



INFLUENZA >> NOVEL H1N1 INFLUENZA (SWINE FLU) >> NEWS >>

CDC sharply raises H1N1 case estimates; kids hit hard

Robert Roos ■ News Editor

Dec 10, 2009 (CIDRAP News) – Another month's worth of data on H1N1 influenza has led federal officials to more than double their estimates of total cases, hospitalizations, and deaths and to assert that the impact on children and younger adults has been far greater than that of a typical flu season.

After analyzing data for the weeks from Oct 18 through Nov 14, the Centers for Disease Control and Prevention (CDC) estimated that 47 million people, or about 15% of the population, have been infected and 9,820 have died in the pandemic. That compares with estimates of 22 million cases and 3,900 deaths issued Nov 12 and covering the period from April through Oct 17.

The new estimate of hospitalizations is 213,000, compared with 98,000 a month ago.

"By Nov 14, many times more children and younger adults, unfortunately, have been hospitalized or killed by H1N1 influenza than happens in a usual flu season," CDC Director Dr. Thomas Frieden said in a news briefing today.

The additional weeks covered in the latest report spanned the peak period for the fall wave of H1N1. In terms of the number of states reporting widespread activity, the last 2 weeks in October marked the crest, with 48 states in that situation. The number dropped to 43 states by the second week in November and has declined further since.

16 million cases in children

In an online report, the CDC estimated there have been 16 million cases in children up through age 17, leading to 71,000 hospitalizations and 1,090 deaths. For adults age 18 through 64, the agency estimated 27 million cases, 121,000 hospitalizations, and 7,450 deaths.

For elderly people, who are believed to have some protection from the virus because of past flu exposures, the new estimates are 4 million cases, 21,000 hospitalizations, and 1,280 deaths.

Less than 5% of the increases in total cases, hospitalizations, and deaths are explained by late reporting of events that occurred before Oct 17, the CDC report says. Frieden commented, "There is some correction for late reporting. But there has been a lot more disease in the month that's reported than in the months before."

All the numbers represent the midpoints of ranges of estimates the CDC produced with a new estimation method, which was unveiled Nov 12. The numbers of confirmed cases and related hospitalizations and deaths are far lower, because most people infected, including some who get severely sick, are not tested.

Comparing H1N1 with seasonal flu

When he was asked to compare the H1N1 pandemic with seasonal flu, Frieden said, "We know that it's much milder for older people. It's much less likely to result in death because older

people are much less likely to get infected. But it has been a much worse flu season for people under the age of 65, particularly younger adults and children."

According to CDC estimates that are often quoted, the nation has about 200,000 flu-related hospitalizations and 36,000 deaths in an average flu season, with about 90% of the deaths occurring in elderly people. Frieden noted today that the pandemic estimates are not derived in the same way as these seasonal flu estimates.

While the estimation methods are different, seasonal flu is believed to cause fewer than 1,000 deaths per year in people younger than 50, he added. He said the CDC doesn't have a specific estimate of H1N1 deaths among adults under age 50, but a "large share" of the adult deaths are in that group.

"So it is really many times more severe in terms of severe illness, and hospitalizations are several times higher for children and young adults than in a usual flu season," he said.

The CDC estimates that between 5% and 20% of the population get seasonal flu in an average year. If 15% of people have already been infected with H1N1, the nation, 8 months into the pandemic, is already approaching the upper end of the average attack rate for seasonal flu.

However, the estimated death toll so far, 9,820, remains well below the estimated seasonal flu toll of 36,000, though children and younger adults make up about 87% (8,540) of that total, the opposite of what is seen with seasonal flu. Meanwhile, the estimate of 213,000 H1N1 hospitalizations is slightly above the estimate of 200,000 hospital cases for a typical flu season.

In terms of case-fatality rate (CFR), the new CDC estimate of 9,820 deaths in 47 million cases translates into an overall rate of about 0.021%, or about 210 deaths per million people sickened by the virus. That's just slightly higher than the 0.018% CFR indicated by the previous CDC estimate of 3,900 deaths among 22 million cases.

But the CFRs differ considerably by age-group. The CFR for children, with an estimated 1,090 deaths in 16 million cases, comes to 0.007%, or about 70 deaths in a million cases. The CFR for adults between 18 and 64 comes out much higher, at 0.028%, or 280 deaths per million. And the rate for the elderly is higher yet, at 0.032%, or 320 deaths in a million cases—supporting the view that while seniors seem less likely to get sick, they are more likely to die if they do.

Time to get vaccinated

Frieden used the new estimates to stress the importance of getting vaccinated against the pandemic virus. If about 15% of the population has already been infected, he said, "That still leaves most people not having been infected and still remaining susceptible to H1N1 influenza."

He reported that another 12 million doses of vaccine became available in the past week, bringing the cumulative total to about 85 million doses. Many states now have met the vaccine demand from priority groups and have begun offering doses to everyone, he added.

The CDC in the past week began offering the vaccine to all employees, in line with state policy in Georgia, Frieden reported. He said he would get the nasal-spray vaccine himself in a few days.

Though cases have been declining recently, vaccination is prudent given the possibility of a third wave of cases this winter, he said. "Flu season lasts until May. And we don't know what the future will bring in terms of H1N1 influenza," he observed.

See also:

CDC estimates of H1N1 cases, hospitalizations and deaths through Nov 14
http://www.cdc.gov/h1n1flu/estimates_2009_h1n1.htm

Nov 12 CIDRAP News story "[CDC's new estimation method raises H1N1 numbers](#)"

Center for Infectious Disease Research & Policy
Academic Health Center -- University of Minnesota
Copyright © 2009 Regents of the University of Minnesota