

H1N1 Testing in America: After the Pandemic's Peak

Quest Diagnostics, the world's leading diagnostic testing company, is uniquely positioned to provide insights into the impact of the H1N1 influenza virus on Americans. Quest Diagnostics performs H1N1 laboratory testing for physicians across the U.S. Through its Focus Diagnostics business, the company also provides two H1N1 test kits that the FDA has authorized for emergency use by other qualified molecular laboratories.*

In this Quest Diagnostics Health Trends™ Report, we summarize analyses of de-identified data representing about 85 percent of our total national test volume for H1N1. Our H1N1 tests report whether a patient's specimen is positive for influenza A and/or H1N1.

Our analysis supplements CDC reporting: cdc.gov/flu/weekly/.

**These H1N1 tests have not been FDA cleared or approved. These H1N1 tests have been authorized by FDA under an Emergency Use Authorization (EUA). These H1N1 tests are only authorized for the duration of the declaration of emergency under section 564(b)(1) of the Act, 21 U.S.C. § 360bbb-3(b)(1). The declaration of emergency will expire on April 26, 2010, unless it is terminated or revoked sooner or renewed.*

Quest Diagnostics is the world's leading provider of diagnostic testing, information and services that patients and doctors need to make better healthcare decisions. For more information, visit QuestDiagnostics.com.

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Declines in Testing Demand, Positivity Rates Suggest End of Pandemic's Peak

Influenza viruses often circulate in waves of activity. Based on the company's test data, two major waves of H1N1 influenza virus activity have affected the U.S. since the H1N1 virus was identified in the U.S. in late April.

As the graphic below indicates, the first wave started in early May, following the discovery of the virus in the U.S. A second wave began in late August and peaked the week ending October 28. [A December 2009 Quest Diagnostics H1N1 Health Trends Report](#) showed that testing rates in early December were equivalent to volumes experienced in late August, when the second wave began.

The second wave was the most dramatic in terms of increased testing demand. It coincided with the beginning of the school season, when children across the U.S. congregated in classrooms – presumably passing the virus among one another and, eventually, family and other members of the community.

According to recent analyses, testing volume has continued to decrease since December, and now is roughly commensurate with volumes when the company first launched its H1N1 flu test in early May 2009. Since peaking in early November, volume has declined by 96 percent.

Moreover, positivity rates have also declined. In late October, when the pandemic peaked, positivity rates for H1N1 were about 60 percent of specimens tested for influenza A. For the week ending February 18, 2010, the H1N1 positivity rate was only about 13 percent.

The company's data also shows that H1N1 continues to be the predominant strain of influenza. In recent weeks, approximately 99 percent of specimens that tested positive for influenza A were also positive for H1N1. These data may suggest that H1N1 has "crowded out" other potential seasonal influenza A strains.

Our test data does not provide the basis for identifying the factors driving the recent decline in testing demand, although several possible explanations exist. These include previous infection of tens of millions of Americans with this influenza virus; H1N1 vaccinations, which have reduced the number of susceptible patients; and changes in physician test-ordering practices.

Nonetheless, influenza viruses are unpredictable, and the risk remains that one or more waves of H1N1 or seasonal flu activity could occur later this year.

H1N1 Test Volume By Week

