

# Antivirals Use During the Pandemic H1N1 2009 Outbreak

*This program is presented by the Centers for Disease Control and Prevention.*

[Christina Dzikowski] Hi, I'm Christina Dzikowski and today I'm talking with CDC's Charisma Atkins, who's a public health analyst. Our conversation is based on her paper about the effect of antivirals on the flu, which appears in CDC's journal, Emerging Infectious Diseases. Welcome, Charisma.

[Charisma Atkins] Thank you.

[Christina Dzikowski] So what is an antiviral drug?

[Charisma Atkins] Well, an antiviral drug is a medication that's used to treat the flu. Currently, there are only two FDA-approved drugs recommended for use in treating pandemic flu. Those drugs are oseltamivir, known as Tamiflu®, and zanamivir, known as Relenza®, are recommended to use with pandemic flu. The Influenza A and B viral strains, such as the 2009 Pandemic H1N1, are resistant to other antiviral drugs.

[Christina Dzikowski] Do we care how many people used antiviral drugs during the pandemic?

[Charisma Atkins] Yes. The primary goal in using antiviral drugs is to reduce the number and severity of pandemic cases, especially hospitalizations and deaths. Without knowing the number of people who were prescribed antiviral drugs, we wouldn't be able to accurately estimate the usefulness of the drugs in preventing the number of hospitalization or deaths.

[Christina Dzikowski] Are antivirals effective in fighting H1N1?

[Charisma Atkins] Absolutely. Antivirals are most effective when given within the first two days of illness. Using antivirals may prevent people who are having mild flu-like symptoms from becoming more severely ill. Mild symptoms include cough, fever, muscle aches, chills, and sore throat. Pneumonia would be an example of a more serious illness.

[Christina Dzikowski] Do we know which groups of people most benefited from antivirals?

[Charisma Atkins] Yes. Adults 18 to 64 years old accounted for approximately 60 percent of the prevented hospitalizations.

[Christina Dzikowski] Are antivirals also effective for all other flu strains, besides H1N1?

[Charisma Atkins] No. Tamiflu and Relenza are most effective against flu viruses A and B because these viruses aren't very resistant to drugs.

[Christina Dzikowski] Since antivirals seem to be effective, can people skip getting their annual flu shots?

[Charisma Atkins] No, we don't recommend that at all. Antiviral drugs aren't a substitute for getting a flu vaccine. Vaccinations are used to *prevent* getting the flu and antiviral medications are used to treat people who are already sick. While not 100 percent effective, a flu vaccination is the first level of defense against the illness. Antiviral drugs are mostly used to treat the flu once a person has flu-like symptoms, so they are the second line of defense.

For instance, if a person is diagnosed with the flu, he or she may be prescribed an antiviral drug to treat the symptoms. While the antiviral will help with the symptoms, it will not stop all the symptoms. You'll still be sick, but the length of time and the severity will be shortened. However, if a person receives a flu vaccination against a circulating strain, the likelihood that a person contracting the same strain of flu is very small. Flu season in the United States is usually October through March and the flu vaccine usually takes about two weeks before it becomes effective in the body. However, it is never too late in the season to get your flu shot.

[Christina Dzikowski] Thank you, Charisma. I've been talking with Charisma Atkins about her paper, *Estimating Effect of Antiviral Drug Use during Pandemic (H1N1) 2009 Outbreak, United States*, which appears in the September 2011 issue of CDC's journal, *Emerging Infectious Diseases*. You can see the entire article online at [www.cdc.gov/eid](http://www.cdc.gov/eid).

If you'd like to comment on this podcast, send an email to [eideditor@cdc.gov](mailto:eideditor@cdc.gov). That's e-i-d-editor - one word - at c-d-c-dot-gov. I'm Christina Dzikowski, for Emerging Infectious Diseases.

*For the most accurate health information, visit [www.cdc.gov](http://www.cdc.gov) or call 1-800-CDC-INFO.*