
Dear Alice,

Is there any vaccine for avian flu? Any viral replication inhibitor? What would you suggest to buy?

?Person with family residing close to Russia and Turkey...

Answer

Dear Person with Family Residing Close to Russia and Turkey,

Avian flu is an infection caused by influenza viruses that occur naturally in birds. H5N1 is the scientific name for the type of avian flu that is spreading among birds in Europe and Asia. Infected birds release influenza viruses in their feces, saliva, and nasal secretions. Birds catch the virus from contact with contaminated secretions or excretions and/or surfaces that have been contaminated by the virus. Though very rare, people can become infected with avian flu when they ingest infected birds or are directly exposed to their excretions and secretions.

There are measures (such as strict quarantines of farm-raised bird populations from exposure to wild birds) to protect humans from exposure to avian flu and health officials monitor outbreaks closely. Many global health organizations are working to create prevention and response strategies to any potential avian flu outbreak, and further recommendations and policies will likely be implemented in the near future.

One reason for growing concern and what seems like infinite news coverage is the fact that avian flu can spread rapidly among birds. If a farm of chickens was exposed to the disease, it would likely infect all of the birds within a few days, if not sooner. If people ingest these birds or eggs, they could then contract avian flu. While there have been reports of people contracting avian flu, very few people in the world ? about 300 ? have been infected since 2003, and about half of those have died. While contracting avian flu from an infected bird is possible but unlikely, catching this virus from another person is extremely rare, even though the media may make it seem otherwise.

In early 2007 the Food and Drug Administration (FDA) announced the approval of a bird flu vaccine. Researchers believe that this vaccine may provide only limited protection from H5N1, but in the event of an epidemic, it would buy time during which a specific vaccine could be developed. A vaccine that would be effective against all strains of influenza will probably take another 5 or 10 years to develop.
According to the FDA’s website [2], the current vaccine produced antibodies in 45 percent of individuals at a level sufficient to reduce the risk of getting H5N1. Additionally, researchers believe that even those with a lower level of antibodies could still receive some protection from H5N1. However, it is important to note that although researchers believe this vaccine would be protective in the case of an epidemic, it is impossible to test this in the absence of such an event. Also, keep in mind that if an epidemic is declared, it would take approximately 4 to 6 weeks to produce the vaccine since the vaccine supply is so limited.

Concerning your question about viral replication inhibitors, oseltamivir (brand name Tamiflu) is the antiviral drug researchers believe best combats avian flu in people who become infected. Tamiflu is in the drug class called neuraminidase inhibitors. This category of drugs blocks the function of a protein in the virus and interferes with the its ability to replicate, which can slow down or stop the progression of infection. While Tamiflu can be useful if you have the flu, it is expensive and has a limited shelf life, so it shouldn't be "stockpiled" for future use because it could expire before it was ever needed.

Use of an antiviral without proper medical supervision can increase the chances that strains of influenza (including possibly H5N1) will become resistant to drugs. Additionally, the benefits of antivirals are potentially restricted as a different strain of influenza could come into being for which the stockpiled antiviral would not treat. It is also important to be aware that Tamiflu can cause side effects or have serious interactions with other medications (i.e. respiratory distress, fever, and chills).

For more information about avian flu and staying well, check out:

- Columbia University's Preparedness Plan for Pandemic Flu [3]
- Centers for Disease Control and Prevention: Avian Flu [4]
- Centers for Disease Control and Prevention: Preventing the Flu [5]

As with any cold or flu, prevention is the best bet. Maintaining healthy habits such as covering coughs and sneezes and washing your hands regularly can keep from spreading any kind of influenza or cold virus. Whether or not you decide to purchase the flu medication, it may be a good idea to do some more research on the subject, and of course, talk to your health care provider.

Alice!
Category:
Colds & Flu [6]
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Related questions

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- Swine flu (H1N1) vaccine, 1976 and now [9]
- Free flu shots at Columbia? [10]
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