

## **Chapter I: Region VIII Chlamydia Project Description**

*Chlamydia trachomatis* infection is considered to be the most prevalent reportable sexually transmitted disease in the United States. The wider availability of affordable, cost-effective laboratory diagnostic tests for chlamydia has allowed further exploration of the broad spectrum of disease caused by this organism. *Chlamydia trachomatis* is now recognized as the causative agent for a wide group of genital and neonatal infections, including many that were previously thought to be of unknown cause.

Chlamydial infections are among the most common reproductive tract infections health care providers see in men. It is estimated that *Chlamydia trachomatis* causes approximately 50 percent of reported cases of nongonococcal urethritis (NGU) among men. In most parts of the United States chlamydia has an estimated incidence several times that of gonococcal urethritis. Chlamydia is also responsible for approximately 50 percent of the estimated 500,000 cases of acute epididymitis seen each year in the United States.

Even more important are chlamydial infections among women. *Chlamydia trachomatis* plays a significant role in causing mucopurulent cervicitis (MPC), acute pelvic inflammatory disease (PID), and maternal and infant infections during pregnancy and following delivery. Chlamydia accounts for one-quarter to one-half of the 1 million recognized cases of PID in the United States each year. These infections, in addition to sub-clinical *Chlamydia trachomatis* infections of the fallopian tube not clinically recognized as PID, contribute significantly to the increasing number of women who experience ectopic pregnancy or involuntary infertility. Approximately 17 percent of women treated for PID will be infertile; another 17 percent will experience chronic pelvic pain resulting from the infection. Ten percent of the women who do conceive after PID will have an ectopic pregnancy.

Besides its association with mucopurulent cervicitis and PID, chlamydia plays an important role in the urethral syndrome (dysuria-pyuria syndrome) and in perihepatitis (Fitz-Hugh-Curtis syndrome). Maternal chlamydial infection during pregnancy has been associated with preterm labor, premature rupture of membranes and postpartum endometritis.

Each year more than 155,000 infants are born to chlamydia-infected mothers. Almost two-thirds of the infants born vaginally to chlamydia-infected mothers become infected during delivery. These newborns are at high risk of developing inclusion conjunctivitis and pneumonia and are at slightly elevated risk of having otitis media and bronchiolitis. Chlamydia is the most common cause of neonatal eye infections and of afebrile interstitial pneumonia in infants less than six months of age.

Enormous cost is associated with chlamydial infections. Each year, more than \$2.4 billion is expended on these infections in the United States. Many of these costs result from the management of women with PID and its complications and from the management of infants hospitalized with chlamydial pneumonia. This estimated cost does not reflect the human

suffering experienced by those with chlamydial diseases. Further growth in the economic burden of chlamydial infections will occur if these infections become more prevalent.

To reduce morbidity and subsequent complications associated with *Chlamydia trachomatis* infection in the United States, effective prevention and control strategies must be implemented.

Since 1988, the Centers for Disease Control and Prevention (the CDC) and the Office of Population Affairs (OPA) have funded a chlamydia demonstration project in the Northwestern region of the United States, Public Health Service (PHS) Region X. In 1992, this demonstration project was expanded to include PHS Regions III, VII and VIII. PHS Region III is in Philadelphia; PHS Region VII is in Kansas City; Region VIII is in Denver; and Region X is in Seattle. The other six PHS regions have received funding, making this a national project. The demonstration projects are funded through the Regional Infertility Prevention Projects legislation, which aims to reduce the costly and destructive sequelae of chlamydia and other sexually transmitted diseases on the reproductive health of women.

Approximately 80 percent of the estimated \$2.4 billion in costs are associated with chlamydial infections and complications in women. Therefore, the legislation which funds this project emphasizes prevention services for women.

The Region VIII Chlamydia Project Advisory Committee was formed in 1992 and comprises representatives from state family planning programs, state STD programs and state public health laboratories within PHS Region VIII, which includes the states of Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

The Regional Advisory Committee meets twice a year. The Executive Committee comprises three officers: two co-chairpersons and the secretary. There are two standing subcommittees: Data and Laboratory with *ad hoc* workgroups created as necessary. Regular conference calls are held between the Executive Committee, the chairperson of each of the four subcommittees and JSI, during which the progress of the project is reported and discussed.

The overall goal of the Region VIII Chlamydia Project is to assess and reduce the prevalence of chlamydia and associated complications in family planning and STD clinic populations, and other community-based provider populations through a program of outreach, education, screening, treatment, and follow-up. Funds granted through this project are intended to expand services to women in need, rather than replace or supplant existing service dollars.

While specific objectives may vary from state to state, the overall objectives of the regional plan are as follows:

- Implement a regional data collection system
- Determine screening criteria
- Expand services
- Improve services, such as screening, treatment, and follow-up
- Provide appropriate and relevant training
- Reduce test, treatment, and laboratory costs

JSI Research and Training Institute administers the project in Region VIII, providing coordination and support to the Regional Advisory Committee and subcommittees. The CDC provides ongoing guidance and technical assistance in the operation of the project, including the provision of up-to-date information on testing, treatment, surveillance, and other vital components of a chlamydia control program. The CDC will use data and experience gained through these regional projects to coordinate and implement a national chlamydia program in the near future.