

## **Stay Healthy throughout Your Pregnancy—and throughout Flu Season**

Never thought of yourself as high-risk, health wise? If you're pregnant during flu season, consider yourself on the list. And, if it's been years since you've had the flu—that classic seasonal illness that brings on the "I-feel-like-I've-been-hit-by-a-truck-how-can-anything-hurt-this-much?" symptoms of fever, aching muscles and extraordinary fatigue—the time is *now* to take action to keep you and your baby healthy.

Here's why: About one in five people—adults and children—get the seasonal flu each year. You might tough it out at home or you might find yourself one of the more than 200,000 people hospitalized each year with flu-related complications, such as dehydration, bacterial or viral pneumonia, infections of the brain and spinal cord, Reye syndrome, heart conditions or seizures (a flu-related complication for children). If you have a chronic health condition like congestive heart failure, asthma or other lung diseases or diabetes, you're particularly susceptible to complications associated with flu.

Then there's the simple—but scary—fact that every year about 36,000 people in the United States die from seasonal flu.

And this year, the novel H1N1 flu ("swine flu") poses an additional risk. Novel H1N1 flu has been spreading from person to person in the United States since April 2009. To date, most people who have become ill with the virus have recovered without needing medical treatment. However, severe illness and death continue to be reported, especially among high-risk populations—those individuals between the ages of 6 months and 24 years; adults ages 25 to 64 with chronic health conditions such as diabetes, kidney disease, asthma or compromised immune systems; and *pregnant women*.

In fact, pregnant women have had four times the rate of hospitalizations for H1N1 as the rest of the population. That's why health experts have identified pregnant women as one of the priority groups for H1N1 flu vaccination. At this point, scientists expect illnesses from H1N1 flu to continue for some time—and for this illness to continue to range from mild to severe in the individuals it affects. So it's important to be as informed about this new virus as possible—particularly if you're now pregnant or will be during the flu season ahead.

### **Double Protection Will Go a Long Way**

Like most viral diseases, the flu is highly contagious. Unlike the common cold, however, there's a relatively simple, easy, safe way to protect against the flu: a vaccine.

Maybe you think you don't need a vaccine because you're young and healthy and don't work in a day-care center or nursing home. Or maybe you think you shouldn't get a vaccine because you're pregnant.

Unless you're allergic to eggs, had a severe reaction to the flu vaccine in the past or currently have a fever, you should get vaccinated. Even if you're young and healthy, flu

vaccination is important. According to the Centers for Disease Control and Prevention (CDC), in years when the seasonal flu vaccine is a close match to the circulating viruses, the vaccine can be expected to reduce influenza rates by 70 to 90 percent in healthy adults under 65. One study found that healthy working adults receiving the seasonal flu vaccine had 43 percent fewer sick days from work. Since many companies are cutting back on sick days, that's a good benefit!

If you're pregnant (or plan to be) during flu season, you should get vaccinated. Here's a fact you might not have learned from your pregnancy planning books: If you get the flu during pregnancy, you are more likely to be sicker and to develop flu-related complications like pneumonia than if you weren't pregnant. Your risk of dying is higher if you have the flu while you're pregnant. Blame pregnancy-related changes in your respiratory and immune systems for these risks.

And, here's the kicker—if you get the flu, it could affect your baby. After major worldwide flu outbreaks like the one in 1918, infected women had higher rates of miscarriage and premature births, especially those who developed pneumonia. During the Asian influenza pandemic of 1957, it appeared that babies of women who developed the flu were more likely to have birth defects. Even during normal flu years, getting the flu during early pregnancy may increase the risk of cleft lip or palate, neural tube defects such as spina bifida (in which the spinal column doesn't completely close) and heart defects.

So, protecting yourself against the flu by getting the flu vaccine while you're pregnant provides protection for your unborn baby as well. In addition, because vaccines aren't recommended for children until they are 6 months or older, getting a flu vaccination can help your baby once he or she is born. One study found that the risk of flu in infants dropped 63 percent when the mothers were vaccinated during pregnancy, plus the risk of other respiratory illnesses in infants also dropped nearly a third.

That's why the CDC recommends seasonal and H1N1 flu vaccines for all pregnant women, no matter where they are in their pregnancy. In fact, the American College of Obstetricians and Gynecologists and seven other leading national maternal and infant health organizations say that getting these two flu shots is an essential part of prenatal care.

### **Flu Vaccine Is Safe and Effective for Pregnant and Breastfeeding Women**

The good news is that the injectable flu vaccine, made with an inactive form of the virus, is safe for pregnant women at any time during pregnancy and is also safe for breastfeeding women. The seasonal flu vaccine is widely available from multiple sources in our communities, if it's not offered by your obstetrics practice. You also can consider flu vaccines that are not made with the mercury-based preservative thimerosal. Plus, no matter what you've heard, *you cannot get the flu from the flu vaccine*. However, if you're pregnant, you *should not* get the nasal version of the vaccine that contains attenuated, or partially live, viruses.

And follow announcements about the novel H1N1 flu vaccine closely. It also is safe to have the H1N1 flu vaccine during pregnancy, and pregnant women are among the highest priority groups recommended to receive this vaccine.

OK, so what if you forgot to get vaccinated and now here it is flu season? What can you do? Get your flu vaccines! It only takes two weeks for the vaccines to rev up your immune system to better resist the virus.

### **Guarding Against Flu during Pregnancy in Other Ways**

That's not the only thing you should, do, however. You also need to practice preventive protection. That means washing your hands often with soap and water, especially after you cough or sneeze. Alcohol-based hand sanitizers also are effective. Cover your nose and mouth with a tissue when you cough and sneeze and avoid touching your nose and mouth. Also, try to stay away from people who might be sick, and avoid crowded, close rooms if possible.

Plus, continue all the things you're already doing to ensure a healthy pregnancy—eating right, exercising moderately, sleeping adequately and managing stress. All will help strengthen your immune system so it is better prepared to fight off any viruses that do come calling.

And if you get the flu, contact your health care professional right away. It's important that he or she monitors you closely so you don't become dehydrated, your fever doesn't get too high and you don't develop complications. Antiviral medications—those medications that can help minimize the effects of the flu when they are taken within 48 hours of your first symptoms—are recommended if a pregnant woman is suspected to have novel H1N1 influenza.

*The "Flu-Free and a Mom-to-Be" campaign is a joint initiative of HealthyWomen and the Association of Women's Health, Obstetric and Neonatal Nurses. The campaign is supported by CSL Biotherapies.*

### **References**

"Flu Vaccine Effectiveness: Questions and Answers for Health Professionals." The Centers for Disease Control and Prevention. January 2006.  
<http://www.cdc.gov/FLU/PROFESSIONALS/VACCINATION/effectivenessqa.htm>. Accessed September 2009.

"Pregnant Women and Novel Influenza A (H1N1) Virus: Considerations for Clinicians." June 30, 2009.  
[http://www.cdc.gov/h1n1flu/clinician\\_pregnant.htm](http://www.cdc.gov/h1n1flu/clinician_pregnant.htm). Accessed August 2009.

"Novel H1N1 influenza vaccine." July 20, 2009.  
[http://www.cdc.gov/h1n1flu/vaccination/public/vaccination\\_qa\\_pub.htm](http://www.cdc.gov/h1n1flu/vaccination/public/vaccination_qa_pub.htm). Accessed August 2009.

"What to do if you get flu-like symptoms." August 5, 2009.  
<http://www.cdc.gov/h1n1flu/sick.htm>. Accessed August 2009.

"2009-2010 seasonal influenza vaccine updates." August 12, 2009.  
[http://www.cdc.gov/flu/flu\\_vaccine\\_updates.htm](http://www.cdc.gov/flu/flu_vaccine_updates.htm). Accessed August 2009.

"Antiviral drugs for the treatment of influenza in adults." Uptodate.com. May 2009.  
Subscription necessary to view text. Accessed August 2009.

"Key facts about seasonal influenza." Centers for Disease Control. July 2008. Available at: <http://www.cdc.gov/flu/keyfacts.htm>. Accessed August 2009.

Harper SA, Fukuda K, Uyeki TM, et al. Advisory Committee on Immunization Practices (ACIP), Centers for Disease Control and Prevention (CDC). "Prevention and control of influenza. Recommendations of the Advisory Committee on Immunization Practices (ACIP)." *MMWR Recomm Rep*. 2005;54(RR-8):1-40.

"Key Facts about Influenza and Influenza Vaccine." Centers for Disease Control. September 28, 2005. Available at [www.cdc.gov](http://www.cdc.gov). Accessed October 26, 2005.

"Key Facts: Information about Avian Influenza and Avian Influenza A." Centers for Disease Control. Available at [www.cdc.gov](http://www.cdc.gov). Accessed October 28, 2005.

Nichol KL, Lind A, Margolis KL, et al. "The effectiveness of vaccination against influenza in health, working adults." *New England Journal of Medicine*. 1995 Oct. 5;333(14):889-893.

Rasmussen SA, Jamieson DJ, Bresee JS. "Pandemic influenza and pregnant women." *Emerg Infect Dis* [serial on the Internet]. January 2008. Available from <http://www.cdc.gov/EID/content/14/1/95.htm>. Accessed September 18, 2008.

"Guidelines for Vaccinating Pregnant Women." The Centers for Disease Control and Prevention. Available at:  
[http://www.cdc.gov/vaccines/pubs/downloads/b\\_preg\\_guide.pdf](http://www.cdc.gov/vaccines/pubs/downloads/b_preg_guide.pdf). Accessed September 19, 2008.

"Influenza vaccination and treatment during pregnancy. ACOG Committee Opinion No. 305." ACOG Committee on Obstetric Practice. American College of Obstetricians and Gynecologists. *Obstet Gynecol*. 2004;104:1125-1126.

"Influenza vaccination in pregnancy: Practices among obstetrician-gynecologists—United States, 2003–04 influenza season." Centers for Disease Control and Prevention. *Morb Mortal Wkly Rep.* 2005 Oct 21;54(41):1050-2.

"Breastfeeding vaccination recommendations." Centers for Disease Control and Prevention. Available at:  
<http://www.cdc.gov/breastfeeding/recommendations/vaccinations.htm>. Accessed September 18, 2008.

Zaman K, Roy E, Arifeen SE, et al. "Effectiveness of Maternal Influenza Immunization in Mothers and Infants." *N Engl J Med.* 2008 [Epub].