

# It's Unofficial: For Public, Flu Pandemic Is Over

BY MITCHEL L. ZOLER

Much of the American public has unofficially declared the influenza A(H1N1) pandemic of 2009-2010 over, even though health officials continue to urge Americans to get vaccinated.

The U.S. population spoke with its unrolled sleeves and averted nostrils. That's to say that during January, the period when the H1N1 vaccine was available to all U.S. residents and not officially limited to just those in high-risk groups, the pace of vaccination fell to the relatively low rate of about 9 million people immunized during the month. This was a significant drop compared with an average rate of about 20 million vaccinations per month from October through December, according to survey results and extrapolations made by the Centers for Disease Control and Prevention (CDC).

Interest in the H1N1 vaccine in January ran parallel with the low level of H1N1 infection that month. During the final week of January, the CDC's sentinel system found that 1.9% of physician visits involved influenza, with virtually all identified strains H1N1, compared with a national baseline level "during the off-season" of 2.3%, indicating infection rates were far from epidemic.

The prospects for much more H1N1 vaccine uptake by Americans seem dim, given results from a poll conducted Jan. 20-24 by the Harvard Opinion Research Program of Harvard University's School of Public Health, Boston. A telephone interview survey of more than 1,400 American adults found that 44% said the H1N1 outbreak was "over," and only 32% had concern that they or someone in their immediate family might get sick from H1N1 during the next several months.

The poll also found that 61% of respondents had not received the H1N1 vaccine and did not intend to get it in the future, with 37% of those polled saying their major reason for shunning the vaccine was that they did not think the H1N1 outbreak to be as serious now as public health officials once thought.

"The skepticism of this group indicates that, going forward, it may be difficult to get more movement in the percentage of adults vaccinated for H1N1," Robert J. Blendon, Sc.D., professor of health policy and political analysis at Harvard and director of the Opinion Research Program, said in a statement.

"The public aren't dummies. They figured out that despite the exhortations of the CDC to still get vaccinated [against H1N1] because the virus is still out there, at the moment it's a much

quieter flu season than usual and so they are not lining up for vaccine," said Dr. William Schaffner, professor and chairman of the department of preventive medicine at Vanderbilt University in Nashville. "In Tennessee, we have ample supplies of vaccine and few customers right now. The stock is not moving."

CDC officials maintained their commitment to widespread vaccination of the American public against H1N1. At a media briefing in February, Dr. Anne Schuchat, director of the CDC's National Center for Immunization and Respiratory Diseases, warned that "many people believe the outbreak is over, and I think it's too soon for us to have that type of complacency. ... My sense is that we are not at all out of the woods, because the [H1N1] virus continues to circulate. The chances of a very large, additional wave are very hard to predict."

But indications are that the CDC will not meet a receptive public unless a third wave of widespread H1N1 infection does indeed occur before the end of the flu season this spring.

Statistics show the H1N1 vaccine never caught on in the United States. The approximately 70 million Americans who got the vaccine through the end of January—23% of the population according to CDC numbers—contrasts with the 32% of Americans who received the sea-

sonal 2009-2010 flu vaccine through mid-November 2009, according to a survey by the RAND Corp. For the 2008-2009 season, 38% of American adults had received the seasonal flu vaccine as of March 2009, according to RAND.

Experts cite poor timing in the H1N1 vaccine's availability last fall, confusion about who was to get the vaccine based on its limited early supply, and concerns about the vaccine's safety.

"The vaccine was too little, too late in the public's mind," said Dr. Gregory A. Poland, professor of medicine and director of the vaccine research group at the Mayo Clinic, Rochester, Minn.

"Vaccine availability peaked just as the second wave of the pandemic diminished." The public "waited and waited for [the vaccine], and when it became available they stopped hearing reports of cases." Another important factor was the "underlying distrust and suspicion about vaccines, with many Americans believing the vaccine was too rushed, untested, and not safe."

The striking difference in H1N1 vaccine uptake, compared with the reception the seasonal flu vaccine received in September through November, isn't surprising because "people looked at the H1N1 vaccine differently," Dr. Poland said in an interview.

"People are familiar with the seasonal vaccine and presumably more comfortable with its safety; drugstores and supermarkets heavily promoted [seasonal] flu shots; and most important, in contrast to H1N1, there was seasonal vaccine available to meet demand at the time vaccination was being heavily promoted. The public heeded the call to be vaccinated early," said Katherine M. Harris, Ph.D., a senior economist at RAND Corp. and lead researcher on RAND's flu vaccine surveys. "Three times as many people were vaccinated against seasonal

flu in September compared with the same time last year."

Dr. Georges C. Benjamin, executive director of the American Public Health Association, agreed. "Seasonal vaccine was available in an environment when people were concerned about the flu. Public health officials were effective at promoting the need to get seasonal vaccine. The diminishing risk of high mortality and morbidity from H1N1 in the broader population reinforced the belief that the [H1N1] vaccine was not essential. The failure of a third wave to occur to date has also reinforced this belief."

Dr. Benjamin also cited the public's safety concerns about the "new" H1N1 vaccine, and confusion about the number of vaccinations needed for protection.

Dr. Poland highlighted the tiered approach that targeted the earliest available H1N1 vaccine exclusively to high-risk people as another factor that dissipated momentum of the vaccination effort last fall.

"It caused delay, and as a result we'll have tens of millions of H1N1 vaccines go to waste."

The major underlying problem appears to have been a mismatch between vaccine supply and demand, which meant missing the key vaccination window as the second wave of H1N1 infection built and peaked last fall.

"The single biggest problem is that we did not have enough vaccine early enough," Dr. Schaffner said. "The bulk of the vaccine began to arrive between the [Thanksgiving and Christmas] holidays, and there was a sense by then that H1N1 had peaked."

Because the vaccine strain of the H1N1 virus grew more slowly than expected, "the output of vaccine was not optimal," Dr. Benjamin said. "This argues for current efforts the scientific community is undertaking to use newer methods to make the vaccine." ■

**Disclosures:** Because the federal government fully funded H1N1 vaccine production, the sources in this article have no relevant disclosures, except for Dr. Schuchat, who is a government employee.



**'We have ample supplies of vaccine and few customers right now. The stock is not moving.'**

DR. SCHAFFNER

## Less Than a Quarter of U.S. Population Got H1N1 Vaccine

BY ROBERT FINN

Between 39 million and 80 million people in the United States contracted influenza A(H1N1) between April 2009 and Dec. 12, 2009, according to data collected by the Centers for Disease Control and Prevention.

The midlevel of the estimated range is 55 million individuals. Of those infected with H1N1 influenza, an estimated 173,000-362,000 were hospitalized, and between 7,880 and 16,460 died, the CDC reported.

Adults 18-64 years of age accounted for another 32 million

cases, and about 18 million children 0-17 years of age contracted the virus. There were 5 million cases among individuals 65 years of age and older.

According to two surveys (the National 2009 H1N1 Flu Survey and the Behavioral Risk Factor Surveillance System), an estimated 61 million persons (20% of the U.S. population) had received the monovalent H1N1 vaccine by Jan. 2, 2010, including 29% of children and 22% of health care personnel (MMWR 2010;59:1-5).

About 28% of people in the initial target groups and 38% of those in the limited vaccine sub-

set received at least one dose. The initial target groups included pregnant women, persons who live with or care for infants less than 6 months of age, young adults aged 6 months to 24 years, and persons aged 25-64 years with certain medical conditions. The limited vaccine subset included pregnant women, persons who live with or care for infants less than 6 months of age, health care and emergency services personnel, children aged 6 months to 4 years, and children aged 5-18 years with certain medical conditions.

At an estimated 33%, the vac-

ination rate was highest among children 6 months to 4 years of age. The lowest rate, 11%, was among adults 65 years of age and older.

"Nearly 90% of adults aged

[less than] 65 years with medical conditions that increase their risk for influenza-related complications remain unvaccinated," wrote J.A. Singleton and colleagues at the CDC. ■

### VERBATIM

*'The adherence in this study was absolutely off the charts.'*

Dr. Marc L. Benton, on using continuous positive airway pressure to help golfers prevent obstructive sleep apnea—and improve their golf scores, p. 43.