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Swine Flu: The Next Wave

What You Need to Know as the Virus Threatens to Spread With the Start of the School Year

By [BETSY MCKAY](#)

With about 55 million U.S. children heading back to school in the next few weeks, concerns are growing that the H1N1 swine flu will spread even further than it already has. Identified by scientists four months ago, the virus has already turned up in nearly every corner of the world, from Argentina to Iran. It defied public-health officials' predictions of a lull in the warm summer months, proliferating in military units and children's summer camps.

More than two million people are believed to have contracted the new flu in the U.S.; 7,511 had been hospitalized and 477 had died as of Aug. 13, according to the Centers for Disease Control and Prevention. World-wide, 177,457 people have been confirmed with the disease, and 1,462 deaths had been reported as of Aug. 12, according to the World Health Organization.

A vaccine against the new flu is under development, but it is unlikely to be widely available before the flu season gets under way. That could leave many people scrambling to protect themselves and their children.

Here is what you need to know:

How dangerous is the H1N1 swine flu?

Public health officials initially feared a deadly scourge, after reports of dozens of deaths in Mexico. Instead, "what we are seeing looks very much like seasonal flu so far," Health and Human Services Secretary Kathleen Sebelius said earlier this month. Most people suffer unpleasant but not life-threatening symptoms, such as fever, body aches, sore throat and runny nose. Gastrointestinal problems—vomiting and diarrhea—are normally rare for adults with flu, but have been reported globally in as many as 50% of nonhospitalized patients with the virus.

Many people don't even develop a fever, though they had other symptoms, says Richard Wenzel, chairman of the department of internal medicine at Virginia Commonwealth University's Medical College, who observed such cases on trips to Latin America. One academic hospital in Chile told Dr. Wenzel that only half of its outpatients infected with H1N1 swine flu had fever; some had only a runny nose, sometimes with a headache, he says.

One unusual thing: Young people are getting sick, while the elderly, who normally account for 90% of annual deaths from flu, have largely been spared. Most of those who died—generally of viral pneumonia and other complications—have ranged from 25 through 64 years old, according to a CDC analysis. CDC officials say people 60 and older may have some immunity to the new virus from exposure to H1N1 viruses that circulated between 1918 and 1957.

For more information

- [CDC's guidance for schools](#)
- [More H1N1 information from CDC](#)

- [World Health Organization's situation update](#)
- [WHO pandemic flu vaccine timeline](#)
- [Study published in the Lancet on the H1N1 virus during pregnancy](#)

Public health officials are monitoring the disease closely. Scientists point to a few hopeful signs: The new H1N1 virus lacks gene sequences that made the 1918 flu virus so deadly, and it hasn't mutated into a more-virulent form despite its rapid spread.

Who is most at risk?

Pregnant women and people with asthma, diabetes, heart disease and other chronic diseases. About 70% of those hospitalized and about 80% of those who have died in the U.S. had underlying medical conditions, according to the CDC. [In a study published in the Lancet](#), CDC scientists found pregnant women were more than four times as likely to be hospitalized with the new flu than the general population.

It isn't clear whether obesity itself is a risk factor. Morbidly obese patients have had greater complications, but it may be due to diabetes or other chronic diseases they have, health officials say.

What if I get swine flu?

You can't know for sure if you have the new H1N1 flu unless you get a test. But rapid flu tests haven't proven reliable at pinpointing cases of the new disease; only a lab test can confirm whether you have it.

Treatment is similar to that for seasonal flu. Most people get well by resting, staying hydrated and taking medicines to reduce fever. Stay home and keep your distance from others for at least 24 hours after your fever is gone.

Children under 18 years old shouldn't be given aspirin due to a risk of Reye's Syndrome, a rare but potentially life-threatening illness. Don't give cold medicines to children under four without first talking with a pediatrician.

You should call the doctor if you have trouble breathing, chest or abdominal pain, dizziness, confusion or persistent vomiting, or if your flu symptoms worsen after improving, the CDC says. Call the pediatrician if your child has those symptoms, isn't drinking enough fluids, or is irritable or sluggish.

Reuters

Should I take an antiviral such as Tamiflu?

Two antiviral medications, oseltamivir and zanamivir, marketed as Tamiflu and Relenza, respectively, can help shorten the duration and severity of H1N1 swine flu.

The WHO and the CDC don't recommend oseltamivir and zanamivir for people with only mild H1N1 swine flu illness, partly out of concern about the potential emergence of H1N1 swine-flu viruses that are resistant to the drugs. But the drugs should be prescribed for adults and children who have severe H1N1 swine flu or who are at risk for complications from the disease, the agencies say.

Side effects include nausea, vomiting and dizziness for both drugs. The CDC recommends use of the drugs for pregnant women, given their high risks of flu complications, though it notes that studies to assess their safety in pregnant women are lacking.

When will a vaccine be available, and how can I get it?

Public health officials say a vaccine is the best defense against the new flu, but you may have to wait until well into flu season to get one. The first 45 million doses—of a total of 195 million—are expected to be ready by mid-October, with approximately 20 million doses delivered each week thereafter. The shots are set to be recommended first for those at highest risk of complications, as well as health-care workers and close contacts of infants.

Officials expect each person will need two separate doses, so if demand is high for the voluntary shots, many people will have to wait. The priority groups total about 159 million people, or more than half the U.S. population. It's worth getting the vaccine, to boost your immunity, if you believe you had the virus but aren't sure, or if you did have the virus but are considered at high risk of flu complications, says Nancy Cox, the CDC's flu chief.

Shots will probably be offered starting in mid-to-late October in many of the same places where you can get seasonal flu vaccine—doctors' offices, retail outlets and pharmacies. Many schools will also likely offer it.

The H1N1 swine flu shot won't protect you against seasonal flu, and the seasonal flu shot, which many locales will start offering in September, won't protect you against the new H1N1 virus. You will need both shots.

Is the vaccine safe?

The government and vaccine manufacturers are conducting clinical trials to determine whether the vaccine is effective and how large a dose is needed. Initial results are expected in early October. Some experts and advocates have expressed concern that the vaccine may be administered to pregnant women and children before full test results are in. But government officials believe the new vaccine is safe because it resembles seasonal flu vaccines, which normally don't undergo trials.

"It's made by the same companies, using the same processes, with the same materials," says Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases, which is overseeing the trials. Flu vaccines "have been given to tens and tens of millions of people for decades with an excellent safety record, including to pregnant women."

Some are also worried about thimerosal, a preservative that contains mercury and is in multi-dose vials of vaccine. The CDC says thimerosal-free vaccine will be available in the form of both shots and nasal spray.

First In Line for Swine-Flu Shots

- Pregnant women
- Infants' caregivers and contacts
- Children ages 6 months through 24 years old
- People up to 65 years old with medical conditions
- Health-care workers
- Emergency medical-services workers

Source: Centers for Disease Control and Prevention

Others have voiced concern that Guillain-Barré Syndrome, a potentially life-threatening neurological disorder, could emerge as a side effect of the vaccine. Hundreds of people out of more than 40 million vaccinated against swine flu in a 1976 campaign contracted GBS.

A 2003 report by the Institute of Medicine, a federal advisory body, found that evidence favored a "causal relationship" between the 1976 swine flu vaccine and GBS, but stopped short of declaring that the vaccine had definitively caused the illnesses.

Government scientists say that while the reason for the GBS cases remains a mystery, the new H1N1 virus differs substantially from the 1976 virus. Still, they say they plan to monitor closely for GBS. "We will be highly alerted" to symptoms of GBS, says Mark Mulligan, of Emory University, which is conducting some of the clinical trials. The government is working on ways to speed up collection and analysis of reports of side effects from the vaccine, Dr. Cox says.

How can I protect myself until I can get the vaccine?

Wash your hands often with soap and water, or use hand sanitizer. Avoid touching your eyes, nose or mouth. The virus spreads through respiratory droplets in a cough or sneeze, and people start spreading the virus a day before they develop symptoms. You can also pick it up by touching something that has flu virus on it, then touching your mouth or nose.

If swine flu is going around my child's school, should I keep him or her home?

No. The CDC recommends that schools monitor closely for ill children and staff, isolate them quickly and send them home—but remain open, in most cases, for classes.

Children spread infections easily to one another because they excrete virus in greater amounts than adults and for longer periods. Many schools are taking steps to curb the spread of disease by making sure paper-towel dispensers are kept full in bathrooms and taking other simple steps. Urge your children to wash their hands often or use hand sanitizer, and to cough into their elbows or a tissue to prevent viruses from spreading.

Schools would be urged to keep ill students home longer, move desks apart, and take other steps to minimize the spread of the virus if it grows more severe.

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