COST-EFFECTIVE SCREENING AND TREATMENT FOR CHLAMYDIA CAN AVERT SEVERE HEALTH CONSEQUENCES

Chlamydia remains the most commonly reported infectious disease in the United States, yet up to 90% of women and a large percentage of men with chlamydial infection are asymptomatic. If left untreated, chlamydia can cause severe health consequences, including pelvic inflammatory disease (PID) – a leading cause of infertility. Up to 40% of women with untreated chlamydia will develop PID. Of women with PID, approximately 1 in 5 will become infertile, almost 1 in 5 will suffer from chronic pelvic pain, and nearly 1 in 10 will have an ectopic (tubal) pregnancy.

In pregnant women, chlamydial infection is associated with adverse pregnancy outcomes, including preterm delivery and postpartum endometritis; Chlamydia may also result in adverse outcomes for infants including neonatal conjunctivitis and pneumonia. More than 50% of pregnant women with chlamydial infection will deliver an infected baby. A woman infected with chlamydia has up to a 5-fold increased risk of acquiring HIV infection. In men, chlamydial infection can cause adverse health consequences, including infertility.

To address this significant health crisis, we call for an increase of $20 million in FY 2009 to support the Infertility Prevention Program at the Centers for Disease Control and Prevention (CDC).

How common is chlamydia?

In 2006, 1,030,911 chlamydia diagnoses were reported to the CDC, up from 976,445 on the previous year. Even so, most chlamydia cases go undiagnosed, and CDC estimates that there are almost 3 million new cases of chlamydia in the United States each year.

Chlamydia cases for females in 2006 was three times higher than for males and the long-term consequences of untreated disease are much more severe for females. Women, especially those 25 and under, are hit hardest by chlamydia. The CDC’s analysis of 2003-2004 data confirms the significant health risk to young women, finding that four percent of all 15-19 year old females were infected.

How can we limit the impact of chlamydia?

The U.S. Preventive Services Task Force (USPSTF) strongly recommends that clinicians routinely screen all sexually active women aged 25 years and younger, and other asymptomatic women at increased risk for infection, for chlamydial infection. One critical effort to reach this population is the CDC’s Infertility Prevention Project (IPP), funded through the Division of STD Prevention. Since 1993, the program has had remarkable success in developing systematic, region-wide collaborations between sexually transmitted disease prevention programs and health care providers who specialize in family planning and women's health care.
Despite documented success, chlamydia testing and treatment efforts continue to be hampered by severe funding constraints. The FY 2006 funding level for infertility programs, for example, was approximately $30 million, an insufficient amount to cover the nearly 15 million women eligible for the program. The inability to screen eligible women will dramatically increase the long-term costs associated with chlamydia-related infertility.

**Funding Limitations**

Despite success, testing and treatment is limited by funding. A systematic assessment of the value of clinical preventive services recommended for average-risk patients by the U.S. Preventive Services Task Force ranked chlamydia screening as one of the 8 high-impact, cost-effective clinical preventive services that are currently being delivered to less than 50% of the target population nationally. The CDC estimates that 14.9 million women who are eligible for screening, treatment, and prevention counseling services authorized by the Preventive Health Amendments of 1992 are currently not reached by CDC’s Infertility Prevention Program.

The nation spends an estimated $2.4 billion in direct and indirect costs for chlamydial infections each year. Although cases of PID cost at least $1,167 per patient, only $3.5 million was made available in the FY 2005 Labor-HHS Appropriations bill for the entire IPP – an amount that supports 64 awards to 50 states, 8 territories and 6 cities. Funds are designed to prevent transmission of STDs that result in PID, infertility, and ectopic pregnancy, especially in adolescent girls and young adult women by linking surveillance, clinical, laboratory, and epidemiologic activities.

Depending on the frequency and duration of the specific program, chlamydia screening – as compared to no screening - prevents 11% to 42% of all PID and its consequences. The most effective strategy is to screen all sexually active women between 15 and 29 years of age annually, with follow-up screening every 6 months for those with infection.

Infertility prevention funds may be used to support chlamydia screening and treatment of women and their sex partners, counseling and referral services, and outreach activities. Up to 10% of the total infertility prevention funds can be used to augment gonorrhea screening in women. Up to 20% of total infertility prevention funds can be used to support male chlamydia screening and treatment. These funds augment state and local health department allocations for chlamydia and gonorrhea prevention and control activities.

Despite 1993 recommendations from CDC that all sexually active women 15-19 years old should be screened for chlamydia on an annual basis, national data from 2000 estimate that only 60% of these young women were screened.

**Chlamydia screening rates are well below screening rates for other preventive health services.** The National Committee for Quality Assurance (NCQA) developed a measure to estimate the proportion of sexually active women, 15-25 years old, who are screened in managed care settings for the Health Employer Data and Information Set (HEDIS). Health plans have reported on the measure since 2000, and the percentage of women screened annually has increased in both private and Medicare Managed Care Organizations since introduction of the measure. However, the current levels of screening for Chlamydia are well below screening rates for breast cancer (56% and 75%) and cervical cancer (64% and 82%) and even below the screening levels for colorectal cancer (49% and 53%), a HEDIS measure that was introduced in 2003.

**Partnership between Title X Family Planning Agencies and STD programs**
Given that women remain the target of the screening and treatment program, it isn’t surprising that STD programs partner with family planning programs that receive Title X family planning funds. CDC allocates 50% of funds to support screening and treatment of women in family planning programs. This partnership with Title X programs, which serve more than 5 million women at more than 4,500 clinic sites, has been critical to IPP success.

**Next steps**

Funds are needed to develop a comprehensive program to include re-screening of young, sexually-active women, wider screening of men, and implementation of comprehensive partner management strategies to prevent re-infection of women. In addition, the continued high chlamydia prevalence indicates that expanding programs in non-traditional sites as school-based settings and juvenile detention centers is imperative.

**References**