# Survey: U.S. Public Deems H1N1 Pandemic Over

BY MITCHEL L. ZOLER

By the start of February, much of the American public had unofficially declared the influenza H1N1 pandemic of 2009-2010 over, even though as recently as Feb. 5 U.S. health officials continued to urge Americans to get vaccinated.

The U.S. population spoke with unrolled sleeves and averted nostrils. That's to say that during January, the period when the 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



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October through December, according to survey results and extrapolations made by the Centers for Disease Control and Prevention (CDC) in Atlanta.

Interest in the H1N1 vaccine in January ran parallel with the low level of H1N1 infection last month. During the final week of January, the CDC's sentinel system found that 1.9% of U.S. 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 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. A telephone 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," said Robert J. Blendon, Sc.D., professor of health policy and political analysis at Harvard in Boston and director of the Opinion Research Program, in a written 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."

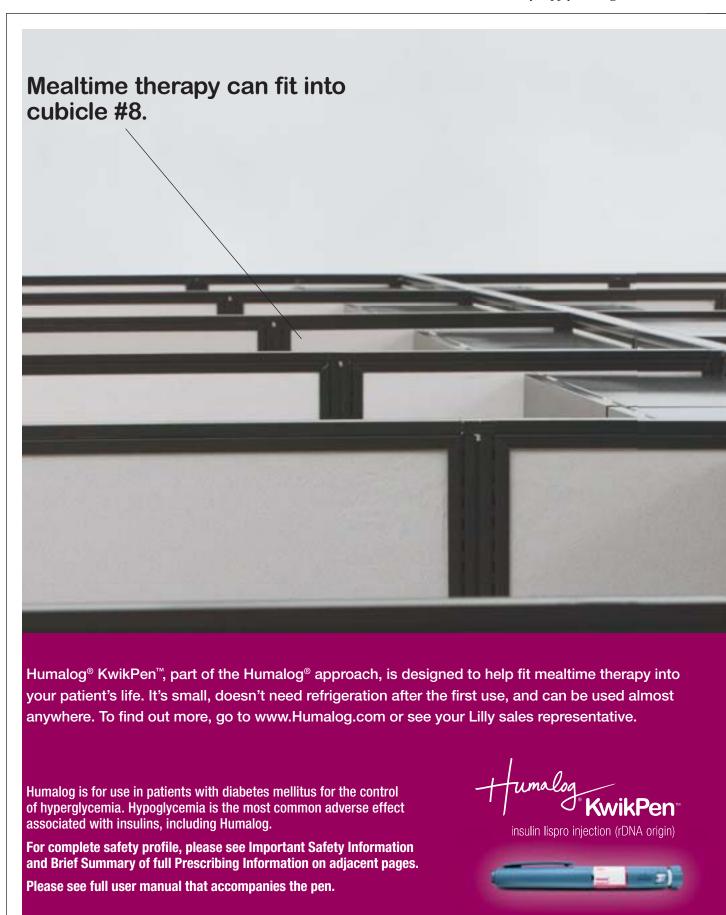
Statistics show the H1N1 vaccine nev-

er caught on in the United States. The approximately 70 million Americans who got the vaccine through the end of January, 23% of the U.S. population according to CDC numbers, contrasts with 32% of American who received the seasonal 2009-2010 flu vaccine through mid-November 2009, according to a survey by the RAND Corporation. For the 2008-2009 season, RAND reported, 38% of American adults had received the

seasonal flu vaccine as of March 2009.

What made the H1N1 vaccine so much less popular, despite an unprecedented public health campaign? (The federal government's widely publicized strategy was to swiftly buy and distribute up to 200 million doses of vaccine.)

Experts cite poor timing in the vaccine's availability last fall, confusion over who was to get the vaccine based on its limited early supply starting last October,



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 Mayo Clinic in Rochester, Minn.

"Vaccine availability peaked just as the second wave of the pandemic diminished," he said. The American public "waited and waited for [the vaccine], and when it become 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 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, drug stores 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.

Dr. Poland highlighted the tiered approach that targeted the earliest available H1N1 vaccine to high-risk people as another factor that dissipated momentum of the vaccination effort. "I don't think it works well on a public health level. It caused delay, and as a result we'll have tens of millions of H1N1 vaccine [doses] go to waste. If we had instead said

first-come first-served I don't think we would have wasted as many doses."

The major underlying problem appears to have been a mismatch between vaccine supply and demand.

"If I had to choose one element that slowed the whole thing down, it was that the bulk of the vaccine began to arrive between [Thanksgiving and Christmas], and there was a sense by then that H1N1 had peaked," said Dr. Schaffner.

Because the U.S. government totally funded H1N1 vaccine production, the sources in this article have no disclosures relevant to the topic.

## Indication

Humalog (insulin lispro injection [rDNA origin]) is for use in patients with diabetes mellitus for the control of hyperglycemia. Humalog should be used with longer-acting insulin, except when used in combination with sulfonylureas in patients with type 2 diabetes.

### **Important Safety Information**

Humalog is contraindicated during episodes of hypoglycemia and in patients sensitive to Humalog or one of its excipients.

Humalog differs from regular human insulin by its rapid onset of action as well as a shorter duration of action. Therefore, when used as a mealtime insulin, Humalog should be given within 15 minutes before or immediately after a meal.

Due to the short duration of action of Humalog, patients with type 1 diabetes also require a longer-acting insulin to maintain glucose control (except when using an insulin pump). Glucose monitoring is recommended for all patients with diabetes

The safety and effectiveness of Humalog in patients less than 3 years of age have not been established. There are no adequate and well-controlled clinical studies of the use of Humalog in pregnant or nursing women.

Starting or changing insulin therapy should be done cautiously and only under medical supervision.

#### **Hypoglycemia**

Hypoglycemia is the most common adverse effect associated with insulins, including Humalog. Hypoglycemia can happen suddenly, and symptoms may be different for each person and may change from time to time. Severe hypoglycemia can cause seizures and may be life-threatening.

### **Other Side Effects**

Other potential side effects associated with the use of insulins include: hypokalemia, weight gain, lipodystrophy, and hypersensitivity. Systemic allergy is less common, but may be life-threatening. Because of the difference in action of Humalog, care should be taken in patients in whom hypoglycemia or hypokalemia may be clinically relevant (eg, those who are fasting, have autonomic neuropathy or renal impairment, are using potassium-lowering drugs, or taking drugs sensitive to serum potassium level).

For additional safety profile and other important prescribing considerations, see accompanying Brief Summary of full Prescribing Information.

Please see full user manual that accompanies the pen.

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insulin lispro injection (rDNA origin)

