

Public Health and Corrections: A Model of Program

Collaboration and Service Integration (PCSI)

Paula Gibbs¹, Jim Gibson¹, Richard Steece¹, Jason Cummins², Trudy Stein-Hart², Marie Wright³, Carolyn Wester², Kenneth Williams³, Jon Warkentin²

1. Tennessee Department of Health Division of Laboratory Services; 2. Tennessee Department of Health
3. Tennessee Department of Correction;

TN

Department of
Health

TN

Department of
Correction

Background

PCSI

- Service mechanism introduced in 2009 by CDC's National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention (NCHHSTP).
- Public health programs provide categorical services to persons who have multiple related disease risk but often miss significant opportunities for testing.
- Strategic priority is to strengthen collaboration across disease program areas at the client level.

Prison Population

- Newly incarcerated inmates have an increased prevalence of HIV, syphilis, gonorrhea, chlamydia and *Mycobacterium tuberculosis* infection (Bick, Joseph A. Infection Control in Jails and Prisons. *Clinical Infectious Diseases*. 2007; 45:1047-55).
- The U.S. Department of Justice reports that at least 95% of all state prisoners will be released from prison at some point.

Tennessee Department of Correction (TDOC)

- There are 14 state prisons within TDOC, located in 11 counties in Tennessee (Figure 1) with 29,323 inmates (as of May 2016).
- There is one intake facility for male and female inmates each.



Figure 1

Planning & Implementation

Key stakeholders were identified and the current screening and testing process upon intake was discussed. The pilot project included replacing the tuberculin skin test (TST) with a QuantiFERON® TB-Gold In-Tube (QFT). That QFT along with samples for HIV, syphilis, chlamydia and gonorrhea are transported via statewide courier to the Tennessee Department of Health Division of Laboratory Services in Nashville for testing.

Prison staff received training on:

- QFT collection and handling
- Electronic lab ordering via the state Patient Tracking and Billing Management System (PTBMIS)
- Accessing electronic lab results in PTBMIS
- Utilizing the statewide courier system

Results

Table 1 shows the number of total tests performed by test type at each facility as well as the percent of total tests that were positive. The overall percentages of indeterminate results for QFT tests are 0.5% and 0.7% for the women's intake facility and the men's intake facility, respectively.

Contact Information

Paula Gibbs
TDH Laboratory Services, Assistant Clinical Director
Phone: 615-262-6364
Email: Paula.L.Gibbs@tn.gov

Jason Cummins
Program Manager & Senior Epidemiologist
Phone: 615-741-5818
Email: Jason.Cummins@tn.gov

Table 1. Number of Tests Performed by Facility
(% positive)
October 2015-February 2017

	QFT	HIV	RPR	Chlamydia	Gonorrhea
Women's Prison	1,260 (3.5)	1,230 (0.5)	1,197 (1.3)	1,148 (1.1)	1,148 (0.2)
Men's Prison	7,385 (5.1)	7,306 (0.7)	7,309 (0.8)	7,305 (2.5)	7,305 (0.2)

Discussion

Overall, this collaboration has allowed for increased opportunity for prevention and treatment efforts in this at-risk population. Public health is able to provide testing services for five (5) diseases of public health significance and provide results to TDOC in a timely manner. In addition, the amount of time needed to classify inmates at the intake facilities has decreased. project.

Limitations & Next Steps

Limitations

- No explanation regarding the low rates of chlamydia and gonorrhea in the inmate population when compared to Tennessee rates
- Incomplete information regarding additional risk factors for disease among inmates being tested
- No explanation for higher rates of chlamydia in male inmates vs. female inmates

Next Steps

- Cost-effectiveness study
- Compare test results and treatment outcomes for TB infection