

Congenital Syphilis Declined in 2000-2002

BY TIMOTHY F. KIRN
Sacramento Bureau

The incidence of congenital syphilis declined 21% between 2000 and 2002, with the largest decreases occurring in the groups where the incidence had been highest—racial and ethnic minorities and women living in the South—the Centers for Disease Control and Prevention reported.

There were 578 reported cases in this country in 2000 and 451 cases in 2002, according to the federal agency's surveillance.

The decreases continue a pattern of decline in syphilis seen throughout the 1990s and follow the 1999 implementation of the National Plan to Eliminate Syphilis (MMWR 2004;53:716-9).

Between 1997 and 2002, the incidence rate of congenital syphilis declined 63%.

Other observations noted in the report include the following:

- Many of the cases occurred in women who had no documented treatment or received inadequate treatment, even though it appeared that many had received prenatal care. Of the 288 cases reported for 2002, 63% of the mothers received prenatal care.

- In 238 cases, the trimester in which the first prenatal visit occurred was known. In 86 cases, prenatal care began in the first trimester. In 93 cases, it began in the second trimester. In 59 cases it began in the third trimester. Eighteen mothers had a first visit less than 30 days before delivery.

This may indicate that providers are not adhering to syphilis screening recommendations, the report said. A 1999-2000 survey found that 14% of ob.gyns. did not report routinely screening pregnant women, and many who do screen do so only once during pregnancy.

- Seventy-four percent of the cases occurred in mothers who were untreated, had inadequate treatment, or did not have documented treatment. Fourteen percent occurred in mothers who were adequately treated but did not have an adequate serologic response to therapy, and the infant was inadequately evaluated for congenital syphilis. Nine percent occurred in mothers who did not have an adequate serologic response to treatment and the infant's evaluation revealed signs of congenital syphilis.

The remaining cases occurred in other situations.

- The rates of congenital syphilis declined in the South by 29%, and decreases occurred in all regions of the country except the Northeast.

The rate of congenital syphilis declined 51% among American Indian/Alaska Native infants, 22% among Hispanic infants, 21% among Asian/Pacific Islander infants, and 20% among non-Hispanic black infants.

There was no decline among non-Hispanic white infants.

- In 2002, 18 of the infants with congenital syphilis were stillborn and 8 died within 30 days of delivery. ■

Downplay Cancer Risk With HPV Infection—Associated Venereal Warts

YOSEMITE, CALIF. — Patients with venereal warts should be reassured that the condition does not substantially increase their risk of developing cervical cancer, said Laura J. Grimshaw, assistant medical director of the STD Center for Excellence at Rivington House, New York.

That's because the human papilloma virus (HPV) types that cause most condylomata acuminatum are not usually associated with cancer. Even though HPV infection is so common that exposure is virtually universal, the incidence of cervical cancer is only 8/100,000 women per year.

Patients often come in having surfed the Internet and learned that HPV is associated with cancer, Ms. Grimshaw said at a meeting on obstetrics and gynecology sponsored by Symposia Medicus. These patients need to be counseled and to be told that although HPV is common, cervical cancer is rare.

Studies have shown that at any one time, 1%-2% of sexually active men and women between the ages of 15 and 49 years have genital warts, 14% have a subclinical infection detected only by looking for DNA, and 60% have antibodies indicating previous infection.

That translates into a 75% lifetime risk of being infected, Ms. Grimshaw said.

"The message here is: If you have ever had sex with anyone else who has ever had sex with anyone else, you have probably been exposed to HPV," she said.

The types of HPV that cause condylomata acuminatum most commonly are types 6 and 11. Even though HPV is associated in 93% of cases of cervical cancer, types 6 and 11 are not. The types most commonly associated with cervical cancer are 16, 18, 31, and 45, and they are found involved in 80% of cervical cancers.

One thing you cannot tell a patient with such certainty is why the partner suddenly developed genital warts when he or she was supposed to be monogamous, Ms. Grimshaw said.

It is not known how long HPV can persist before it is eradicated by the immune system, even though in the majority of cases it has been cleared by 2 years. It is always possible the partner had a subclinical infection for a long time before the warts appeared, or that the patient had no warts but was the source of the partner's infection. "There can be a latency for years," she said.

—Timothy F. Kirn

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Looking Ahead in Infectious Disease

Yogi Berra once said, "It's tough to make predictions, particularly about the future." With that said, here are my top predictions for pediatric infectious disease developments in 2005:

- Changes in the U.S. vaccine development infrastructure will allow for the distribution of 125 million doses of trivalent inactivated influenza vaccine for the 2005-2006 season. But despite the increase in demand for vaccine fostered by the 2004-2005 shortage, a relatively mild influenza season this winter will lead to relative apathy next season, and 25 million of the 125 million doses manufactured doses will not be utilized.
- A vaccine containing tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap) will be licensed and implemented for use in the 11- to 13-year-old population, probably by June 2005. Although pertussis



MARY ANNE JACKSON, M.D.

cases will decrease from the peak year of 2004 (partly as a reflection of the normal 2- to 3-year cycle of infection), mortality from pertussis in those younger than 4 months of age will not decrease during 2005.

At our pediatric center, we had a 300% increase in confirmed pertussis cases in 2004, compared with the average annual number of cases seen over the last 30 years. And in contrast to past years where diagnoses were made mostly in infants who required hospitalization, many of last year's cases have been linked to school outbreaks.

- Methicillin-resistant *Staphylococcus aureus* (MRSA) infection in the healthy child will reach epidemic numbers. (One pediatrician in our area who has been in practice for over 30 years says he has never seen so many children with boils!) The importance of draining abscesses will once again be brought to light, and novel antibiotic regimens will be utilized more commonly by the pediatric practitioner.

- World AIDS day was observed Dec. 1 and brought to attention the enormous global impact of this infection, particularly focusing on the impact in women. Early in the epidemic, men outnumbered women among HIV-infected individuals, but current figures show more than 50% of adults living with HIV/AIDS in the United States are women, with heterosexual intercourse being the major vector of transmission.

Data from the Centers for Disease Control and Prevention show that HIV infection rates have more than tripled among American teens and adult women since 1986. New cases will continue to occur and minority teenagers will be the hardest group to identify and treat.

- A diagnostic test for Kawasaki disease is close, thanks to Anne Rowley,

M.D., of Northwestern University, Chicago, but will not be available for 2 more years.

- Vancomycin-resistant enterococcal (VRE) colonization in the hospitalized high-risk pediatric patient will become increasingly important and will challenge many more children's hospitals to provide special VRE wards.

- Rates of invasive pneumococcal infection in children will plateau as new serogroups of pneumococcus emerge, but cases of meningitis and empyema will continue to occur.

- Reports of breakthrough varicella will continue to be reported, while a second dose of varicella vaccine will be recommended by the end of 2005.

- The ambitious goal of the World Health Assembly to interrupt wild polio transmission globally by early 2005 will be difficult to achieve. The WHA notes that success

depends on "sufficient political will, oversight, and accountability." Accessing all children, particularly those who live in areas of armed conflict, remains the greatest challenge.

While the number of polio cases worldwide has decreased from 350,000 in 1988 to fewer than 800 cases in 2003, six countries globally are still polio endemic: Nigeria, India, Pakistan, Niger, Afghanistan, and Egypt.

- The scariest prediction of all: Human avian influenza cases will emerge beyond the borders of Asia. All known subtypes of influenza A circulate among wild birds. While most demonstrate low pathogenicity, mutation to highly lethal forms has occurred. Strains have jumped the species barrier, resulting in human avian influenza cases which have now been confirmed in Hong Kong, Vietnam, and Thailand, with case fatality rates of up to 70%.

Now, experts fear that reassortment between human and avian subtypes could generate viruses of pandemic potential. Would antiviral therapy be beneficial? (These viruses are typically resistant to amantadine and rimantadine but susceptible to oseltamivir and zanamivir.) Do newer classes of antivirals such as short-interfering RNAs (siRNAs) hold promise for prevention and treatment of influenza A infection? Will the vaccine technology known as "reverse genetics," which allows the generation of an influenza virus entirely from cloned cDNAs, provide a tool for more efficient vaccine production and development? We can hope, but on this one I'd rather not try to predict.

DR. JACKSON is chief of pediatric infectious diseases at Children's Mercy Hospital, Kansas City, and professor of pediatrics at the University of Missouri-Kansas City.