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Tests for H1N1 not likely for most

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If you come down with a nasty cough, a fever over 100 and other flu-like symptoms this fall, do you have the new 2009 H1N1 pandemic virus or the regular, get-it-every-year seasonal flu?

Your doctor might take a culture, but, chances are, you might never know the results.

If you're not part of a group that's traditionally considered at high risk for flu complications, such as those with chronic respiratory illness or the immune-compromised, it's unlikely your doctor will need to determine which specific virus is making you sick. Knowing what you have isn't likely to make a difference in how you will be treated, anyway.

The reason for this judicious use of diagnostic testing is twofold, said Andrew Pekosz, associate professor of molecular microbiology and immunology at The Johns Hopkins University Bloomberg School of Public Health.

One, obtaining a conclusive identification of 2009 H1N1 is labor intensive, and capabilities for doing so are limited. And two, testing priority must be given to high-risk groups and those who are seriously ill because in those cases a definitive diagnosis may help pinpoint the appropriate medication.

A "reasonable turnaround time" for test results needs to be maintained for those with the most serious cases, Pekosz said.

For the high risk or the hospitalized, testing may help inform doctors about how best to fight the virus. Besides Tamiflu, other antiviral drugs are available, said Rene Najera, an epidemiologist and the flu surveillance coordinator for Maryland's Department of Health and Mental Hygiene. Some physicians may choose to test patients in those circumstances to help make the best treatment choice.

But most won't need to know the exact cause of their illness, and experts are in agreement that most infected people will recover from 2009 novel H1N1 within days, without medical treatment.

The testing process that definitively isolates the 2009 H1N1 virus requires three separate tests to finally distinguish the new virus strain from the various seasonal strains, said Pekosz, a virology specialist who has been studying influenza since 1996.

The first step — a rapid antigen test — determines if the sample is positive for influenza type A, influenza type B or neither. Most seasonal flu cases are influenza type A, Pekosz said.

Next, the sample is tested for the specific proteins typically found in seasonal flu strains. If that test is negative, a third test is used to look for the specific "genetic signature" encased in the 2009 H1N1 virus, he said.

Every year when flu season hits, The Centers for Disease Control and Prevention and the World Health Organization collect and test samples and conduct surveillance of flu activity, usually starting in October or November and ending in March or April, Pekosz said.

This year, however, the organizations never ceased doing so, because the novel H1N1 strain hit this spring and has never really left, he said.

The majority of flu cases in the Southern Hemisphere — which is just now emerging from its flu season — were caused by the novel 2009 H1N1 virus, with only about 10 percent to 20 percent attributable to seasonal flu strains, Pekosz said.

The CDC's surveillance, which includes data provided by more than 3,000 healthcare providers across the country that test all patients with flu symptoms and submit their samples, shows the same pattern is playing out in the United States, said Tom Skinner, a CDC spokesman.