



COLORADO

Department of Corrections

Priority: R-8

Communicable Disease Prevention

FY 2014-15 REQUEST

Cost and FTE

- This Department requests \$33,215 General Fund in FY 2014-15 and ongoing to coordinate and track a Communicable Disease Prevention Program throughout the Department. This represents an 11.61% increase over the FY 2013-14 funded levels.

Current Program

- The Department employs approximately 6,000 employees throughout the state. None of these employees are screened for tuberculosis (TB) or given hepatitis B vaccines upon hire.

Problem or Opportunity

- Providing staff with TB screening and hepatitis B vaccines are standards outlined by the American Correctional Association (ACA) and derived from recommendations from the Centers for Disease Control (CDC). The Department strives to maintain accreditation with ACA in order to comply with best practices for corrections.
- Infectious diseases can spread rapidly within the correctional facility environment. In early 2013, Sterling Correctional Facility was in isolation status due to an outbreak of influenza (flu) impacting departmental operations as well as the health and well-being of staff and offenders.

Consequences of Problem

- Not providing TB screenings and vaccinations for hepatitis B increases the risk of contracting infectious diseases for staff as well as offenders.
- The Department will not be in full compliance with all ACA standards, which can result in the Department being required to develop a plan of action to meet compliance during ACA accreditation panels. Colorado is the only fully ACA-accredited state that does not have a program nor an action plan in place. Private facilities operating within the state are also compliant.

Proposed Solution

- This request will allow for staff screenings for TB and vaccinations for hepatitis B. The screenings will be conducted by the Department's clinical staff.
- Implementation of the requested Communicable Disease Prevention Program will benefit both staff and offender wellness by reducing the risk of spreading highly contagious, infectious diseases.
- All Department staff would receive annual TB screenings. New hires would be offered the hepatitis B vaccine during training. Providing TB screenings and vaccinations for hepatitis B would also impact offender wellness and help minimize the spread of infectious diseases.

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FY 2014-15 CHANGE REQUEST
Priority: R-8 Communicable Disease Prevention
Request Detail

Problem or Opportunity:

The Department of Corrections (DOC) requests a General Fund increase of \$33,215 beginning in FY 2014-15 in order to implement a Communicable Disease Prevention program that would provide tuberculosis (TB) screenings and hepatitis B vaccines to staff.

The American Correctional Association (ACA) provides accreditation and sets standards for different types of correctional facilities and programs across the country. The ACA currently publishes 21 different manuals of standards, each of which applies to a specific kind of correctional facility or program. The standards cover programs for adults and juveniles housed in correctional facilities, detention centers, and community correctional programs. There are also standards for probation and parole agencies, health care programs, and electronic monitoring programs.

In 2005, the ACA developed standards regarding providing TB testing and hepatitis B vaccines for correctional staff. These standards, based on recommendations from the Centers for Disease Control and Prevention (CDC), promote 1) annual TB testing, and 2) offering the hepatitis B vaccine series for all corrections staff due to the high potential prevalence and risk of infection in correctional environments. Approximately 79% of newly acquired cases of hepatitis B are associated with high risk behaviors that are associated with offender activities in the correctional environment. From 1990 through 2005, the overall nationwide incidents of reported acute hepatitis B declined 78%.¹ This decline was attributed to the recommendations from the CDC for hepatitis B vaccinations for infants and children, as well as adults working in correctional settings.

TB is one of the world's largest deadliest diseases. A total of 10,528 TB cases (a rate of 3.4 cases per 100,000 persons) were reported in the United States (U.S.) in 2011. In 2011, a total of 62% of reported TB cases in the U.S. occurred in foreign-born persons. The case rate among foreign-born persons (17.2 cases per 100,000) in 2011 was approximately 11.5 times higher than among U.S.-born persons (1.5 cases per 100,000). There were 529 deaths in the U.S. from TB in 2009, compared to 590 deaths in 2008, representing a 10% decrease in TB deaths year-over-year.² This decrease in deaths is attributed to regular TB screening and early identification of the disease.

When the ACA released its standards regarding TB screening and hepatitis B vaccines, the Department began developing a program to meet these recommendations. The Department has explored funding sources and alternate ways to implement the program. This process included consulting with the local health department and other states to see how they implemented their programs. The Department developed a team to re-evaluate how TB screenings and hepatitis B vaccines could be provided to staff without a huge cost impact. The plan proposed in this funding request is the result of those efforts.

Obtaining ACA accreditation is considered a significant accomplishment in the correctional industry. The application and implementation of ACA standards have expanded beyond traditional community-based programs, adult and juvenile facilities, and parole and probation agencies. A recent review of requests for standards manuals indicated the most frequent users are correctional practitioners, facility designers and construction groups. Lawyers, judges, county administrators, academia and advocacy groups also use ACA standards as a tool to ensure the basic constitutional rights of the offender are being met, while also serving to protect staff and the public at large.

ACA standards are classified into two categories: mandatory and non-mandatory. To be awarded accreditation, applicants must comply with 100% of the applicable mandatory standards and at least 90% of applicable non-mandatory standards. The TB screening and hepatitis B vaccines recommended in this funding request are part of the non-mandatory standards. However, any standards that are non-compliant require a plan of action be submitted to bring the organization into compliance. Since Colorado has a lower rate of TB infection than the national average (1.4 cases per 100,000 people compared to 3.4 cases per 100,000 people nationally), DOC has historically been granted a waiver for the TB screenings. However, the strong recommendations from the CDC are prompting the ACA to ask the Department to develop and implement a plan of action to put TB screenings and hepatitis B vaccines in place for staff.

There are 19 states, as well as the Federal Bureau of Prisons and two major private corrections providers, that are fully accredited and in compliance with the required number of mandatory and non-mandatory ACA standards. Colorado is one of these fully accredited states. However, Colorado is the only accredited state that does not fulfill the standard for TB testing and hepatitis B vaccines and that also does not have an action plan in place per ACA recommendations. Another state that is currently not in compliance with this standard has an action plan in place to develop and implement a program to provide TB screening and hepatitis B vaccines to staff.

Proposed Solution:

The Department requests a General Fund increase of \$33,215 beginning in FY 2014-15 in order to implement a Communicable Disease Prevention Program that would include TB screening and hepatitis B vaccines for staff. Implementation of the requested program will benefit both staff and offender wellness by reducing the risk of spreading highly contagious, infectious diseases. All Department staff would receive annual TB screenings. New hires would be offered the hepatitis B vaccine during training.

To administer the TB screenings for new hires, a nurse from the clinical staff will administer the TB skin test to trainees in the Basic Training Academy during the first week. In order for results to be accurate, skin tests must be read within 48 to 72 hours. Therefore, the nurse would return to the Academy within this timeframe in order to read the tests.

The current plan is that TB screenings would be given to existing staff annually based upon their DOC hire date anniversary. Staff would be notified to come to the clinic at their facility on available designated days and times to accommodate nurse availability and evenly distribute workload among regular clinical staff.

All staff would be offered a TB screening annually, including those who do not have regular offender contact. Many staff who are not assigned to work in a correctional facility often go to the facilities for various job functions. These individuals are in close contact with offenders and other DOC staff, which puts them at risk for exposure and for exposing others, including offenders, to possible infection.

The hepatitis B vaccine is a series of three injections: an initial injection, another 30 days later, and the final five months later. Because existing employees can obtain the vaccine series for free through their State health insurance (if initiated during an annual physical), this proposed program will provide hepatitis B vaccines to new hires only. The process will be similar to that for TB screening: the first and second vaccines will be provided during training at the Training Academy. The subsequent injections will be provided at facility clinics by regular clinical staff.

Anticipated Outcomes:

Implementation of this program would provide annual TB screenings for all DOC staff and the hepatitis B vaccine series for new hires, which would have a positive impact on both staff and offender wellness and help minimize the spread of these infectious diseases. Success of the program could be quantified by the number of TB screenings and hepatitis B vaccine series administered annually. The Department would also be in compliance with an ACA standard which it has been historically unable to satisfy.

Additionally, the potential for cost avoidance exists with funding of this proposal. Treatment for TB lasts from six to nine months and can cost between \$2,000 and \$250,000, depending on whether or not a person has drug-resistant TB (which is more expensive to treat). [Source: World Health Organization]. Hepatitis B treatment costs vary depending on what drug regimen is chosen. There is no cure for hepatitis B, but there are seven different drugs approved for use in treatment of adults. According to 2011 data from the Hepatitis B Foundation, these drugs range in cost from approximately \$5,000 to \$35,000 annually.

Assumptions and Calculations:

Costs for the TB screening were calculated using a current price of \$2.46 per test. Costs for the hepatitis B vaccine were calculated using a current price of \$97.93 for the series of three injections. Total costs based on number of employees to be screened initially and on an ongoing basis are outlined in Table 1.

The number of staff to be screened for TB is based on FY 2013-14 appropriated FTE (Long Bill plus special bills) of 6,035.3, plus an additional 500 to account annually for new hires (based on most recent two years of Training Academy attendees).

The number of staff to receive the hepatitis B vaccination series, an estimated 175.0 FTE per year, is based upon the 500 new hires above, adjusted for estimates of those in the medical field who would already have the vaccine, as well as individuals who, based upon their age, would have received the hepatitis B vaccine as a condition of attending public school. Also taken into consideration was an estimate of how many people would opt out of receiving the vaccine.

References:

¹ CDC. *A Comprehensive Immunization Strategy to Eliminate Transmission of Hepatitis B Virus Infection in the United States; Recommendations of the Advisory Committee on Immunization Practices (ACIP) Part II: Immunization of Adults.*

² CDC Division of Tuberculosis Elimination. *Fact Sheet: Trends in Tuberculosis, 2011.*

Appendix

Table 1: Vaccine Costs				
	Cost Each	Estimated FTE	FY 2014-15	FY 2015-16
Hepatitis B	\$ 97.93	175.0	\$17,138	\$17,138
TB	\$ 2.46	6035.3	\$14,847	\$14,847
TB	\$ 2.46	500.0	\$1,230	\$1,230
Total			\$33,215	\$33,215

totals rounded to the nearest whole dollar

Table 2: Request Summary		
	FY 2014-15	FY 2015-16
Operating		
(1)(A) Executive Director's Office, Operating Expenses	\$33,215	\$33,215
Total Operating	\$33,215	\$33,215
Total Request	\$33,215	\$33,215

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