



Clinton County Health Department
THE WORLD TRAVELER

Health Services Unit, 133 Margaret Street, Plattsburgh, NY 12901
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Vaccine Highlight: 2005-6
Flu Vaccine

This season's flu vaccine formulation will protect you against three strains of the influenza virus and those closely related to them. The other 2 vaccines in the formulation have been carefully selected by the National Institute of Health based upon their probability of occurrence in the population and their virulence.

Each year in the U.S. approximately 200,000 people are hospitalized from flu and its side effects such as pneumonia. About 36,000 people die, most of them over 65 years of age.

The Flu Shot cannot cause the flu and is highly effective at reducing the risk of death.

There are many flu strains "going around" and the flu vaccine cannot protect against all of them, so it is possible to get the flu shot and still get the flu; but chances are you will not get severely ill and develop complications. Taken all together, this year's vaccine will be up to 90% effective in reducing flu cases.

Getting the flu shot is your best protection against getting the disease.

Information for Travelers Update:

Dengue Fever Emerges

Dengue Fever is increasingly recognized as one of the world's major emerging infectious diseases. An estimated 100 Million cases of Dengue fever and 250,000 cases of Dengue Hemorrhagic fever with 25,000 deaths are reported annually.

Clinton County has not been unscathed

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by this trend. Recently, 9 confirmed cases in travelers returning from Nicaragua have been identified .

To understand how this could happen in our "North Country" world, let's look at the nature of disease , how it spread, its symptoms, and how to avoid "catching" it.

Dengue is present in most tropical and subtropical countries, many of which are popular tourist destinations. Dengue is a virus transmitted by infected mosquitoes, and humans are the main "reservoir" for the virus. In simple terms, Dengue is spread from human to human by mosquito bite. To add to the problem, the mosquito (*Aedes aegypti*) is well adapted to urban settings, prefers human blood, and is capable of biting several people in a short period of time.

"Classic" Dengue fever is characterized by sudden onset of fever, severe headache, pain "behind the eyes", muscular, and joint pain. The fever lasts five to seven days, and is often accompanied by small, pinpoint, hemorrhages beneath the skin. While "classic" Dengue is seldom fatal, the hemorrhagic form of the disease has a mortality rate of up to 20 percent. Both forms are incapacitating, may require hospitalization, and may interfere with a long-awaited vacation. Dengue is positively diagnosed by blood test.

Since Dengue is caused by a virus once it is contracted, it must run its course and the only treatment is supportive. There is no Dengue vaccine presently available.

The best treatment for Dengue is prevention. Because of the affinity of the virus-carrying mosquito for urban areas and its preferences for human blood, effective control in has remained elusive.

The most effective preventive measure for travelers are to avoid mosquito bites by using insect repellents containing DEET and wearing permethrin-impregnated clothing by day.



The Clinton County Health Department can provide you with current information on how to avoid Dengue fever as part of a complete travel immunization program. **Call us at 565-4848 at least six weeks before you travel.**

Avian Flu Related to 1918 Spanish Flu

Much news has recently been made about Avian Flu and the 1918 "Spanish " Influenza that killed million people in a worldwide pandemic.

Let's clear some possible misconceptions about these two deadly diseases and their relationship to today's flu vaccination programs.

Today's Avian Flu is a serious viral infection that occurs primarily among poultry and other related birds. Contrary to much recent publicity, **it is unusual for humans to get influenza infections directly from poultry or birds, but rare cases of poultry-to-human infections caused by the Avian Flu transmission have been confirmed in Southeast Asia. A significant death rate has occurred with this virus.**

So far, spread of the Avian virus from person-to person has been rare and has not continued beyond one person.

Flu virus subtypes are identified by variations in two surface proteins designated as "H" and "N". Today's Avian Flu, which is identified as H5 and N1, shares traits with the virus that caused the pandemic of 1918 which was identified as a H1 and N1 virus.

Today's H5 (Avian) subtype is similar to the H1 (1918) subtype which started as a bird virus. It then mutated which made it unusually lethal. It then was able to infect humans. The ancestral H1 subtype mutated again after infecting a human. After the second mutation the 1918 subtype became extremely lethal and had the ability to move freely from human to human.



Avian Flu cont.....

Since 1918 H1 virus already has the capability to be transmitted from human to human, it does not need to gain the mutations needed to cause the influenza pandemic. But because the H1 and H5 subtypes are related, scientists are increasingly concerned that H5 Avian subtype could eventually “jump” to humans, mutate to become human-to human transmittable, and trigger a highly lethal pandemic.

On a positive note, the pandemic of 1957 and 1968, both caused by Avian Flu subtypes were much less severe than predicted. This is due to the fact that they lost their lethality when they recombined with human subtypes.

There is no approved vaccine against the H5 Avian virus, and this year’s flu vaccine will not protect against it.

However, development of an Avian flu vaccine for humans is underway. The National Institute of Health has awarded two contracts for development of an Avian Flu vaccine, and a prototype vaccine is available for testing.

Precautions For Travelers

Travelers to areas with avian influenza activity should be immunized with the available trivalent influenza vaccine, preferably at least two weeks before traveling.



Travelers should avoid all direct contact with poultry, including chickens, ducks, or geese, and farms or live-animal markets with poultry, and should avoid touching surfaces contaminated with poultry feces or secretions.

Travelers should reduce possible exposure by practicing good hand hygiene with frequent hand washing or use of alcohol gels and by not ingesting undercooked eggs or food from poultry.

Handwashing is important when handling raw poultry for cooking (e.g., during cooking classes).

Travelers should be advised to consult a health care provider if they become ill with fever and respiratory symptoms within 10 days of returning from an affected area.

Malaria: In Clinton County?

Among the world’s most destructive parasitic diseases is Malaria which is caused by a tiny one-celled organism similar which, like Dengue fever, is spread by mosquito bite. 300 to 500 million cases of Malaria are reported annually, and the death rate is approximately 1.1 million, mostly children who live in tropical areas of sub-Sahara Africa, South Asia and Central America. Nearly three times as many children under 5 years of age die from Malaria as from HIV-AIDS.

Like Dengue fever, cases of Malaria are not unknown in the United States, or even Clinton County. Since 2003, approximately 3000 Malaria cases have been reported in the United States, the vast majority being acquired through foreign travel to countries where Malaria control measures have not been effective.

Three recent cases of Malaria in Clinton County residents have been confirmed in travelers who have either taken protective measures lightly, or have not followed anti-malarial regimens correctly.

Symptoms of Malaria include fever, night sweats, headache, muscle pain, nausea, vomiting and right-side abdominal pain due to liver inflammation. A diagnosis of Malaria is confirmed by blood test.

As with Dengue, the best treatment for Malaria is prevention.

The most effective preventive measures for travelers are to avoid mosquito bites by antibiotic prophylaxis before, during, and after the travel to a Malarious area, and conscientious use of a good insect repellent containing DEET.

Other preventive measures include limiting travel in the evening hours when Malaria mosquitoes are more prevalent, wearing long-sleeved shirts and long pants, and sleeping under mosquito netting while in rural settings.

The Clinton County Health Department can provide you with information on how to protect yourself from Malaria, and a prescription for an anti-malarial antibiotic. Since the Malaria organism has developed resistance to some standard antibiotics, prescriptions may vary depending upon the foreign country the traveler plans to visit.

Call us at 565-4848 at least six weeks before you plan to travel.

Travel Tips:



Learn about your destination.

- Visit a travel clinic at least 6 months before traveling.
- Get appropriate vaccinations for each trip.
- Have a dental check-up and complete medical exam.
- Arrange for adequate supply of medications.
- Obtain a medical alert bracelet for medical conditions.
- Purchase an extra set of eye glasses or contact lenses.
- Obtain a directory of English-speaking medical facilities.
- Collect items for a first-aid travel kit.
- Check your health insurance coverage for international coverage.

Immunizations Contact:

Clinton County Health Department
Health Services Unit
(Immunization Services)
Tel: (518) 565-4848
Fax: (518) 565-4821
Information Line: (518) 565-4490

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www.clintonhealth.org

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