CDC Reports Rising Congenital Syphilis Rates

BY ELIZABETH MECHCATIE

The congenital syphilis rate in the United States increased between 2005 and 2008, after dropping over the previous 14 years, which reflects an increase in the rate of primary and secondary syphilis cases among women, based on a report from the Centers for Disease Control and Prevention.

In 2008, there were 431 cases of congenital syphilis (CS) reported to state and local health departments in the United States, according to the report, based on national surveillance data between 2003 and 2008 (MMWR 2010;14:413-7).

However, this was an increase from 339 cases reported in 2005. And the CS rate increased by 23% during this time, from 8.2 cases per 100,000 live births in 2005 to 10.1 cases per 100,000 live births in 2008. Most of this increase was attributed to trends in the South, where the rate increased from 9.6 to 15.7/100,000 live births between 2005 and 2008—a 64% increase. In the Northeast, the rate increased from 4.2 to 5.4/100,000 live births—a 29% increase.

Previously, the CS rates had dropped, from 10.6 cases per 100,000 live births in 2003, to 8.2 cases per 100,000 live births in 2005 (which continued the decline from 1995, when the rate was almost 50 cases per 100,000 live births). The number of CS cases dropped from 432 in 2003 to 339 in 2005.

The increase in CS cases between 2005 and 2008 was preceded by a 38% increase in the rate of primary and secondary (P&S) syphilis among females aged 10 and older from 2004 to 2007, which continued to increase in 2008, according to the report, which noted that this trend may have been associated with the use of crack cocaine and commercial sex work.

Most of the increase was attributed to trends in the South, where the rate increased from 9.6 to 15.7/100,000 live births between 2005 and 2008—a 64% increase.

Between 2005 and 2008, most of the increase in CS was seen among infants born to black mothers. In this group, the CS rate increased from 26.6 to 34.6 per 100,000 live births between 2005 and 2008—a 30% increase. (There were 156 cases in 2005 and 215 cases in 2008). The percentage of infants with CS born to black mothers who lived in the South increased from 51% in 2005 to 75% in 2008.

Between 2005 and 2008, there was a 2% increase in the CS rate among infants born to Hispanic mothers (12.6 to 12.8 cases per 100,000 live births) and a 115% increase among infants born to white mothers (1.3 to 2.8 cases per 100,000 live births). But the report pointed out that the number of infants with CS born to white mothers was small: 31 cases in 2005 and 65 in 2008.

In 2008, infants of black mothers accounted for 50% of CS cases; infants of Hispanic mothers, 31%; infants of white mothers, 15%; and infants of Asian/Pacific Islander and American Indian/Alaskan Native mothers, 2% and 1%. The remaining 1% of infants had mothers of unknown race/ethnicity.

The CDC recommends that all pregnant women be tested for syphilis at the first prenatal visit, but the mothers of 125 (nearly 30%) of the 431 infants with CS reported in 2008 had not received prenatal care, and syphilis was detected at delivery. Of the 276 infants (64%) whose mothers had received prenatal care, the mothers of 75 infants (27%) were first screened for syphilis within 30 days of delivery; 67 (24%) mothers had a positive screen more than 30 days before delivery but had not been treated. For the remaining 30 infants, whether the mother had received prenatal care was not known.

Of the cases reported in 2008, 25 (6%) were stillborn and 3 (1%) died within 30 days of delivery, for a case fatality ratio of 6.5%.

"Reversing the upward trend in CS rates will require collaboration among health care providers, health departments, health insurers, policy makers, and the public to reduce syphilis among women and to increase early prenatal care access and syphilis screening during pregnancy," the report said.

An editorial comment on the findings pointed out that the increase in the primary and secondary syphilis rate from 1.1/1,000 females in 2007 to 1.5/1,000 females in 2008 "might portend a larger increase" in the CS rate in 2009 and in the future. ■

High-Dose Seasonal Flu Vaccine Ready for 2010-2011

BY MARY ELLEN SCHNEIDER

Physicians have a new option this year for vaccinating patients aged 65 and older against seasonal influenza, but vaccine experts can't say for sure whether it will keep more people from getting the flu, according to a recent report.

On Dec. 23, 2009, the Food and Drug Administration licensed Sanofi-Pasteur's Fluzone High-Dose vaccine, an injectable inactivated trivalent influenza vaccine that provides four times the amount of antigen contained in standard flu vaccines. The aim is to increase the immune response among older adults, who are at greater risk for hospitalization and death from seasonal influenza. The new vaccine will be available for the first time in the 2010-2011 flu season.

Immunogenicity data from prelicensure clinical trials showed that people aged 65 and older who received the high-dose vaccine had significantly higher hemagglutination inhibition titers against all three influenza virus strains, compared with the standard-dose Fluzone vaccine. While the higher immune response to vaccination generally correlates with protection against influenza, it is still unclear whether it will translate into fewer vaccine recipients getting the flu this year, according to the report (MMWR 2010;59:485-6).

People who received the high-dose Fluzone vaccine were also more likely to experience injection site reactions and systemic adverse events following vaccination. For example, in a study of 2,572 people who received Fluzone High-Dose and 1,275 who received standard-dose Fluzone, about 36% of high-dose vaccine recipients reported injection site pain in the week after receiving the vaccine, compared with 24% of standard dose vaccine recipients. However, the reactions were generally mild and didn't last long.

The Advisory Committee on Immunization Practices (ACIP), which advises the Department of Health and Human Services on vaccine-related issues, has not expressed a preference for whether the new high-dose vaccine should be used over existing vaccines in the 65 and older population. ACIP officials are awaiting postlicensure data that will show whether the vaccine actually offers greater protection against influenza illness for older people.

The results of a 3-year postlicensure study on Fluzone High-Dose, compared with standard-dose Fluzone, are expected sometime in 2012, the report said. ■

Federal Agencies Investigating Adverse Effects of H1N1 Vaccine

BY MICHELE G. SULLIVAN

The federal government will step up its search for possible adverse reactions to the pandemic influenza A(H1N1) vaccine, particularly looking for any cases of Guillain-Barré syndrome, Bell's palsy, and thrombocytopenia that might be linked to the vaccine, according to a report issued by the Department of Health and Human Services.

The National Vaccine Information Center recommended the expanded safety monitoring because 3 of the nation's 13 vaccine safety monitoring systems have picked up weak signals of a possible interaction between the pandemic flu shot and the disorders. The decision came after a meeting of the H1N1 Vaccine Safety Risk Assessment Working Group (VSRAWG). As of March 31, almost 127 million doses of H1N1 pandemic flu vaccine have been distributed in the United States.

The Vaccine Safety Datalink program is the largest of the three systems that found a possible disease link; it contains information on 1.5 million pandemic flu immunizations. This system picked up a weak signal for an association with Bell's palsy.

The Defense Medical Surveillance System, with information on 1.3 million pandemic flu immunizations, and the Veterans Affairs signal detection database, with almost 300,000 vaccination records, both showed a weak signal for thrombocytopenia and idiopathic thrombocytopenia purpura (ITP).

The Indian Health Service, with information on 2.2 million immunizations, showed a weak signal for both Bell's palsy and the blood disorders.

In systems that linked the vaccine and thrombocytopenia/ITP, "the cases are being reviewed to see if the diagnoses are evaluated," the report noted. "More rigorous comparisons between cohorts with H1N1 vaccine exposure and other vaccines or no exposures are planned."

The Guillain-Barre Syndrome enhanced surveillance database observed a "potential signal" for that disorder. The database monitors a population of 45 million, but no information was available on how many pandemic flu vaccinations had been examined to determine the possible link. Five other systems are also exploring a possible GBS/pandemic flu vaccine link, the report noted. "Although some systems are reporting elevated relative risks, none have crossed the threshold for a signal. Of importance is the fact that, even if an association between H1N1 vaccine exposure and GBS were substantiated, the estimate is that the vaccine would account for only one extra case of GBS per 1 million persons vaccinated, based on currently available data."

The nation's primary—and largest—system, however, has picked up no worrisome safety signals. The Vaccine Adverse Event Reporting System (VAERS) has captured information on more than 126 million pandemic flu vaccinations. It found that adverse events after the shots were no different than those occurring after seasonal flu vaccine.

Additional study is needed to determine whether the reported links represent a causal relationship, the report said. ■