressive fashion. It created an excellent antibody response in normal hosts. But there was a major breakdown when it came to distribution, Dr. Gwen A. Huitt said at a meeting on allergy and respiratory diseases.

Another big problem was "woefully inadequate" viral testing methodology. So many people had a negative rapid test—even though they had classic symptoms of H1N1 infection—that the testing was basically abandoned. Rapid, reliable, and relatively inexpensive polymerase chain reaction (PCR) tests are being developed and will soon be available. But the new PCR tests are unlikely to find their way into most physicians' offices or smaller clinic facilities, according to Dr. Huitt, director of the adult infectious disease care unit at National Jewish Health and professor of medicine at the University of Colorado, both in Denver.

Other areas in need of improvement include the following:

▶ Poor education. Only about one-third of the general population has been vaccinated to date. The great majority of the public was not persuaded by the case for immunization made in the vaccination campaign.

More effective pandemic H1N1 education needs to be aimed not only at the general public, but also at health care workers, said Dr. Huitt at the meeting, which was sponsored by the National Jewish Medical and Research Center.

- ▶ Treatment issues. Physicians learned too slowly that the antiviral agents are less effective in special populations. For example, it was discovered that much higher doses of oseltamivir (Tamiflu) are required in obese patients—which was one of the groups at particularly high risk of hospitalization and severe complications of H1N1.
- ► Legal issues regarding mandatory vaccination. "We're still dealing with this," Dr. Huitt said. "I can tell you there's ongoing litigation on this issue."

What did the medical community get right? Pandemic preparedness algorithms were already in place before case counts started rising. Antiviral agents were available in adequate quantities. Physicians were quick to recognize that testing methods were inadequate and couldn't be relied on. And the vaccine was protective.

**Disclosures:** Dr. Huitt indicated she has no relevant financial relationships.

## H1N1 Vaccination Patterns Show Marked State Variation

BY MITCHEL L. ZOLER

Uptake of the 2009 influenza A(H1N1) vaccine by the American public showed a striking state-by-state variation, ranging from a high of 39% in Rhode Island to a low of 13% in Mississippi, the Centers for Disease Control and Prevention reported.

The CDC's H1N1 vaccination data, which cover the period through the end of January 2010, also showed sharp variations in vaccine uptake based on people's age and whether they fell into one of the initial target groups for the vaccine, the agency reported (MMWR 2010;59:363-8).

Among Americans aged 6 months to 17 years, one of the initial target groups, vaccine coverage ranged from a high of 85% in Rhode Island to a low of 21% in Georgia. For all people in the initial target groups, uptake rates ranged from 58% in Rhode Island to 19% in Mississippi. In addition to children aged 6 months to 17 years, other initial target groups included pregnant women, health care and emergency medical personal, adults aged 18-24 years, and adults 25-64 years with high-risk medical conditions.

The wide geographic variation in vaccination rates "suggests opportunities for improvement" in future flu vaccine seasons, such as boosting the distribution of vaccine at public venues such as

schools, the investigators wrote. Among four New England states that achieved especially high vaccination rates of 60% or greater among children, three states—Maine, Rhode Island, and Vermont—had statewide school vaccination campaigns that coincided with a period of high vaccine demand.

Health care personnel also showed high levels of H1N1 vaccine uptake, although the rate fell short of their uptake of seasonal flu vaccine during the period of August 2009 to January 2010. During that period, overall uptake of any influenza vaccine occurred in 64% of health care personnel, including 62% who received the seasonal flu vaccine and 37% who received the H1N1 vaccine. A total of 35% received both vaccines (MMWR 2010;59:357-62).

The 64% overall flu vaccine uptake rate among health care personnel "for the first time meets the Healthy People 2010 target of 60%," the authors noted.

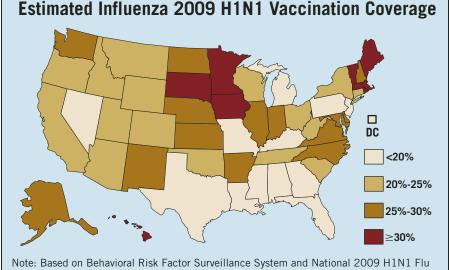
The CDC also found that health care personnel who were subject to employer requirements for vaccination were most likely to receive a flu vaccine. Those results were based on health care personnel flu vaccination rates obtained in an Internet-based survey with 1,417 respondents.

In addition, 81% of the health care personnel surveyed believed the seasonal influenza vaccine was safe, compared with 67% who believed the H1N1 vaccine was safe. The two most commonly cited reasons for not receiving vaccine were "I don't need it" and fear of side effects.

"Seasonal flu vaccine rates were higher than in prior years," Dr. Anne Schuchat, director of the CDC's National Center for Immunization and Respiratory Diseases, said at an April 1 press briefing.

Other findings from the CDC's survey of vaccination uptake in the general U.S. population showed median, nationwide rates for H1N1 vaccination of 22% in people aged 65 years or older, 14% in those aged 25-64 years and not in an initial target group, and 25% in those aged 25-64 years in an initial target group.

For all Americans aged 6 months or older, the median H1N1 vaccination rate was 24%, the CDC reported. As of the end of February 2010, between 72 million and 81 million Americans had received at least one dose of H1N1 vaccine, Dr. Schuchat said.



Note: Based on Behavioral Risk Factor Surveillance System and National 2009 H1N1 Flu Survey data for 73,864 children and 140,452 adults.