

This is an introduction to the Region I Infertility Prevention Project or IPP, which is funded by the Centers for Disease Control and Prevention, or CDC. The project is a collaboration between CDC and the Office of Population Affairs. JSI Research & Training Institute coordinates the project at the regional level. The project's goal is to reduce preventable infertility in at-risk populations. IPP encourages public-private partnerships and collaboration across the health care system to encourage screening of at-risk young women by private providers. IPP promotes screening in the public sector primarily through support for routine screening and treatment services for chlamydia and gonorrhea in publicly funded family planning and sexually transmitted disease facilities throughout New England.

## Purpose

To provide new members with a brief and easy-to-access introduction to the Infertility Prevention Project (IPP)

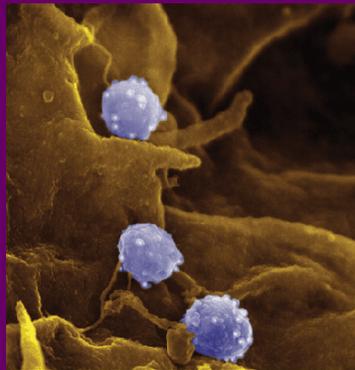
The purpose of this orientation is to provide new Advisory Board members with a brief and easy-to-access introduction to chlamydia, gonorrhea and IPP. IPP focuses primarily on chlamydia, or CT, because it is the most common sexually transmitted disease, or STD, and is often asymptomatic. Gonorrhea, or GC, is a secondary IPP focus because it is less common and is more often symptomatic.

## **By the end of this training, you will be familiar with the:**

- Clinical presentation of chlamydia and gonorrhea
- Epidemiology of chlamydia and gonorrhea
- History and purpose of IPP
- Administrative structure of IPP
- Role of IPP project areas
- Role of IPP Infrastructure

At the end of this training, you should have a better understanding of: the clinical presentation and risk factors for chlamydia and gonorrhea, the epidemiology of chlamydia and gonorrhea, the history and purpose of IPP; the administrative structure of IPP; the role of IPP project areas; and the role of the IPP Infrastructure in IPP.

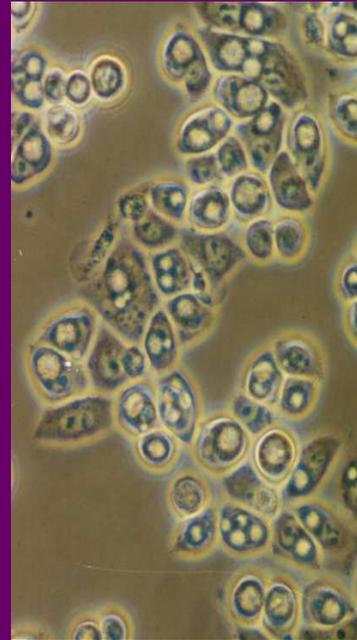
# Chlamydia and Gonorrhea 101



Let's start with some background information on chlamydia and gonorrhea.

## *Chlamydia trachomatis*

- Most common bacterial STD<sup>1</sup>
- Estimated 2.8 million cases per year nationally<sup>1</sup>
- Up to 80% of women with chlamydia have no visible signs or symptoms of infection<sup>2</sup>



Chlamydia is the most frequently reported bacterial STD in the US, particularly among adolescents and young adults. Annually, there are an estimated 2.8 million chlamydia infections in the US, approximately 80% of which have no visible signs or symptoms.

# Presentation of Chlamydia

**Very often asymptomatic**

## **Females**

- Abnormal vaginal discharge
- Itching or burning of the vagina
- Burning during urination
- Painful intercourse
- Abdominal or lower back pain
- Fever

## **Males**

- Discharge
- Burning or itching at urethral opening
- Burning sensation during urination

The most important thing to remember about Chlamydia is that infections are most often asymptomatic. When signs and symptoms are present, however, they can include the following for both females and males: discharge, burning or itching, and burning during urination. Females may also experience painful intercourse, abdominal or lower back pain, and fever.

## *Neisseria gonorrhoeae*

- Second most commonly reported bacterial STD
- 700,000 cases per year<sup>3</sup>
- More likely to be symptomatic than chlamydia (especially in men)



After chlamydia, gonorrhea is the second most commonly reported bacterial STD in the US. There are an estimated 700,000 gonorrhea cases each year, half of which go undetected and untreated. Gonorrhea is more likely than chlamydia to be symptomatic, particularly in male patients.

# Presentation of Gonorrhea

*More likely to be symptomatic than chlamydia;  
May be asymptomatic*

## Females

- Abnormal vaginal discharge
- Pain or burning with urination
- Rectal and throat infections may occur with or without symptoms

## Males

- Discharge (white, yellow, green)
- Pain or burning with urination
- Swollen or painful testicles
- Rectal and throat infections may occur with or without symptoms

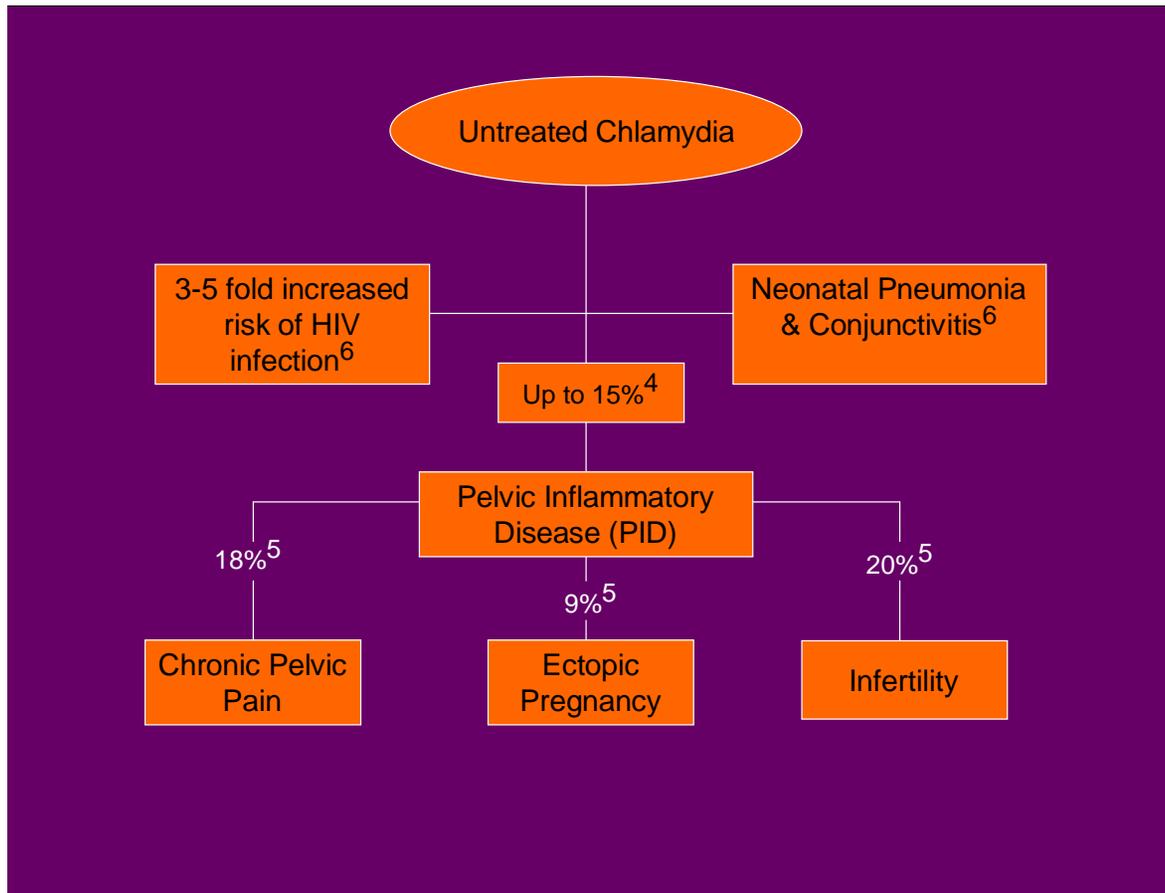
Signs and symptoms of gonorrhea among females and males include discharge and pain or burning during urination. Rectal and throat infections may occur with or without symptoms. Males may also experience swollen or painful testicles. It is important to remember that, as with chlamydia, gonorrhea may also be asymptomatic.

## Link to Infertility

- If left untreated, chlamydia and gonorrhea may cause pelvic inflammatory disease (PID), infertility, and ectopic pregnancy<sup>1,2</sup>
- If identified early, chlamydia and gonorrhea infections are easily and effectively treated with antibiotics<sup>1,2</sup>
- Chlamydia infections are suspected to be the number one cause of preventable infertility<sup>1</sup>
- At-risk populations should be screened to reduce incidence

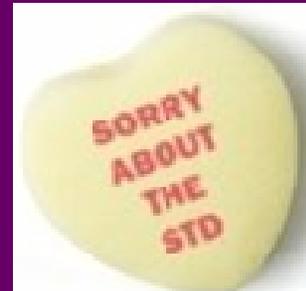


There is a strong link between both chlamydia and gonorrhea and infertility. Both STDs may cause ectopic pregnancy, pelvic inflammatory disease (or PID), and infertility. When treated early, chlamydia and gonorrhea are easily treated with antibiotics; however, when left untreated they can cause irreversible damage to a woman's reproductive system. As a result, at-risk populations should be screened to reduce the incidence of chlamydia and gonorrhea. Chlamydia is more prevalent than gonorrhea and therefore screening efforts should focus on chlamydia unless there is a high incidence of gonorrhea in the local area.



This diagram depicts the serious health consequences that can occur when chlamydia is left untreated. Untreated chlamydia puts a woman at 3 to 5 times the risk of contracting HIV. Among pregnant women, untreated chlamydia can lead to low birth weight or premature birth. If passed to the newborn during delivery, it can lead to neonatal conjunctivitis and pneumonia. For up to 15% of women with untreated chlamydia, PID may develop. Research suggests that, of those that develop PID, approximately 9% will have ectopic pregnancy, 18% will have chronic pelvic pain, and 20% will have infertility.

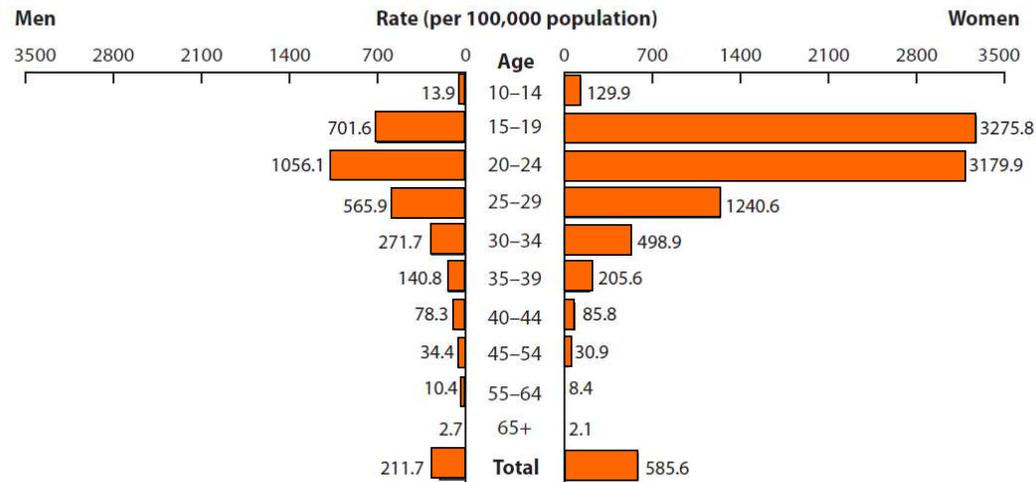
# Epidemiology



Next we will discuss the epidemiology of chlamydia and gonorrhea in the United States and in Region I.

# US Chlamydia Case Rates<sup>7</sup> By Age and Sex, 2008

Figure 5. Chlamydia—Age- and sex-specific rates: United States, 2008



In the U.S., the chlamydia case rate is highest among women aged 15-24. The case rate among this population is over 3,000 cases per 100,000 women. As with women, the chlamydia rate among men is highest in 15-24 year olds. Nevertheless, the chlamydia rate for men in this age group is significantly lower than the chlamydia rate among women in this age group.

## Racial Disparities in US Chlamydial Infections, 2008<sup>8</sup>

Non-Hispanic  
Blacks



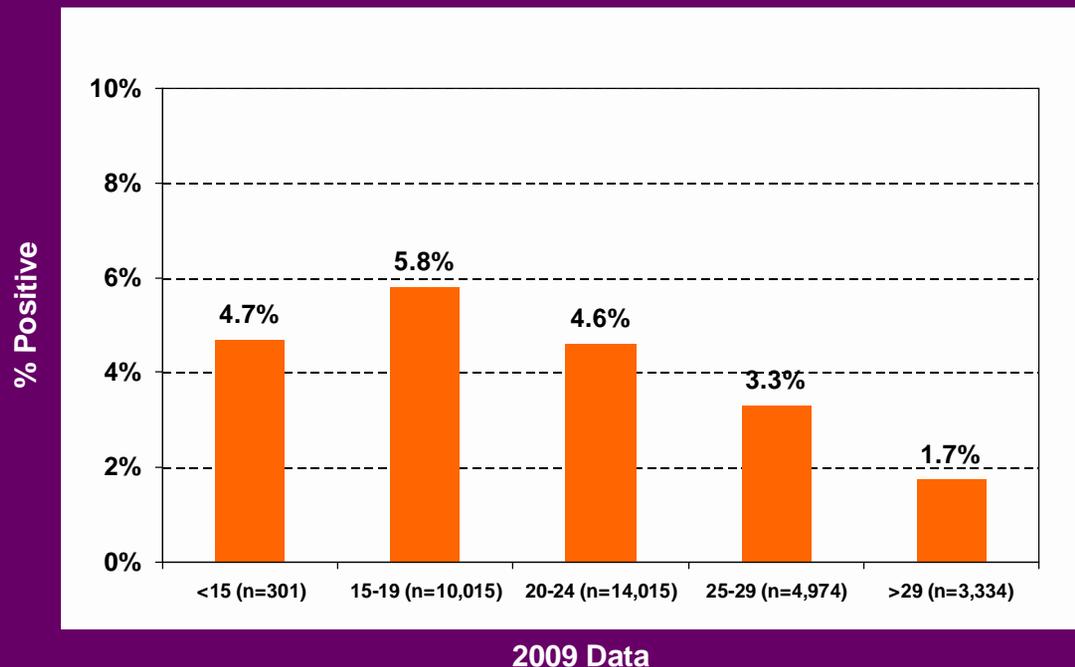
Non-Hispanic  
Whites



Non-Hispanic Blacks had 8.8 times the reported  
chlamydia rates of non-Hispanic Whites.

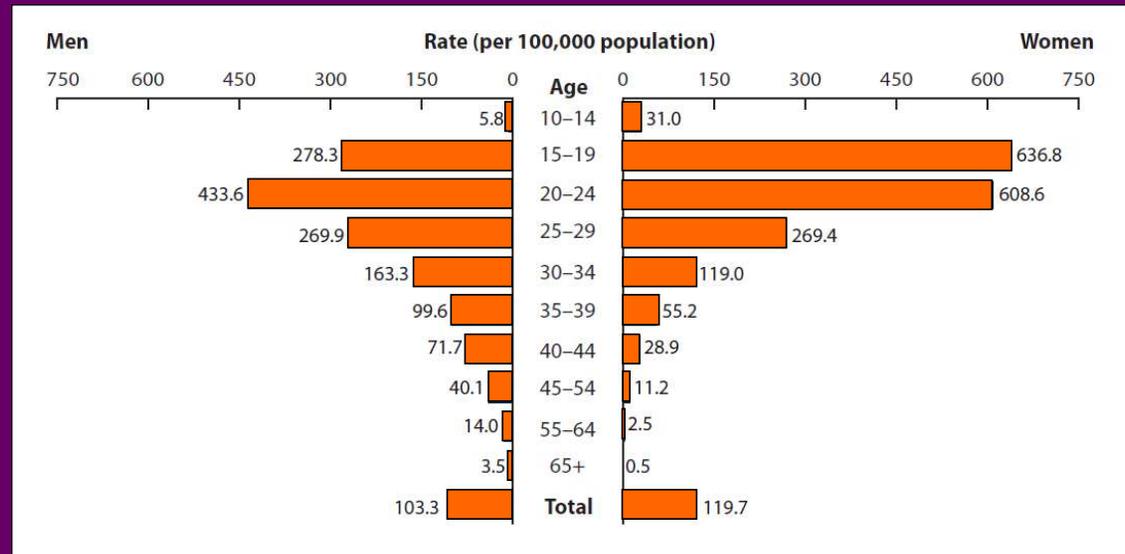
The causes of racial and ethnic health disparities are complex. Socio-economic factors are so entangled with race that causal relationships are often hard to discern. Nevertheless, research has shown that race, socio-economic status, poverty, and geography are all significant determinants of STD disparities. As seen here, non-Hispanic Blacks are 8.8 times as likely as non-Hispanic Whites to contract a chlamydial infection.

## Region I Chlamydia Positivity<sup>9</sup> All Females by Age Category



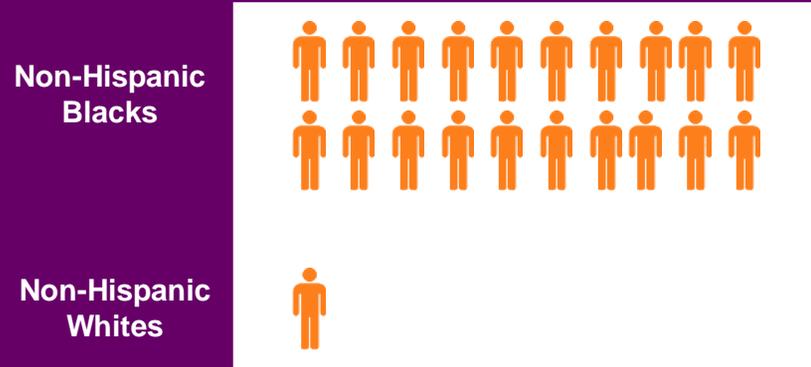
This graph illustrates the chlamydia positivity rates of female family planning clients in the New England Region, which is known as Region I, who were tested through IPP in 2009 by age. As you can see, positivity is highest among women 24 and under. Positivity is defined as the total number of positive chlamydia tests divided by the total number of people tested. Note that the Region I presents information on chlamydia positivity while CDC presents the case rate, which is the number of positives reported among the total population, not just those tested. While the definitions vary slightly, both show that the disease burden of chlamydia is highest among women 24 and under.

## US Gonorrhea Case Rates<sup>10</sup> By Age and Sex, 2008



The highest rate for gonorrhea among males was in 20-24 year olds at approximately 434 cases per 100,000 population, while the highest rate of gonorrhea for females was in 15-19 year olds with a rate of approximately 637 per 100,000 population. Reported cases of gonorrhea are concentrated among younger females, with nearly 70% of reported gonorrhea morbidity among females ages 15-24. For males, slightly less than 50% of reported gonorrhea morbidity is among ages 15-24. These data show that gonorrhea is of greatest concern for adolescents and young adults.

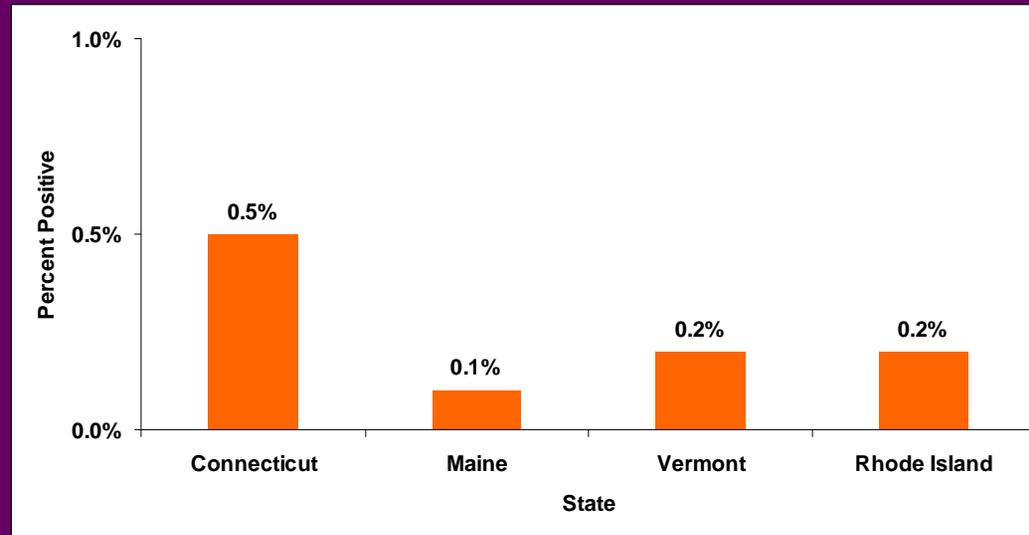
## Racial Disparities in US Gonorrhea Infections, 2008<sup>8</sup>



Non-Hispanic Blacks had 20.2 times the reported gonorrhea rates of non-Hispanic Whites.

In 2008 in the United States, non-Hispanic Blacks had 20.2 times the reported gonorrhea rates of non-Hispanic Whites. Nevertheless, STD disparities can't be explained by risky behaviors or socio-demographic factors alone. Sexual network dynamics play a significant role that interventions must address.

## Region I Gonorrhea Positivity<sup>9</sup> Tests in Females by State, 2009



\*MA and NH did not report GC data to IPP

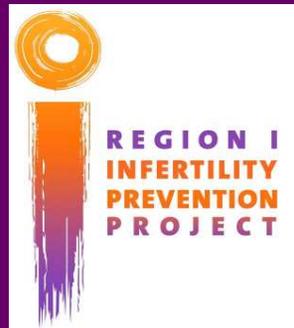
Gonorrhea positivity rates across Region I are less than 1% among females. Because of the small numbers, this graph does not present rates by age group.

## Current Epidemiology

- For current United States chlamydia and gonorrhea epidemiology, visit [www.cdc.org](http://www.cdc.org)
- For current Region I chlamydia and gonorrhea epidemiology, visit <http://www.ipp.jsi.com/stats.htm>

For more information on the current epidemiology of chlamydia and gonorrhea in the United States, visit [www.cdc.org](http://www.cdc.org). Statistics on the chlamydia epidemic in Region I can be found on the Region I Infertility Prevention Project web site, [www.ipp.jsi.com](http://www.ipp.jsi.com).

# Infertility Prevention Project



Now that we have seen how the burden of chlamydia and gonorrhea falls predominantly on women younger than 25, we will introduce the Infertility Prevention Project, which focuses on increasing the screening and treatment of chlamydia and gonorrhea among sexually active women under 25 and their partners.

## IPP History

- Began as a demonstration project in Federal Health and Human Services Region X in 1988
- Congress appropriated funds for a nationwide screening project in 1992
- Region I (New England) joined in 1995

Chlamydia screening and prevalence monitoring activities were initiated in Health and Human Services, or HHS, Region X in 1988 as a CDC-supported demonstration project. Interestingly, from 1988 through 2003, the screening programs in Region X family planning clinics demonstrated a 52% decline in chlamydia positivity, from 15% to 7% among 15- to 24-year-old women. In 1992, IPP screening services for women were expanded to three additional HHS regions. In 1995, the remaining six HHS regions, including Region I – which is comprised of Connecticut, Rhode Island, Massachusetts, New Hampshire, Vermont, and Maine – joined.

## IPP Goal

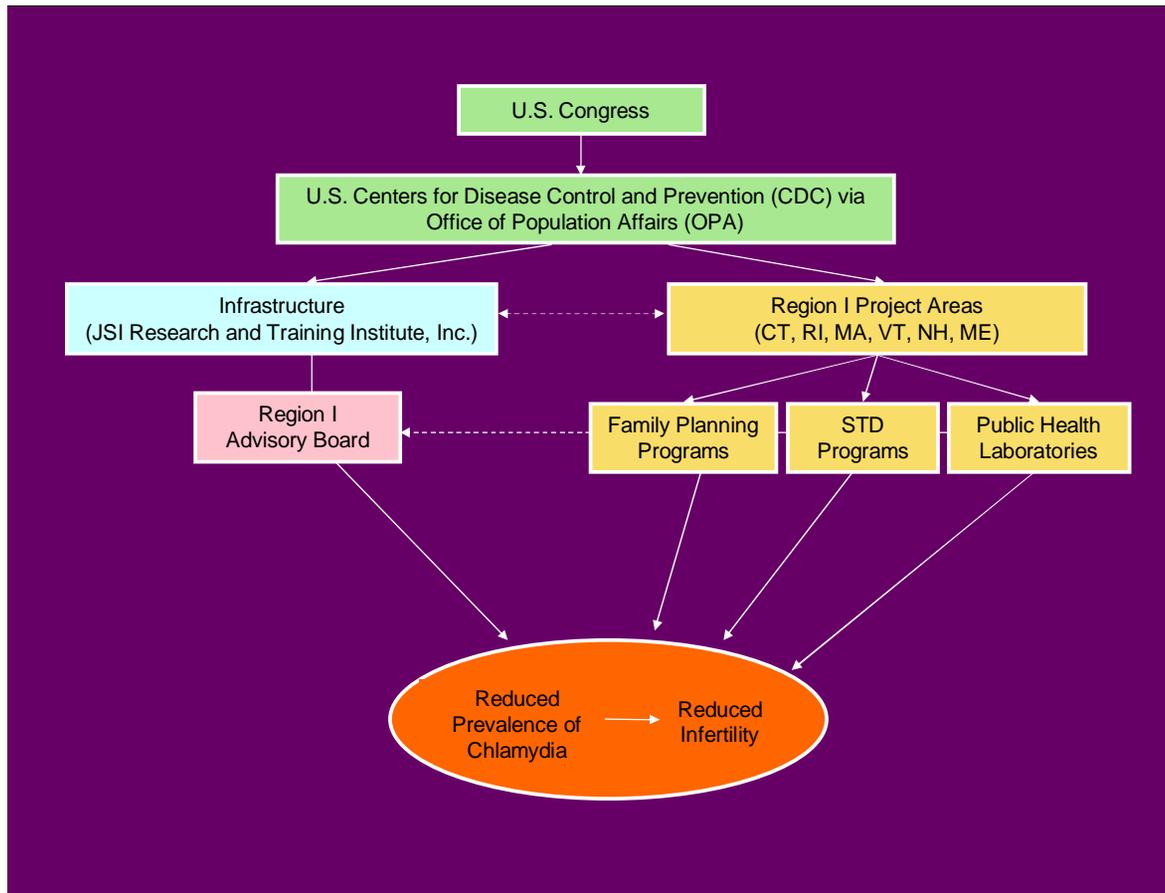
The goal of IPP is to implement effective prevention strategies designed to reduce the debilitating complications, including infertility, that are caused by chlamydial and gonococcal infections among women and their partners.

The goal of IPP is to implement effective prevention strategies designed to reduce the debilitating complications, including infertility, that are caused by chlamydial and gonococcal infections among women and their partners.

## Accomplishing Infertility Prevention

- Screening and treating women and their partners for chlamydial and gonococcal infections
- Counseling women and their partners on safer sex practices
- Referring women for other services as needed

There are three primary strategies for preventing infertility related to STD's. The Infertility Prevention Project promotes: screening and treating women and their partners for chlamydial and gonococcal infections; counseling women and their partners on safer sex practices; and referring women for other services as needed.



Now let's look briefly at the organizational structure of the Infertility Prevention Project. This chart shows how the funds and activities are managed at the national and local levels. The project is funded through the CDC, in collaboration with the Office of Population Affairs and Office of Family Planning, and works closely with the Title X family planning clinics. JSI, as the Infrastructure, manages the Advisory Board and oversees advisory board activities. Advisory Board members provide direct programming and are funded through the STD programs in their states. The partnership and collaboration between the STD, Family Planning, and Public Health Labs in each state is a unique and valued part of the IPP program. The following slides will further explain the management of activities in Region I.

## IPP Key Activities

- Clinical
  - screening, treatment, partner management of CT and GC
- Training and Education
  - of clinicians and laboratorians
- Laboratory
  - bulk purchasing of tests, conducting tests, quality assurance
- Surveillance
  - data collection, management, analysis and reporting to CDC

Key components to the IPP project are: clinical, training and education, laboratory and surveillance. Clinical services focus on chlamydia and gonorrhea screening, treatment, and partner management. Training and education are provided to clinicians and laboratorians. The state public health laboratories purchase tests, process tests and conduct ongoing quality assurance. Lastly, the project conducts surveillance – collecting, managing, and analyzing data for the region and reporting data to the CDC.

## Funds may be used for:

1. Approximately 50% of funds for family planning sites
2. Up to 15% may support male screening and treatment, if the project area can present compelling data and has sufficient female coverage
3. A calculated percent must support targeted gonococcal screening and treatment

The funds received by the Title X Family Planning Training Center grantees can be used for the following services: screening, treatment, counseling and prevention, follow-up, referrals for medical services, partner services, outreach to inform women about services, public information and education, and training for health care providers. Note that approximately 50% of the funds are allocated for family planning Title X clients. Programs have also extended screening activities beyond family planning and STD clinics to high-risk women in juvenile detention and other correctional facilities, adolescent health centers, community health centers, school-based programs, and Indian Health Service clinics. Although the focus of this project is female infertility, up to 15% of funds can be used for male screening and treatment. A calculated percentage based on each project area's budget is also used to support gonorrhea screening. The Gonorrhea burden calculation will be presented later in this presentation. Decisions about targeting gonorrhea screening are determined on a state by state basis, depending on the distribution of the disease.

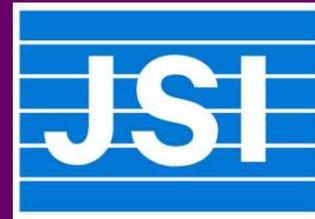
# IPP Administrative Structure



Now let's talk about the administrative structure of the Region I IPP.

## IPP Structure

- Advisory Board (AB)
  - State STD Directors
  - Family Planning Program Directors
  - Laboratory Directors  
(or delegates)
- Infrastructure (JSI)



The Advisory Board is comprised of representatives from state STD programs, family planning agencies, and laboratorians from the state public health labs. In Region I, JSI serves as the Infrastructure to the project – that is, the entity that coordinates all aspects of the project and facilitates data management. JSI convenes the Advisory Board and coordinates Board activities.

## Role of Advisory Board

- Develop and/or share trainings, tools and materials
- Make policy recommendations
- Determine best way to allocate resources
- Evaluate prevalence and incidence of disease regionally



The role of the Advisory Board is to: develop and/or share trainings, tools and materials; make policy recommendations; determine the best way to allocate resources; and evaluate the prevalence and incidence of disease regionally.

## Role of Advisory Board

continued

- Develop projects for regional benefit
- Develop regional goals and objectives
- Review CDC recommendations
- Implement regional and state projects
- Respond to CDC priorities

The Advisory Board also: develops projects for regional benefit; develops regional goals and objectives; reviews CDC recommendations; implements regional and state projects; and responds to CDC priorities.

## Membership Responsibilities

- Attend meetings
- Develop, implement, promote and monitor adherence to screening guidelines
- Target screening to those most in need
- Promote STD prevention and counseling
- Provide accurate and timely testing
- Be familiar with regional performance measures, goals and objectives
- Submit accurate prevalence monitoring data in a timely manner

As responsibilities of their membership, Advisory Board members: attend meetings; develop, implement, promote and monitor adherence to screening guidelines; target screening to those most in need; promote STD prevention and counseling; provide accurate and timely testing; become familiar with regional performance measures, goals and objectives; and submit accurate prevalence monitoring data in a timely manner.

## Membership Responsibilities

- Attend meetings

First, Advisory Board members must attend regular Region I IPP meetings.

## Advisory Board Meetings

- Attend biannual regional Advisory Board meetings, usually in November and June
- Decision-making
  - No by-laws
  - Decision making by consensus, not voting
- Participate in one of three subcommittees



Advisory Board members are responsible for attending biannual regional Advisory Board meetings, which usually occur in November and June. The Region I Advisory Board does not have by-laws and it makes decisions by consensus, not voting. Members are also required to participate in one of three subcommittees.

## Subcommittee Meetings

- **Subcommittees:**
  - Screening and Treatment
  - Data
  - Laboratory
- Participate in subcommittee meetings via phone or web conference

The Board meets in three subcommittees – screening and treatment, data, and laboratory. The Advisory Board and subcommittees convene at the bi-annual in-person Advisory Board meetings and also conduct bi-annual conference calls to evaluate progress on action items. Advisory Board members are responsible for actively participating in reaching the regional goals and objectives, which are determined by the Board annually.

## Membership Responsibilities

- Develop, implement, promote and monitor adherence to screening guidelines

Second, Advisory Board members are responsible for working toward developing, implementing, promoting and monitoring adherence to screening guidelines. CDC publishes screening guideline recommendations, however project areas often tailor these screening guidelines to reflect their specific chlamydia and gonorrhea epidemiology. Please note that screening is different from testing. A test is considered “testing” when performed on a person who presents with signs and symptoms of infection, but is considered “screening” when performed on a specific population with no symptoms.

## CDC Recommended Screening Guidelines<sup>11</sup>

CDC recommends screening:

- All sexually-active females aged  $\leq 25$  years annually
- Sexually-active females aged  $\geq 26$  years with risk factors (e.g., new sex partner or multiple sex partners)



CDC recommends that providers screen all sexually active females 25 and under annually. The CDC guidelines indicate that women 26 and over may be screened if they present with risk factors, such as a new sex partner or multiple sex partners. Remember that chlamydia infection has the highest prevalence among adolescents and young adults.

## Project Area Screening Guidelines (FY 2010)

### MA & RI

- Screen sexually active females 25 years and younger annually
- Screen sexually active women  $\geq 26$  years with new or multiple partners and/or who have been diagnosed with an STD in the previous 12 months
- Screen pregnant women at first prenatal visit

Massachusetts and Rhode Island have the following screening guidelines: screen sexually active females 25 years and younger annually, and screen sexually active women 26 years old and older with new or multiple partners and/or who have had an STD diagnosis in the previous 12 months. Massachusetts and Rhode Island also recommend screening pregnant women at the first prenatal visit. Clinicians are encouraged to test anyone with signs or symptoms of chlamydia, as well.

## Project Area Screening Guidelines (FY 2010)

### ME, NH & Vermont

- Screen sexually active females 24 years and younger annually
- Screen women  $\geq 25$  years with new or multiple partners and/or who have been diagnosed with an STD in the previous 12 months
- Screen pregnant women at first prenatal visit

Maine, New Hampshire and Vermont's screening guidelines are: screen all females 24 years and younger annually, and screen women 25 years or older with new or multiple partners and/or who have been diagnosed with an STD in the previous 12 months. Once again, providers in these states are encouraged to screen pregnant women at the first prenatal visit.

## Project Area Screening Guidelines (FY 2010)

### CT

- Screen all sexually active females 25 and under annually.
- Screen pregnant women at first prenatal visit

Connecticut's guidelines are to screen annually females 25 and under and screen pregnant women at the first prenatal visit. Because of the low rate of chlamydia among women aged 26 and over in Connecticut, Connecticut IPP does not support screening women 26 and over. Clinicians are still encouraged to test anyone with signs or symptoms of chlamydia.

## Membership Responsibilities

- Target screening

Third, Advisory Board members are responsible for promoting targeted screening. Targeting screening initiatives are aimed at providing screening for those populations who have high rates of CT. Two populations that have high rates of CT are women who have had CT previously and women who are seeking a pregnancy test. Studies have shown that among women who have had chlamydia once, around 13-14% of them will get it again within the year<sup>11</sup>. For women seeking a pregnancy test only, rates have been reported between 4-13%, and consistently higher than other patients at a given clinic site<sup>12</sup>. For this reason, screening is targeted at these two populations.

## CDC Recommended Re-Screening

Chlamydia-infected women and men should be retested approximately 3 months after treatment...If retesting at 3 months is not possible, clinicians should retest whenever persons next present for medical care in the 12 months following initial treatment.<sup>13</sup>



In addition to annual screening, CDC recommends that clients with a positive chlamydial infection should be re-tested approximately 3 months following treatment, but at least within 12 months of initial treatment. Interestingly, a 2008 study published in the Journal of the American Sexually Transmitted Diseases Association showed that about 25% of female teenagers diagnosed with chlamydia become re-infected within one year of treatment. Research has also shown that clients being re-screened after a positive result have routinely higher positivity rates when compared to clients at the same clinic who have not had a recent positive diagnosis. This research demonstrates the importance of re-screening along with annual screening due to the high rate of re-infection.

## Pregnancy Test Only Visits

- Data show that Chlamydia rates are high among women who come in for a “pregnancy test only” (4-13%)<sup>12,14,15,16,17,18</sup>
- One unpublished study showed that Chlamydia rates are higher among women who come in for a “pregnancy test only” compared to the clinic population (11% vs. 4%)
- All project areas in Region I collect information for PTO on their lab slips (starting in 2011)
- Promote screening at PTO visits according to the screening guidelines

Data show that Chlamydia rates are high among women who come in for a “pregnancy test only” (4-13%)<sup>12,14,15,16,17,18</sup>. One study showed that Chlamydia rates are higher among women who come in for a “pregnancy test only” compared to the clinic population (11% vs 4%). For that reason, all Region I project areas are collecting PTO information on their lab slips, beginning in 2011, to learn more about the association of PTO with positivity. Region I promotes screening at PTO visits according to the CDC screening guidelines.

## Membership Responsibilities

- Promote prevention and counseling

Fourth, the Advisory Board is tasked with promoting prevention and counseling.

## Prevention and counseling messages should include:

- Education & safer sex counseling
- Instructions for taking medications, including finishing all antibiotics
- Instructions to refrain from sex for 7 days after both patient and partner have been treated
- Encouragement to return approximately 3 months after treatment for re-screening

In addition to screening for chlamydia and prescribing treatment, health care providers are encouraged to educate and counsel clients diagnosed with chlamydia about safer sex practices. Clients should be instructed to finish all of their antibiotics and to abstain from sexual intercourse for 7 days after they and their sex partners have been treated. Clients treated for chlamydia infection should also return to the clinic to be re-screened approximately 3 months after treatment.

## Management of Sex Partners

- All sex partners from within 60 days preceding onset of symptoms or diagnosis of CT should be evaluated, tested and treated
- Treat partners if testing is not possible
- Look at your state laws regarding Expedited Partner Therapy (EPT) and the option to provide treatment without seeing a patient in the clinic

One component of chlamydia control is to ensure that sex partners of clients diagnosed with chlamydia are also tested and treated. All sex partners within 60 days of diagnosis and treatment should be tested and, if positive, treated. Since untreated chlamydia may persist in an individual for years, sex partners from over 60 days prior to diagnosis may also benefit from testing and treatment. If testing is not possible, then partners should be treated without being tested. An option for providers in many states is Expedited Partner Therapy, also known as EPT. EPT is the clinical practice of treating the sex partners of patients diagnosed with chlamydia or gonorrhea by providing prescriptions or medications to the patient to take to his/her partner without the health care provider first examining the partner.

## Expedited Partner Therapy

- Giving medication or prescription for partner without requiring partner to be examined by provider
- In 2006, CDC released guidance and research in support of EPT
- Legal barriers to EPT in some states
  - For more details on the legality of EPT, visit:  
<http://www.cdc.gov/std/EPT/legal/default.htm>

Expedited Partner Therapy reduces barriers to partner treatment and decreases re-infection rates, and is now an option in many states. This practice is encouraged by the CDC. Providers should make sure they are familiar with their state's policies and regulations regarding partner notification and therapy. Within Region I, EPT is either expressly permitted or potentially permissible in all 6 New England states. Visit the CDC website for updated information on the legality of EPT and your state's specific policies.

## Membership Responsibilities

- Provide accurate and timely testing

Fifth, Advisory Board members must provide accurate and timely testing of chlamydial and gonococcal specimens.

## Provide Accurate and Timely CT/GC Testing

- Public health laboratorians:
  - Conduct CT/GC tests
  - Monitor performance and turn-around-times
  - Conduct quality assurance activities

The public health labs from each state conduct chlamydia and gonorrhea tests for clinics funded through IPP. They routinely monitor performance and turn-around-times for reporting test results. They also conduct quality assurance activities. These reports and activities are shared during IPP subcommittee meetings.

## Membership Responsibilities

- Be familiar with regional performance measures, goals and objectives

Sixth, Advisory Board members are responsible for being familiar with regional performance measures, goals, and objectives.

# Regional IPP Goals and Objectives

## Project Areas

- Goals and Objectives (*CSPS*)
- Performance Measures (*CSPS*)
- Performance Improvement Plan (*CSPS*)

## Infrastructure

- Region I Goals and Objectives (*Regional Plan*)
- Goals and Objectives (*Infrastructure Application*)
- Performance Measures (*Infrastructure Application*)

The Infertility Prevention Project's goals and objectives are communicated to the Regional IPP participants and the CDC through three main documents: the CSPS, the Regional Plan and the Infrastructure Application. Project areas write state-specific goals and objectives for participating in IPP in the CSPS. They also report on state-specific performance measures and performance improvement plans. The Infrastructure facilitates the development of regional goals and objectives, which are agreed to by the Advisory Board and printed through the regional plan. In addition, the Infrastructure reports on its own IPP goals and objectives and performance measures for the infrastructure through the infrastructure application.

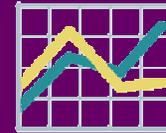
## CSPS Performance Measures

Among clients of IPP **family planning clinics/STD clinics**, the proportion of women with positive CT and GC tests that are treated within 14 and 30 days of the date of specimen collection

As previously mentioned, CSPS stands for the Comprehensive STD Prevention System, which is a CDC grant through which Infertility Prevention Project areas are awarded funding. The first 2010 CSPS performance measure related to IPP is, among clients of IPP family planning clinics and STD clinics, the proportion of women with positive chlamydia tests and gonorrhea tests that are treated within 14 and 30 days of the date of specimen collection. There is a separate performance measure for each disease type and each clinic type resulting in 4 performance measures.

## CSPS Performance Measures

- Proportion of females admitted to large juvenile detention facilities that were tested for chlamydia
- Proportion of females tested diagnosed with chlamydia



The final CSPS performance measures are: the proportion of female admittees to large juvenile detention facilities that were tested for chlamydia and the proportion of total females tested that were diagnosed with chlamydia.

## Regional Goals and Objectives

- Increase chlamydia screening of young women and men (<25 year olds) by 10%
- Decrease the number of women 25 and older with no risk factors that are screened to less than 5%
- Increase number of women re-screened for chlamydia 3-4 months after treatment
- Increase access to Expedited Partner Therapy

The regional IPP goals and objectives include: increase chlamydia screening of women and men under age 25 by 10%; decrease the number of women 25 and older with no risk factors that are screened to less than 5%; increase the number of women re-screened 3 months after treatment; and increase access to Expedited Partner Therapy.

## Infrastructure Performance Measures

- Among clients attending family planning clinics, determine chlamydia screening coverage stratified by age
- Among clients attending family planning clinics, determine chlamydia screening test utilization rates stratified by age

The CDC has also developed performance measures for the Infrastructure which are: among clients attending family planning clinics, determine chlamydia screening coverage stratified by age; and, among clients attending family planning clinics, determine chlamydia screening test utilization rates stratified by age.

## Membership Responsibilities

- Submit accurate prevalence monitoring data in a timely manner

Seventh, Advisory Board members must submit accurate prevalence monitoring data in a timely manner.

## Data Submission to CDC

- Data are collected from completed lab slips
- Lab slips are entered by states or by the Region I data entry contractor into each state's prevalence monitoring database
- Regional data report is compiled and sent out quarterly and annually to the Advisory Board and CDC, and is posted on the [www.ipp.jsi.com](http://www.ipp.jsi.com) web site

Data are collected from completed lab slips. For most states in the region, lab slip data are entered by a Region I data entry contractor; Massachusetts, however, conducts its own data entry. Data are entered into each state's prevalence monitoring database and sent to each state's STD department for use. Quarterly, STD Directors or Data Managers from the state send JSI a clean dataset. JSI compiles the data and sends it out quarterly and annually to the Advisory board and CDC. All data reports can also be found on the Region I IPP web site, [www.ipp.jsi.com](http://www.ipp.jsi.com).

## Regionally Collected Risk Factors and Clinical Signs

The following variables are collected on lab slips for program monitoring:

- Risk Factors
  - New sex partner
  - Two or more sex partners
  - STD diagnosis in past 12 months
  - Pregnancy
- Clinical Signs and Symptoms
  - Cervical ectopy
  - Mucopurulent cervicitis
  - PID

In order to track adherence to these screening criteria, project areas collect the following risk factors: new sex partner, two or more sex partners, and STD diagnosis in past 12 months. They also collect data on pregnancy status. Connecticut is the only state that does not collect risk information since they only screen women 25 or younger. The project areas in the region also collect data on the following clinical signs and symptoms: cervical ectopy, mucopurulent cervicitis, and pelvic inflammatory disease.

## Lab Slips

- JSI prints lab slips for all project areas except MA
- Lab slips are printed in triplicate with one page intended for the clinic, one for the lab, and one for the STD program
  - The slip sent for data entry has the patient name blacked out to protect confidentiality

Each Region I state uses lab slips as a means of recording each chlamydia and gonorrhea test and all relevant demographic and risk factor information. JSI is responsible for printing lab slips for each state in Region I except Massachusetts, which prints its own lab slips.

# Lab Slip Example

**LAB SLIP- CONNECTICUT**  
Region I Chlamydia Project - PRINT CLEARLY

*Lab Use Only*

Client Name \_\_\_\_\_

Lab \_\_\_\_\_ Date Received \_\_\_\_\_

Client Number \_\_\_\_\_ Client Sex  F  M

Date of Birth (mm/dd/yyyy) \_\_\_\_\_

Date Specimen Collected \_\_\_\_\_

Service Site  3

Site of Specimen:  Cx  U  Urine  Not tested

PROVIDER CLINIC ADDRESS: ACCOUNT NUMBER:  
New London PPC C00302/9NEW  
Les Silberman, MD  
45 Franklin St.  
New London, CT 06320  
860-443-5820

**TEST 307 M**

CT Test  Probe  PCR  GC Results  Negative  Equivocal  Positive  Un satisfactory Specimen

SDA  LCR  Positive  Un satisfactory Specimen

SPA  TMA  Positive  Un satisfactory Specimen

Culture  SDA  Positive  Un satisfactory Specimen

Blocking

CT Results  Negative  Equivocal  Positive  Un satisfactory specimen

Comments: \_\_\_\_\_

Date Reported \_\_\_\_\_ By \_\_\_\_\_

**A. Ethnicity**  
 Hispanic/Latino  
 Non-Hispanic/Non-Latino

**B. Race (check all that apply)**  
 White  
 Black or African American  
 Alaskan Native or American Indian  
 Asian  
 Native Hawaiian or Other Pacific Islander  
 Other

**C. If over age 25 (check all that apply)**

	Yes	No
1. New sex partner:	<input type="checkbox"/>	<input type="checkbox"/>
2. Two or more sex partners:	<input type="checkbox"/>	<input type="checkbox"/>
3. STD contact:	<input type="checkbox"/>	<input type="checkbox"/>
4. Pregnant:	<input type="checkbox"/>	<input type="checkbox"/>
5. Other (explain):	<input type="checkbox"/>	<input type="checkbox"/>

**D. Program Area/Visit to:**  
 Family planning  STD  Other

*For DFH Use Only*

RX \_\_\_\_\_

RX Date \_\_\_\_\_

Here is a sample lab slip. Each state's lab slip is slightly different, but they all collect data required for the CDC's core dataset. This includes: the date the specimen was collected, the facility code, demographic information, test type information, and test results.

## Lab Slip Ordering

- Orders are placed 3 times a year in January, May and September
- 3 weeks prior to placing the order, JSI requests orders from the Data Managers
- Data Managers contact facilities and have them complete the lab slip order form
- Order forms are faxed or emailed to JSI
- JSI makes any requested changes to lab slips, confirms orders with Data Managers and sends them the lab slip files for approval
- Lab slips are printed and delivered directly to facilities

Three times a year, JSI requests lab slip orders from data managers, who are responsible for contacting facilities and helping them calculate their order. Order forms are then sent to JSI, which makes any edits necessary to the lab slips and submits the complete order to the printer. Lab slips are then sent directly to each facility.

## Role of Project Areas



Now we will discuss the role of the project areas in IPP. Project areas can be states, US territories, or large metropolitan areas. In Region I, the project areas are the six New England states.

## Project Area CSPA Funding

- IPP funds are awarded to state STD programs, who distribute to family planning and other clinics
- Should focus on CT screening in sexually active adolescent and young adult women

Project areas receive IPP funding from the CDC through the Comprehensive STD Prevention System or CSPA. State STD programs are responsible for distributing IPP funds to family planning and other IPP-funded sites. These funds should be prioritized for chlamydia screening among sexually active young women.

## Expectations of Project Area IPP

- Meet regularly with state partners
- Share data
- Develop funding applications
- Monitor performance measures
- Perform QA regarding adherence to screening criteria
- Submit CSPA applications to JSI for review
- Meet CSPA requirements



Project areas support chlamydia and gonorrhea screening for at-risk populations. In order to accomplish targeted screening of at-risk populations project areas are expected to: meet regularly with state partners; share data; develop funding applications; monitor performance measures; perform quality assurance to improve adherence to screening criteria; and submit CSPA applications to JSI for review before submission to CDC.

## CSPS Requirements

- Meet minimum 3% site positivity
- Implement GC screening plans



There are two requirements outlined for project areas through the CSPS. The sites funded to provide chlamydia and gonorrhea testing through IPP must have a minimum site positivity rate of 3% and they are also required to implement gonorrhea screening plans.

## Minimum Positivity

- Minimum 3% site positivity rate set by CDC
- If facilities do not meet the 3% site positivity rate, STD Directors may ask facilities to further target their screening to the highest risk populations within their facility.
- If facilities cannot meet 3% positivity, STD Directors may redirect IPP funds to other facilities.

Facilities funded to provide chlamydia screening are expected to have a minimum 3% site positivity rate. CDC set this at the minimum site positivity rate based on cost effectiveness studies. If facilities do not meet the 3% positivity rate, STD Directors may ask facilities to target their screening to the highest risk populations within their facility. If facilities cannot meet 3% positivity, STD Directors may redirect IPP funds to other facilities.

## Gonorrhea Screening

- Portion of total IPP funds to be used to target GC screening
- CDC created calculation to determine how much funding should be allocated based on the gonorrhea burden in each project area
- Up to 10% of funds available
- Target Funds - Identify facilities/providers
  - High morbidity with limited screening coverage
  - In geographic catchment areas with high morbidity

Each project area is required to use a portion of its total IPP funds for gonorrhea screening. CDC created a calculation to determine how much funding should be allocated based on the gonorrhea burden in each project area. This calculation will be presented on the next slide. Up to 10% of IPP funds may be used for gonorrhea screening. Project areas are encouraged to target funds to those facilities and providers providing services in high morbidity area.

## Gonorrhea Burden Calculation

- Total IPP Funds x Gonorrhea burden in women 25 and younger in the Project Area
- Gonorrhea burden is calculated among women 25 and younger:
  - $\text{Total number of GC cases} / (\text{total number of CT cases} + \text{total number of GC cases})$

The gonorrhea burden calculation determines how much of a project area's funds should be spent on gonorrhea screening. It is calculated by multiplying the total project area IPP funds by the gonorrhea burden in women 25 and younger in the project area. The gonorrhea burden of women 25 and younger is calculated by dividing the total number of gonorrhea cases by the sum of the total number of chlamydia cases and the total number of gonorrhea cases. Let's take a look at an example.

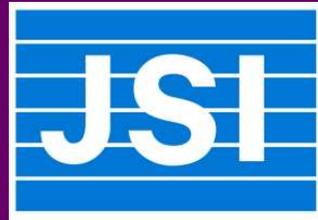
## Gonorrhea Burden Calculation Example

### Project Area X

- Total IPP funds = \$500,000
- Among women 25 and younger (all venues)
  - 500 Gonorrhea and 10,000 Chlamydia
  - GC Burden =  $[500/(10,000+500)] \times 100 = 4.76\%$
- IPP funds to be used
  - $\$500,000 \times 4.76\% = \$23,800$
  - @ \$10/test = 2,380 tests available for screening

Here, the project area has an IPP budget of \$500,000. Among women 25 and younger, there are 500 gonorrhea cases and 10,000 chlamydia cases. The GC burden is 500 GC cases divided by 10,000 CT cases plus 500 GC cases, for a GC burden rate of 4.76%. The total funds (500,000) are multiplied by the GC burden (4.76%) which comes out to be 23,800 dollars to be used for GC screening. If GC tests are 10 dollars a piece, then this project area could fund 2,380 tests.

## Role of Infrastructure



Let's talk a little bit more about the role of the infrastructure in IPP.

## Infrastructure = JSI

JSI receives Region I IPP infrastructure funds for the following activities:

- Administration and coordination of project
- Plan Advisory Board and subcommittee meetings
- Printing of clinic lab slips
- Data entry
- Data management and analysis
- Communication with IPP partners/CDC
- Special funding projects within region
- Technical assistance (TA) and training

As previously mentioned, JSI serves as the infrastructure for the IPP. As the infrastructure, JSI is responsible for: administration and coordination of the project; printing clinic lab slips; data entry; data management and analysis; communication with IPP partners and the CDC; special funding projects within the region; and technical assistance and training.

## Special Projects

- Special projects have included: provider materials, an assessment of regional testing, and epidemiological profiles
- For information on Region I special projects, visit [www.ipp.jsi.com](http://www.ipp.jsi.com)

In addition to the infrastructure tasks, JSI also conducts special projects to fulfill needs identified within the region and by CDC. Special projects have included: developing materials for provider education, conducting an assessment of regional testing, and drafting epidemiological profiles. For more information on the Region I special projects, visit [www.ipp.jsi.com](http://www.ipp.jsi.com).

## Infrastructure Support

- The Infrastructure aims to support the work of the project areas
- The Infrastructure is available for technical assistance and training

While the Infrastructure does a lot of administrative and data management work, its purpose is to support the work of the project areas through coordination, communication and technical assistance and training.

# Thank you and welcome to Region I IPP!

If you have any questions,  
please don't hesitate to contact us.

You can find current contact information at:

[http://ipp.jsi.com/contact\\_us.htm](http://ipp.jsi.com/contact_us.htm)

This has been an introduction to the IPP project. Chlamydial and gonococcal infections remain the most frequently reported STDs in the United States. Women, especially young women, are disproportionately affected by these infections and their sequelae. Access to chlamydia screening and treatment is the primary prevention strategy to reduce prevalence of this infection. Since 1995, IPP has made great strides in expanding chlamydia screening to young women in public sector settings. However, there is still a great deal more that can be done. Working together, we can all continue to reduce the harmful consequences of untreated bacterial STD's.

Thank you and welcome to Region I IPP! If you have any questions, please don't hesitate to contact us by visiting [ipp.jsi.com/contact\\_us.htm](http://ipp.jsi.com/contact_us.htm).

## Resources

- <http://ipp.jsi.com/>
- <http://www.cdc.gov/STD/treatment/>
- <http://www.cdc.gov/std/infertility/default.htm>
- <http://www.cdc.gov/std/infertility/ipp.htm>



Please refer to the web sites listed here for more information on the Region I Infertility Prevention Project.

# Bibliography

1. CDC. *Chlamydia Screening Among Sexually Active Young Female Enrollees of Health Plans – United States, 2000-2007*. MMWR Weekly. April 17, 2009. 58 (14); 362-365. Accessed November 3, 2010. [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5814a2.htm?s\\_cid=mm5814a2\\_e](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5814a2.htm?s_cid=mm5814a2_e).
2. Pandey D et al. *Chlamydia in female reproductive tract*. The Internet Journal of Infectious Diseases. February 13, 2009. Accessed November 3, 2010. [http://www.ispub.com/journal/the\\_internet\\_journal\\_of\\_infectious\\_diseases/volume\\_7\\_number\\_1\\_20/article\\_printable/chlamydia\\_in\\_female\\_reproductive\\_tract.html](http://www.ispub.com/journal/the_internet_journal_of_infectious_diseases/volume_7_number_1_20/article_printable/chlamydia_in_female_reproductive_tract.html).
3. CDC. *Gonorrhea – CDC Fact Sheet*. Page last updated September 1, 2010. Accessed November 3, 2010. <http://www.cdc.gov/std/gonorrhea/stdfact-gonorrhea.htm>.
4. CDC. *Chlamydia Prevention: Challenges and Strategies for Reducing Disease Burden*. Public Health Grand Rounds. Page last updated May 20, 2010. Accessed September 1, 2010. <http://www.cdc.gov/about/grand-rounds/archives/2010/05-May.htm>.
5. Gerberding JL. *Report to Congress: Infertility and Prevention of Sexually Transmitted Diseases, 2000-2003*. CDC. November 2004.
6. Fleming DT and Wasserheit IN. *From Epidemiological synergy to public health policy and practice: the contribution of other sexually transmitted diseases to sexual transmission of HIV infection*. Sex Transm Inf 1999;75:3-17.
7. CDC. *Chlamydia – Age and sex-specific rates: United States, 2006*. Page last updated November 13, 2007. Accessed November 3, 2010. <http://www.cdc.gov/std/stats06/figures/figure7.htm>.
8. CDC. *STD Health Disparities*. Page last updated May 11, 2010. Accessed November 9, 2010. <http://www.cdc.gov/std/health-disparities/race.htm>.
9. Region I IPP. *Region I Infertility Prevention Project 2009 Year End Data Report*. April, 2010. [http://ipp.jsi.com/stats2-regional\\_data.htm](http://ipp.jsi.com/stats2-regional_data.htm).
10. CDC. *Gonorrhea – Age and sex-specific rates: United States, 2007*. Page last updated January 13, 2009. Accessed November 3, 2010. <http://www.cdc.gov/std/stats07/figures/18.htm>.

# Bibliography

## continued

11. Hosenfeld CB, Workowski KA, Berman S, Zaidi A, Dyson J, Mosure D, Bolan G and Bauer HM. *Repeat infection with Chlamydia and gonorrhea among females: a systematic review of the literature*. Sexually Transmitted Diseases. 2009. 36(8):478-89.
12. Stevens-Simon C, Rudnick M, Beach RK and Weinberg A. *Screening positive urine pregnancy tests for sexually transmitted diseases expedites the treatment of infected adolescent gravidas*. The Journal of Maternal-Fetal and Neonatal Medicine. 2002. 11:391–395.
13. JSI Infrastructure Internal Data Analysis of FPAR Data – 2005-2009. Data available upon request.
14. CDC. *Sexually Transmitted Disease Treatment Guidelines 2010*. Page last updated December 17, 2010. Accessed December 17, 2010. <http://www.cdc.gov/std/treatment/2010/>.
15. Geisler WM and James AB. *Chlamydial and gonococcal infections in women seeking pregnancy testing at family-planning clinics*. American Journal of Obstetrics and Gynecology. May 2008. 198:502.e1-502.e4.
16. Thomas AG, Brodine SK, Shaffer R, Shafer MA, Boyer CB, Putnam S and Schachter J. *Chlamydial Infection and Unplanned Pregnancy in Women With Ready Access to Health Care*. The American College of Obstetricians and Gynecologists. December 2001. Vol. 98, no. 6.
17. Gulati R, Marrazzo J and Fine D. *Characteristics of and Risks for Chlamydia trachomatis for Pregnancy-Associated Visits Among Women Aged 15 - 24 Years at Region X Family Planning Clinics, 2003—2006*. [www.centerforhealthtraining.org](http://www.centerforhealthtraining.org). Accessed July 1, 2010.
18. Healthy States, Council of State Governments. *Chlamydia Screening and Treatment: Legislator Policy Brief*. August 2007. <http://www.healthystates.csq.org/NR/rdonlyres/62DCD744-4CD2-406B-8540-08C690F2493B/0/chlamydia.pdf>. Accessed July 1, 2010.