



**STATE OF TENNESSEE
COMPTROLLER OF THE TREASURY**

**DEPARTMENT OF HEALTH AND
MEDICAL EXAMINER ADVISORY COUNCIL**

Performance Audit Report

November 2014



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November 24, 2014

The Honorable Ron Ramsey
Speaker of the Senate
The Honorable Beth Harwell
Speaker of the House of Representatives
The Honorable Mike Bell, Chair
Senate Committee on Government Operations
The Honorable Judd Matheny, Chair
House Committee on Government Operations
and
Members of the General Assembly
State Capitol
Nashville, Tennessee 37243

Ladies and Gentlemen:

Transmitted herewith is the performance audit of the Department of Health and the Medical Examiner Advisory Council. This audit was conducted pursuant to the requirements of the Tennessee Governmental Entity Review Law, Section 4-29-111, *Tennessee Code Annotated*.

This report is intended to aid the Joint Government Operations Committee in its review to determine whether the Department of Health and the Medical Examiner Advisory Council should be continued, restructured, or terminated.

Sincerely,

Deborah V. Loveless, CPA
Director

14034

State of Tennessee

Audit Highlights

Comptroller of the Treasury

Division of State Audit

Performance Audit

Department of Health and Medical Examiner Advisory Council

November 2014

We audited the Department of Health and the Medical Examiner Advisory Council for the period of July 1, 2011, to September 30, 2014. Our audit objectives were to determine the effectiveness of the medical examiner's office; to review the department's program/contract monitoring system to determine its compliance with state policy; and to review the status of certain departmental computer systems, determine progress toward replacement systems, and assess controls in place over data security.

For our sample design, we used nonstatistical audit sampling, which was the most appropriate and cost-effective method for concluding on our audit objectives. Based on our professional judgment, review of authoritative sampling guidance, and careful consideration of underlying statistical concepts, we believe that nonstatistical sampling provides sufficient, appropriate audit evidence to support the conclusions in our report. We present more detailed information about our methodologies in the individual report sections.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

AUDIT FINDINGS

The Office of the Chief Medical Examiner has not provided a systematic training program for local officials, amid concerns of inconsistencies within the statewide system

Though statutorily required, the office struggles to provide initial training and regular continuing education to all county medical examiners and medical investigators. The effectiveness of the office could be improved if staff provided this training. Currently, the office provides ad hoc training upon request. Office staff cites budget and staff limitations as reasons for not providing training to the county medical examiners.

Under current statutes, the office has no jurisdictional authority over the 95 county medical examiners. Although the office issues guidelines and provides advice, the counties are not required to follow the guidelines or advice. A study by the National Association of Medical Examiners reported that statewide policies and procedures lack uniformity; that many county medical examiners are inexperienced and untrained and most self-train for the position; and that county budgets for death investigations vary from zero to three times the national average (page 6).

The Medical Examiner Advisory Council failed to meet statutory requirements

The council has not met annually as required by statute and has not fulfilled its statutory duties to prepare an annual report and assist the chief medical examiner in developing and updating guidelines for death investigations. New council members have not been appointed, even though the existing council members' terms expired on June 30, 2014. Additionally, the department could not locate signed conflict-of-interest forms for all council members. The department reports that council activities have been placed on hold pending the outcome of internal discussions about the council's future (page 9).

OBSERVATIONS AND FOLLOW-UP

The audit report also discusses the following issues: the department met statewide subrecipient monitoring requirements for most programs, even though monitoring responsibilities were split among multiple offices (page 11); the Compliance Office was not notified of home visitor programs' employee misconduct (page 13); and the department provided explanations for implementation delays with the Vital Records Information System (page 15). Additionally, this report follows up on recommendations from the department's 2008 sunset audit (page 16).

**Performance Audit
Department of Health and
Medical Examiner Advisory Council**

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Performance Audit Department of Health and Medical Examiner Advisory Council

INTRODUCTION

PURPOSE AND AUTHORITY FOR THE AUDIT

This is the report on the performance audit of the Department of Health and the Medical Examiner Advisory Council. The audit was conducted pursuant to the Tennessee Governmental Entity Review Law, *Tennessee Code Annotated*, Title 4, Chapter 29. Under Sections 4-29-236(a)(26) and 4-28-237(a)(12) respectively, the Department of Health is scheduled to terminate June 30, 2015, and the Medical Examiner Advisory Council is scheduled to terminate June 30, 2016. The Comptroller of the Treasury is authorized under Section 4-29-111 to conduct a limited program review audit of the agency and to report to the Joint Government Operations Committee of the General Assembly. The audit is intended to aid the committee in determining whether the Department of Health and the Medical Examiner Advisory Council should be continued, restructured, or terminated.

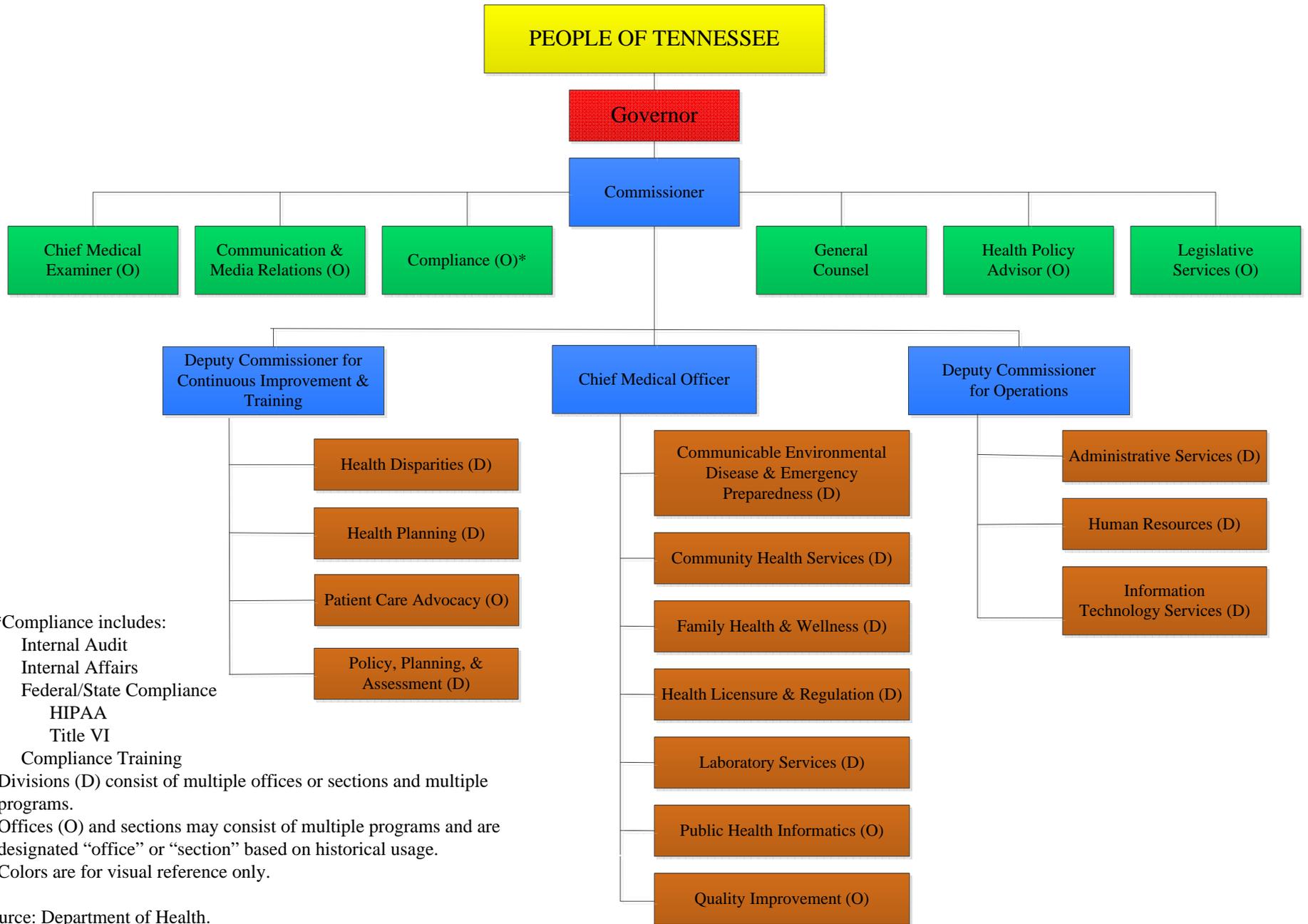
This audit initially focused on the Department of Health. However, during the course of fieldwork, we learned that the Medical Examiner Advisory Council is inactive and not meeting its statutory intent. Because the council is scheduled to terminate on June 30, 2016, and because the Department of Health is internally discussing possible changes to the council, we are also presenting information relevant to council's operation as a part of this audit.

ORGANIZATION AND STATUTORY RESPONSIBILITIES

The Department of Health, under Section 4-3-1803, *Tennessee Code Annotated*, addresses concerns related to the health and lives of the people of Tennessee. Its mission is to protect, promote, and improve the health and prosperity of people in Tennessee.

As shown in the organization chart on the following page, the commissioner oversees the Offices of the Medical Examiner, Communications and Media Relations, Compliance, General Counsel, Health Policy Advisor, and Legislative Services. The remaining three major divisions under the commissioner are overseen by the deputy commissioner for Continuous Improvement and Training, the chief medical officer, and the deputy commissioner for Operations.

**Tennessee Department of Health
as of May 2014**



1. *Compliance includes:
Internal Audit
Internal Affairs
Federal/State Compliance
HIPAA
Title VI
Compliance Training

2. Divisions (D) consist of multiple offices or sections and multiple programs.

Offices (O) and sections may consist of multiple programs and are designated “office” or “section” based on historical usage.

3. Colors are for visual reference only.

Source: Department of Health.

The following units report to the deputy commissioner for Continuous Improvement and Training:

- The Minority Health and Health Disparities Elimination division provides community outreach, education, seminars, and campaigns designed to promote improved health to minority and other potentially disparate communities. Staff provides technical assistance and consultation to state agencies; community and faith-based organizations; and health professionals.
- The Division of Health Planning creates Tennessee's State Health Plan based on input from stakeholders across the state, expert analysis of the health challenges, and information collected from a variety of state and national resources in order to improve both health outcomes and to improve the state's health care system.
- The Office of Patient Care Advocacy provides assistance pertaining to long-term health care matters and responds to inquiries from patients, families, long-term care facilities, hospitals, medical professionals, and public officials.
- The Division of Policy, Planning, and Assessment supports other departmental functions by providing health statistics and information services. Within this division, the Office of Vital Records maintains certificates of birth, deaths, marriages, and divorces that occur in Tennessee.

The chief medical officer oversees the following departmental units:

- The Communicable and Environmental Disease Services section works with staff in regional and local health departments to provide epidemiological services to protect the citizens of the state from infectious diseases. The statewide Public Health Emergency Preparedness Program promotes state, local, and regional preparedness for and response to acts of bioterrorism, infectious outbreaks, and other public health threats and emergencies.
- The Community Health Services assists the department in accomplishing its goals through a combination of preventive programs. Specifically, it is responsible for administering multiple federal programs focused on rural health and the distribution and placement of health professionals and related workforce into areas of the state where shortages of those persons exist.
- The Division of Family Health and Wellness includes Maternal and Child Health; Special Supplemental Nutrition; and Chronic Disease and Health Promotion programs, provided in all 95 Tennessee counties through a network of local and regional health departments.
- The Division of Health Licensure and Regulation regulates emergency medical services, health care facilities, and health professionals.
- The Laboratory Services Division consists of the microbiology and environmental laboratories in Nashville and Knoxville. The central laboratory in Nashville employs approximately 177 full-time employees and also houses the Southeast National Laboratory Training Network office. The laboratories perform a wide range of

microbiological testing and testing in support of other state departments including Environment and Conservation, Labor, and Transportation.

- The Office of Public Health Informatics was created in 2014 to develop systems and data needed to promote public health assessment and practice throughout Tennessee.
- The Office of Quality Improvement reviews and audits regional and metro health departments; promotes and directs evidence-based practices; and oversees research studies with clients through internal review board approval.

The deputy commissioner for Operations oversees internal support functions related to general administrative services, human resources, and information technology services.

AUDIT SCOPE

We audited the Department of Health and the Medical Examiner Advisory Council for the period of July 1, 2011, to September 30, 2014. Our audit scope included a review of internal controls and compliance with laws, regulations, and provisions of contracts or grant agreements that are significant within the context of the audit objectives. Department management is responsible for establishing and maintaining effective internal controls and for complying with applicable laws, regulations, and provisions of contracts and grant agreements.

For our sample design, we used nonstatistical audit sampling, which was the most appropriate and cost-effective method for concluding on our audit objectives. Based on our professional judgment, review of authoritative sampling guidance, and careful consideration of underlying statistical concepts, we believe that nonstatistical sampling provides sufficient, appropriate audit evidence to support the conclusions in our report. We present more detailed information about our methodologies in the individual report sections.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

OBJECTIVES, METHODOLOGIES, AND CONCLUSIONS

The audit's primary objectives are

- to determine the effectiveness of the medical examiner's office;

- to review the department's program/contract monitoring system to determine its compliance with state policy; and
- to review the status of certain departmental computer systems, determine progress toward replacement systems, and assess controls in place over data security.

OFFICE OF THE CHIEF MEDICAL EXAMINER

The goal of the Office of the Chief Medical Examiner, which reports directly to the commissioner of the department, is to create statewide consistency of high-quality medicolegal death investigation and forensic autopsy services. Operations of the office are under the department's control; however, much of the overall state medical examiners' system is located at the county and municipal level throughout the state, and is not under the department's control.

Responsibilities and Composition

The chief medical examiner has three statutory requirements. Section 38-7-103, *Tennessee Code Annotated*, states that,

The chief medical examiner shall be a physician with an unlimited license to practice medicine and surgery in the state of Tennessee. . . . In addition to the chief medical examiner's other administrative duties, the chief medical examiner's educational duties shall include developing and providing initial training and regular continuing education to all county medical examiners and medical investigators. . . . The chief medical examiner, in consultation with the [medical examiner] advisory council and with the approval of the commissioner of health, shall appoint the three (3) deputy state medical examiners and any assistant medical examiners needed for regional administrative, professional, and technical duties. . . . The chief medical examiner shall have investigative authority for certain types of death that are in the interests of the state . . . that represent a threat to the public health or safety, or both.

The chief medical examiner was a contracted, part-time position until 2012, when the department created a full-time position. In addition to the chief medical examiner, the office also employs a chief of operations.

The chief medical examiner is one segment of the death investigation process in Tennessee. Each county medical examiner conducts death investigations and provides an opinion as to the cause and manner of death. The chief medical examiner often advises county medical examiners and health departments, but the lack of authority over the counties makes this task challenging.

Additionally, the office often assists individuals in locating a family member's body or identifying the jurisdiction handling a death investigation; provides reports or information to help with settling estates or with legal transactions; and archives forensic autopsy reports. They also administer autopsy reimbursements to forensic pathologists or forensic centers.

Objective and Methodology

Our objective was to determine the purpose, necessity, and effectiveness of the office. To meet these objectives, the auditors

- reviewed office policies, procedures, and guidelines;
- reviewed the office's budget and position qualifications;
- interviewed the chief medical examiner, chief of operations, commissioner, national professional association officials, and local medical examiners;
- reviewed statutes and department rules; and
- reviewed a study issued in June 2014 by the National Association of Medical Examiners concerning Tennessee's medical examiner system.

Finding

- 1. The Office of the Chief Medical Examiner has not provided a systematic training program for local officials, amid concerns of inconsistencies within the statewide system**

The Office Provides Limited Training to Local Officials

Though statutorily required, the office struggles to provide initial training and regular continuing education to all county medical examiners and medical investigators. The office's effectiveness could be improved if staff provided this training. Currently, the office provides ad hoc training upon request. The office has a pilot training program available in 17 counties funded by a federal Justice Assistance grant, and has obtained a Coverdell Forensic Science Improvement grant to send a small number of local officials to out-of-state training on death procedures. The chief medical examiner acknowledges that the office does not provide training to all counties and recognizes the need for it.

Office staff cites budget and staff limitations as reasons for not providing training to the county medical examiners. The office did not receive state appropriations for fiscal year 2014, but relied on resources from other department areas. Beginning in fiscal year 2015, the office has a designated operating budget but does not have funds for training.

Concerns of Inconsistencies Within the Death Investigation System

Under current statutes, the office has no jurisdictional authority over the 95 county medical examiners. Although the office issues guidelines and provides advice, the counties are not required to follow the guidelines or advice. Several individuals, including the commissioner, voiced concerns about how death investigations are handled and regulated in Tennessee.

In light of these concerns, the department commissioned a study by the National Association of Medical Examiners (NAME) to provide an in-depth assessment of the state's

death investigation system and the role of the office. NAME is a national professional association of forensic pathologist medicolegal death investigators in the United States. NAME publishes national autopsy standards and accredits death investigation systems. Overall, the NAME report, issued in 2014 and available to the public via records request, concludes that

The most critical issue in the current system is the inequality of investigation practices and resources in the vast majority of Tennessee counties where the local medical examiner is not a forensic pathologist. . . . The Tennessee system currently likely misses some homicides in the more rural areas. . . . While this is obviously an issue of concern even more concerning is the complete lack of good public health data for evaluation of the public's health. New emerging disease processes, workplace and home/consumer hazards, current chronic disease processes, evolving drug trends, and accidental injury death data are not uniformly gathered, investigated or collated. This is due to the complete lack of uniform procedures and protocols, and unified web-based death management database system significantly hampering both local and state public health officials in the performance of their duties.

The NAME assessment reported numerous concerns, including the following:

- statewide policies and procedures lack uniformity;
- the chief medical examiner lacks authority to implement statewide policies or to train, supervise, and discipline staff at any level;
- many county medical examiners are inexperienced and untrained, and most self-train for the position; few have received a nationally recognized certification for death investigation;
- county budgets for death investigations vary from zero to three times the national average;
- fewer autopsies per capita are conducted in Tennessee than the national average; and
- there are insufficient succession plans to replace retiring county medical examiners.

NAME officials recommended the state consider three other states' current systems—Virginia, New Mexico, and Maryland—as models for an improved death investigation system. According to NAME, these states all have state-level, rather than local, control, including a state chief medical examiner with authority for all deaths that fall under the jurisdiction of a medical examiner. Similarly, the state is responsible for the budget and all functions of the entire system. These states also have in-house epidemiologists who produce annual reports, monitor trends, and have staff to oversee multiple divisions, such as investigations and technicians. The chief and the forensic pathologists have the final decision in the level of investigation of each death.

Recommendation

The Office of the Chief Medical Examiner should provide new and continuing education to all county medical examiners and medical investigators. The office should work with other

stakeholders to reduce inconsistencies within the statewide medical examiners system, as identified by the NAME report.

Management's Comment

We concur. The Office of the Chief Medical Examiner (OCME) recognizes the need for systematic training and has been taking steps to work within our staffing and budgetary constraints to provide training. OCME has applied for, and has been awarded, approximately \$155,000 in federal grants for training efforts.

The OCME office consists of one full-time state chief medical examiner and one full-time chief of operations. Three months ago, through grant funding, TDH hired one state medicolegal death investigator. This position is shared with Tennessee Department of Health Emergency Preparedness Program and is responsible for education and training of medicolegal death investigators across the state. OCME requests assistance from the regional forensic centers to assist in educational efforts. Between July 2012 and present, the state chief medical examiner has personally delivered lectures to nineteen (19) state and regional stakeholders in the death investigation system. There are three part-time subcontracted deputy state chief medical examiners, one for each grand division that assists in educational efforts.

OCME acknowledges that the training needs of the state require a multifaceted approach. OCME conducted a two day strategic planning retreat with leadership of the Regional Forensic Centers following appointment of the new State Chief Medical Examiner. Ideas and topics for statewide training were discussed and a general agreement to design a training plan after a statewide data collection system was enacted. The current educational plan for OCME consists of a combination of grant-funded seminars and in-person training. Since September 2014, the state medicolegal death investigator has conducted or is in the process of arranging training for four counties. OCME has consulted with two counties interested in improving the death investigation system in their county.

MEDICAL EXAMINER ADVISORY COUNCIL

Council Responsibilities and Composition

The Medical Examiner Advisory Council advises the Department of Health, including the chief medical examiner and, under Section 38-7-201(d), *Tennessee Code Annotated*, has the power and duty to

- (1) Review candidates and make a recommendation to the commissioner of health on the appointment of the chief medical examiner and deputy state medical examiners;

- (2) Assist the chief medical examiner in the development and updating of guidelines for death investigations and forensic autopsies in this state, to be promulgated as rules through the department of health; and
- (3) Issue an annual report on death investigations in this state.

Under Section 38-7-201(c), *Tennessee Code Annotated*, council “meetings shall be held at least annually.”

Statute specifies nine council members appointed by the Governor: the director of the Tennessee Bureau of Investigation; one district attorney general; one district public defender; three county medical examiners (one from each grand division); one licensed funeral director; one public citizen; and the commissioner of Health or the commissioner’s designee as the council’s only ex-officio, nonvoting member. Each member serves until a successor is appointed.

Methodology and Results

In order to gain an understanding of the council, the auditors reviewed statute and interviewed council members, council staff, and department personnel. Auditors also reviewed council meeting minutes from 2009 to 2013, board membership lists, and board members’ conflict-of-interest statements. We found several problems, discussed in Finding 2.

Finding

2. The Medical Examiner Advisory Council failed to meet statutory requirements

The Medical Examiner Advisory Council is out of compliance with statute. The council did not meet annually as required by statute, did not fulfill its statutory duties, did not work to fill vacant council positions, and could not locate signed conflict-of-interest forms for all council members. Additionally, the council has not prepared an annual report and has not assisted the chief medical examiner in developing and updating guidelines for death investigations.

Section 38-7-201(c), *Tennessee Code Annotated*, requires that “meetings shall be held at least annually with additional meetings as frequently as may be required.” However, no meetings were held in 2011 or 2012. The council met three times in 2013, but as of September 2014 has not met in 2014. At the December 19, 2013, meeting, the council mentioned the need to meet in March 2014, but there is no documentation that the meeting took place.

The council also failed to meet two of its statutory responsibilities: issuing an annual report of death investigations and assisting the chief medical examiner in developing and updating guidelines for death investigations. Section 38-7-201(d), *Tennessee Code Annotated*, gives the council the “power and duty to . . . assist the chief medical examiner in the development and updating of guidelines for death investigations and forensic autopsies in this state, to be promulgated as rules through the department of health; and issue an annual report on

death investigations in this state.” The council, in the last meeting held on December 19, 2013, discussed the need to develop rules for improving the medical examiner system and death investigation structure. However, the council has not met since.

The council has never issued an annual report on death investigations. A department representative who attended the council meetings reports that the information required to compile the report, such as the number of death investigations, was not captured because reporting those investigations is not required. Department staff also said the council did not have enough organization or information to compile the report. The chief medical examiner reported that a new case management system, expected to be online statewide by January 31, 2017, will help capture the death investigation statistics needed to compile the report.

Council board openings have not been filled. All of the members’ terms expired on June 30, 2014, with the exception of the ex-officio and one permanent member. (Though, as mentioned earlier, statute provides that each member serves until a successor is appointed.) According to department staff, the appointment of members has been halted because of internal department discussions regarding the council’s future.

Finally, the department could not produce signed conflict-of-interest statements for some council members. While not required by state law, it is prudent to require council members to disclose any interests that may impact their service. The department reports it requested conflict-of-interest statements from some council members in the past; however, the department was unable to locate all signed conflict-of-interest statements for any years after 2009 and was only able to produce five of the nine signed forms for 2009.

Recommendation

The department should ensure that the council meets its statutory obligations. The council should

- meet at least annually,
- assist the chief medical examiner in developing and updating guidelines for death investigations, and
- prepare the annual report on death investigations.

Additionally, the department should work with the Governor’s Office to fill empty council positions, and ensure that council members sign conflict-of-interest statements and keep completed statements on file.

Management’s Comment

We concur. Once the vacancies on the council are filled, it is the department’s intention to guide the council toward at least an annual meeting which would meet the statutory requirements. At the next council meeting we will ensure that each member completes a conflict-of-interest statement and those statements are properly filed. In addition, the council will be asked to work with the chief medical examiner and the three Deputy State Chief Medical

Examiners to develop and update guidelines for death investigations. These updated guidelines will be used to assist with the completion of the annual report on death investigations per the statutory requirements.

PROGRAM MONITORING

The department provides services to citizens through a variety of private contractors, referred to as subrecipients. Monitoring of subrecipients to determine if they meet contract obligations is split between the Office of Internal Audit and department program staff. Our objective was to review the department's program/contract monitoring system to determine its compliance with state policy. Our work included

- reviewing subrecipient monitoring requirements, including Central Procurement Office Policy 2013-007 and previous policies;
- reviewing department-specific policies and procedures on program monitoring, including frequency, sanctions, and schedules;
- reviewing the list of department contracts monitored during the last four fiscal years;
- interviewing program management to identify subrecipient monitoring practices;
- obtaining documentation for all programs monitored by program staff;
- interviewing the director of Internal Audit and staff to identify their procedures for monitoring subrecipients; and
- conducting a review of monitoring efforts on home visitor programs, including interviewing home visitor program managers and the department's director of Compliance.

Our work resulted in two observations on the department's program monitoring.

Observation

- 1. The department met statewide subrecipient monitoring requirements for most programs, even though monitoring responsibilities were split among multiple offices**

Monitoring Requirements and Structure

During the time period covered by this audit, July 2011 to September 2014, state subrecipient monitoring policy changed. Prior to 2013, Policy 22 required each agency to monitor a minimum of one-third of the total number of subrecipient contracts, with a minimum total liability of two-thirds of the current-year maximum liability of the subrecipient population.

As of May 28, 2013, the Central Procurement Office replaced Policy 22 with Policy 2013-007, “Grant Management and Subrecipient Monitoring.” The new policy requires a grantor agency to monitor all subrecipient grant contracts at least once every three years, to monitor federal programs as required by the federal government, and to annually submit a monitoring plan to the Central Procurement Office by October 1.

The monitoring plan must include

- total subrecipient contract population;
- subrecipient contracts to be monitored during the cycle of the plan;
- the agency monitoring cycle (e.g., state or federal fiscal year);
- sample monitoring guides for each program;
- full-time equivalents and personnel classifications for all staff dedicated to monitoring activities;
- a program description of each program to be monitored;
- a risk assessment for each subrecipient and its related contracts;
- an explanation of the criteria used to assign risk to subrecipients and their related contracts;
- a summary of the findings from the previous monitoring cycle; and
- an explanation of the agency’s corrective action process.

The department’s Compliance Office is responsible for submitting the annual plan and monitoring some programs’ subrecipients. Monitoring the remaining programs’ subrecipients is the responsibility of the program staff, who provide a copy of their results to the department’s director of Internal Audit. The director checks the results for compliance with requirements and has Internal Audit staff do any necessary additional work.

Most Programs Monitored According to State Policy

Overall, the department monitors most recipients according to policy. For example, as shown in Table 1 on the following page, the department completed all required subrecipient contract reviews for fiscal years 2011, 2012, and 2013, and all except two in fiscal year 2014.

Table 1
Department of Health
Subrecipient Contracts Monitored
For Fiscal Years 2011 Through 2014

	2011	2012	2013	2014
Total Contracts	426	568	486	539
Total Contracts to be Reviewed*	142	189	162	180
Reviews Completed	146	189	165	178

*In fiscal years 2011 through 2013, the department was required to monitor one-third of its programs in any given year. In fiscal year 2014, the department was required to monitor each program at least once every three years.

Observation

2. The Compliance Office was not notified of home visitor programs' employee misconduct

During the course of this audit, three of the seven regional offices independently reported four instances of employee misconduct in the home visitor programs Help Us Grow (HUGS) and Children's Special Services (CSS). None of the incidents were referred to the Compliance Office for further investigation.

The Northeast, West, and Mid-Cumberland regions reported problems in 2013 and 2014. A total of four people (three employees of a private contractor and one contracted county employee) were accused of misconduct, including falsifying time worked, reporting home visits conducted, improperly using a state-issued cell phone, and falsifying travel claims. In all cases, the employee was either terminated or resigned in lieu of termination.

None of the situations were reported to the Compliance Office in the department's central office, nor to the Comptroller of the Treasury. The Compliance Office became aware of three of the situations when notified by the auditors and the fourth because the director of the office sat on a panel hearing a related employee grievance.

Of the four cases:

- in one case, supervisory staff in the region notified regional department management, but not central department management, nor the Compliance Office;
- in two cases, supervisory staff in the region notified central department management, but not the Compliance Office; and
- in one case, supervisory staff in the region did not notify department management.

Potentially fraudulent activities should be reported to the Compliance Office to allow the office to monitor the situation, conduct any investigation appropriately, and assist prosecution of

illegal activity as necessary. Additionally, it allows the office to identify any trends in program activity that may need to be addressed.

The Compliance Office, once notified by the auditors, followed up with program management and developed recommendations for the future. However, these changes were only verbally communicated to local program staff. Updating the program's written policies and procedures would ensure uniform practices through staff changes.

MAJOR COMPUTER SYSTEMS

The department utilizes approximately 160 computer system applications, ranging from very large, complex systems that support multiple programs in multiple locations to small applications used by a single program. The department's current major systems include the following:

- The Patient Tracking and Billing Management Information System (PTBMIS) is used in the department's seven regions and at six metro health departments. The department uses PTBMIS to register and bill patients in community health clinics; track health clients' appointments, encounters, and lab tests; record immunizations; track WIC (women, infants, and children) program services; monitor state-funded pharmacy inventory; and track home visitor program services.
- The Automated Survey Processing Environment (ASPEN) is a federal multi-state system used by the department to report and access results of state inspection of facilities accepting Medicare funding.
- The National Electronic Disease Surveillance System (NEDSS) is a federal program that provides the NEDSS base system for states to collect, investigate, and securely submit notifiable disease surveillance data electronically to the U.S. Centers for Disease Control and Prevention.
- Starlims is a proprietary program that supports the department's three laboratories in Nashville and Knoxville.

In addition, the department has, or is in the process of implementing, several new major systems, include the following:

- The Vital Records Information System (VRISM) will replace the current manual, paper-based process for tracking vital records. Designed to maintain death, birth, marriage, and divorce records, VRISM will be implemented in stages over a five-year period and is expected to reduce the current time lapse between events' occurring and their being reported to the state. The system will be used primarily by department Vital Records staff and county health department registrars, as well as some county clerks, funeral directors, and anyone who can legally certify a birth or declare a death. The first phase, which addresses back office functions, went into effect in June 2014. The next planned stage, to computerize handling of death records, is scheduled for

implementation by the end of 2014. The death certificate module will be followed by modules for birth certificates, then marriage and divorce certificates.

- The Electronic Verification of Vital Events (EVVE) system allows participating states to verify birth and death information across states. In 2012, the Office of Vital Records began participating in the program, which was developed by the National Association for Public Health Statistics and Information Systems.
- The Electronic Public Health Information System (EPI), an electronic medical records system, is expected to eventually replace many PTBMIS functions, such as patient registration; however, the department will still need PTBMIS to perform some functions such as registration. The department is scheduled to start implementing the first phase of EPI in February 2015, with statewide rollout expected to be complete in March 2016 or later.

Our objective was to review the status of certain departmental computer systems, determine progress towards replacement systems, and assess controls in place over data security. We conducted an in-depth review of PTBMIS, the current system with the highest risk, as well as the three major systems currently under development. We selected PTBMIS for in-depth review because it serves multiple programs, is a key link between the department and local health facilities, and was the subject of a prior performance audit finding (see page 21). Although many of PTBMIS' functions will be replaced by EPI, this system will remain important to the department's functioning.

Auditors identified the status of existing systems and plans to replace these systems by interviewing department program and information system staff, reviewing documentation describing current and planned systems, and reviewing procurement documents related to the new systems. Results of this work are presented in the observation below. To assess the security of existing data systems, we interviewed department information security staff, consulted with State Audit's information systems auditors, and reviewed application controls for PTBMIS modules, including pharmacy, patient tracking, lab, home visitor program, and registration. No application control problems were noted.

Observation

3. The department provided explanations for implementation delays with the Vital Records Information System

The department's initial implementation of the first module of the Vital Records Information System (VRISM), which will replace the current manual process for tracking vital records, was behind schedule. The first phase, which addresses back office functions, was originally planned to be implemented in September 2013 but did not go into effect until 2014. Department information system management cited personnel problems as the reason for recent delays. The primary persons responsible for VRISM are the Vital Records director and program manager. The director has changed twice (March 2013 and May 2014), and as of August 2014, the department was in the process of replacing the temporary Vital Records director. The project

manager changed three times from 2010 to fall 2013. (Two of the three former project managers took other positions, and the third retired.) The current project manager started in February 2014.

Additionally, the department reported challenges in retaining skilled information system staff, who may choose to leave for higher salaries and better benefits offered by the private sector. To prevent future delays with the implementation of VRISM, the department contracted with a private group, Knowledge Services, to hire contractors for projects such as VRISM. Additionally, the department began to use a dedicated statistical research specialist from another division, hired two additional staff specifically for VRISM, and requested to reclassify positions to compete with the private sector for program expertise.

PRIOR AUDIT FINDINGS

Section 8-4-109, *Tennessee Code Annotated*, requires that each state department, agency, or institution report to the Comptroller of the Treasury the action taken to implement the recommendations in the prior audit report. The last sunset performance audit of the Department of Health was in October 2008. The department filed its follow-up implementation report with the Department of Audit on May 4, 2009. As a part of this audit, we reviewed the department's actions to address issues raised in the October 2008 audit. We found that the department has taken at least some action to address those findings, and we consider the findings resolved.

Follow-up Item 1: Outcome Measures Monitoring **2008 Department of Health Audit, Finding 1**

“The Department of Health does not yet have a monitoring program using outcome measures to assess programs it has implemented to reduce major health problems”

The prior audit recommended the department should

- designate staff with the responsibility of developing and implementing outcome measures that are useful in assessing whether the programs it has implemented to combat major health problems are successful;
- assign each outcome measure at least one baseline measurement (the extent of the problem at a particular point in time, ideally in specific regions of the state and statewide) and future targets (an ideal reduced presence of the problem at future dates);
- consider using Healthy People 2010 health targets when developing the outcome measures;
- consider using geographic information system (GIS) technology to target services toward specific geographic locations (e.g., specific city neighborhoods to rural sections of a county) where a health problem is more pervasive; and

- regularly assess whether to expand, change, or terminate a specific public health program and, if necessary, replace that program with an improved one, taking into consideration the results of the progress reports.

Because the department's management and structure has significantly changed since the 2008 audit, auditors focused on the larger issue of whether the department has developed appropriate outcome measures to regularly monitor the success of its programs. We accomplished this by interviewing department management and reviewing program outcome measure documents to determine what mechanisms are in place to monitor the programs, how often the programs are monitored, and whether the programs are meeting their goals.

The department currently focuses on five major public health problems: cardiovascular disease, diabetes, HIV/AIDS, infant mortality, and obesity. The department's chief medical officer reports that outcome measures are different for each program and that those differences often reflect the program funder's goals. Most programs addressing these key health problems are funded by federal funds, which require the program to regularly report key measures mandated by the federal government. Often these mandated measures are a mix of process and outcome measures. For example, an anti-tobacco use program aimed at children could have a process measure of how many children attended an anti-tobacco use presentation. A program's overall success is typically measured by national survey data, such as how many adolescents smoke.

While the department has not designated a specific staff member to develop and monitor such program measures, the department is working to meet the recommendation's intent for the department to actively collect and monitor performance measures by instituting a process where each program presents annually to the commissioner and his deputies. An example of this program review is the newborn screening program, which reported that 99.3% of the approximately 80,000 newborns in Tennessee were screened in the program last year. The chief medical officer reports that the department has found that this thorough screening process ensures the programs are clear on their intended results. Management can identify when a program needs improvements and when new opportunities are present.

Follow-up Item 2: Health Professionals' Recruitment
2008 Department of Health Audit, Finding 2

"The department needs to improve efforts to recruit health professionals to medically underserved areas of the state and to monitor the health professionals recruited"

In an effort to alleviate problems with the poor distribution and shortage of health professionals in Tennessee, the General Assembly passed the Health Access Act, effective July 1, 1989. Although the prior audit found that the department had made efforts to improve medical care in underserved areas, it (1) had not developed a formal plan to recruit health professionals to underserved areas, and (2) did not adequately monitor the professionals it did recruit to meet grant obligations.

The audit recommended the department should

- develop and implement a formal plan to recruit health professionals to medically underserved areas, including specific goals within specific timeframes (such a plan may include incentives for individual providers to recruit health professionals);
- create rational service areas for dentists as a part of the recruitment plan; and
- develop and implement monitoring and complaint-handling systems to ensure that health professionals given grants to serve in underserved areas fulfill the terms of those grants.

The auditors interviewed department staff, including the director of Community Health Systems for the State Office of Rural Health, to determine the steps the department has taken to improve recruitment in underserved areas. The auditors also reviewed outcome reports that the department developed to measure the number of health professionals in underserved areas.

The department issued a formal recruitment plan in January 2014 to direct practitioner placement in underserved areas utilizing recruitment and retention incentive programs. The programs covered by the plan include the Tennessee State Loan Repayment Program, National Health Service Corps, and Conrad 30 J1-Visa Waiver Program. Each program has its own unique recruitment planning, goals, and objectives, which are referenced in the *Workforce Development Recruitment and Retention Incentive Program Report*.

Since the prior audit, dental rational service areas were designated. However, the Health Access Incentive Program, which used those rational service areas, has been placed in inactive status. As a result, there are no longer any recruitment incentive programs that recognize the state-designated shortage area. Rather, current programs recognize only the federally-designated health professional shortage area or federally-qualified health center for dental placements.

The department reports that the total number of health professionals serving in rural areas has steadily increased over time. The Office of Rural Health and Health Access conducted an annual census of health care providers. In part, this survey identifies the number of full-time equivalent (FTE) health care providers serving in rural areas. A 1.0 FTE is the equivalent of working full-time 40 hours per week for physicians and 0.4 FTE for nurse practitioners and physician assistants. From 2009-2012, the number of nurse practitioner and physician assistant FTEs increased by 87.0, while physician FTEs revealed a net loss of 17.8.

Follow-up Item 3: Child Fatality Reviews

2008 Department of Health Audit, Finding 3

“Collection and reporting of information on children’s deaths, pursuant to the Child Fatality Review and Prevention Act of 1995 and the Sudden, Unexplained Child Death Act, needs improvement”

Auditors’ review of the Child Fatality Review Program in 2008 identified several areas of concern that hinder the department in ensuring that all child deaths have been reviewed as required and that the information needed to take action to reduce child deaths in Tennessee is available timely and in sufficient detail. These areas were (1) collecting all child death reviews from local child fatality prevention teams in a timely manner and resolving data inconsistencies

to ensure all required reviews are performed; (2) developing and implementing policies and procedures for the Child Fatality Review Program and rules and regulations related to the Sudden, Unexplained Child Death Act; and (3) improving the timeliness and content of the program's annual report. However, some of these issues (in particular the timeliness issues) were also affected by entities outside of the department's and the local review teams' control.

The audit recommended that

- The department should review the operations of the Child Fatality Review Program to identify changes within the department's and the local review teams' control that could improve the collection and reporting of information on children's deaths. To aid in this process (and possibly identify changes that need to be made by external entities), the reasons that significantly delay submissions of child fatality reviews should be documented and tracked. The department should also consider additional or improved training of local teams to improve the process and its timeliness.
- The department should consistently treat out-of-state deaths as deaths that local child fatality prevention teams do not have to review.
- The department should address the issue of fatalities missing from annual cumulative death lists with the Office of Policy, Planning, and Assessment to ensure that all deaths for each calendar year are documented.
- The department should develop and implement rules and regulations pertaining to the Sudden, Unexplained Child Death Act of 2001, which should address the process for county governments to be eligible for reimbursement related to autopsies performed under the act.
- The department should develop policies and procedures regarding the implementation of statutory requirements of the Child Fatality Review and Prevention Act of 1995.
- The department should reduce (to the extent possible given external factors) the time it takes to publish its annual statistical report on children's deaths. The report should include more local or regional information on the major causes of children's deaths to assist the department in targeting resources to prevent such deaths.
- The department should regularly monitor the Child Fatality Review Program and the resulting reports to ensure errors or problems are regularly identified and corrected so that the data are accurate, reliable, and useful.

To follow up on these recommendations, auditors interviewed the department's Division of Family Health and Wellness director and reviewed documents including child fatality reports, forms used during child death reviews, the Tennessee child fatality team guidelines, and rules governing these processes. The auditors also reviewed nine completed child death review files in order to understand the process.

Department Steps Taken to Address 2008 Recommendations

Our review found that the department took reasonable steps to address all of the prior 2008 audit recommendations. Specifically, the following steps have been taken:

- The department made changes intended to improve the speed of fatality reviews and the collection of information. For example, the collection and reporting of fatality review results is now computerized and either the local review team leader or their designee directly enters the results into a computer system. Additionally, the department requires local teams to report all pending reviews and provides a quarterly new member orientation webinar to ensure local team members understand their role in the child fatality review process and what is expected of them. Annual training is also provided to local team leaders and members.
- The department now reviews all out-of-state deaths of Tennessee residents, allowing more consistent reports about these deaths. Deaths of out-of-state resident children who die in Tennessee are not reviewed. While the original 2008 recommendation called for the department to make its review and reporting of out-of-state deaths more consistent by not reviewing any at all, the state currently has an increased focus on child death investigations by other departments, most notably the Department of Children’s Services. Therefore, reviewing all such cases is now more reasonable than it was in 2008.
- The department addressed the issue of fatalities missing from annual cumulative death totals by instituting crosschecks of data from the national database with the Office of Policy, Planning, and Assessment to account for all deaths.
- The department developed and implemented rules and procedures pertaining to investigations of all unexpected child deaths. The rules address county governments’ eligibility for performing related autopsies.
- The department regularly monitored the Child Fatality Review (CFR) Program and the resulting reports to ensure errors or problems are regularly identified and corrected by improving CFR staff data quality checks on the information entered by local teams. A designated CFR coordinator reviews every death.

Follow-up Item 4: Safeguarding Vital Records

2008 Department of Health Audit, Finding 4

“Although the Office of Vital Records has, in practice, made efforts to identify applicants for certified copies of vital records, state law and departmental rules still do not sufficiently safeguard access to vital records, specifically birth certificates”

The prior audit recommended that

- the General Assembly may wish to consider amending Section 68-3-205, *Tennessee Code Annotated*, to restrict access to vital records and specifically require department personnel to request some type of documentation of identity; and
- pending additional direction in the form of federal or state law changes, Office of Vital Records management should work with department legal counsel to ensure that there are consistent policies and procedures that appropriately protect access to vital records information, particularly information contained in birth certificates, to the extent possible given current statutory requirements.

In order to determine the steps that the department has taken to address the recommendations from the 2008 audit, auditors interviewed department management, reviewed policies and procedures regarding vital records, and determined statutory requirements.

Vital Records Statutes Are Essentially Unchanged, but Improvements Continue

The department's legal counsel reported that the statutes that address vital records access had not been substantially amended since the 2008 report. However, the department has taken several steps to further protect vital records. The department reports customers purchasing multiple copies of a birth certificate (greater than four long-form certificates) to the U.S. Department of State, Bureau of Consular Affairs, and Office of Fraud Prevention Programs. Additionally in 2012, the department joined the Electronic Verification of Vital Events system, which allows participating states to verify birth and death information across states. The department is also reviewing and redrafting all of its vital records rules.

Follow-up Item 5: Pharmacy Inventory Data **2008 Department of Health Audit, Finding 5**

“Medical information in the department's computer system continues to have accuracy problems despite the improvement in the accuracy of pharmacy inventory data”

The department uses a computer system called Patient Tracking and Billing Management Information System (PTBMIS), one function of which is to track drug and vaccine supplies. The department's October 2003 performance audit of the Department of Health reported that medical and pharmaceutical supply information in PTBMIS was often incomplete and/or inaccurate. The 2008 report found improvements, particularly in the accuracy of pharmaceutical supply information; however, local health departments did not always enter accurate supply information.

The 2008 report recommended that the department should review supervision and training of local health department staff, and continue improving both paper and electronic documentation of services, medications, and other materials provided to patients.

To determine what changes the department made to improve accuracy of pharmacy supply information, auditors interviewed community health services staff and the state pharmacists, reviewed department guidelines, and reviewed physical pharmacy inventory reports from January 2011 to January 2014.

Based on our review, the department has addressed the recommendations listed in the 2008 audit report. The department updated a nurse orientation policy, increased the frequency of physical pharmacy inventories from every six months to quarterly, and issued a policy to ensure drugs and drug codes are current. Department regional pharmacies and clinics will also adhere to internal control standards.

APPENDICES

APPENDIX 1 Title VI

The Tennessee Human Rights Commission (THRC) issues a report, *Tennessee Title VI Compliance Program* (available on its website), that details agencies' federal dollars received, Title VI and other human rights related complaints received, whether the agency Title VI implementation plans were filed timely, and THRC findings taken on agencies.

The Department of Health received \$248,133,100 in federal funding for the fiscal year ending June 30, 2013.

In its fiscal year 2013 report, THRC states that the department's Title VI implementation plan is in compliance with all guidelines and requirements. Additionally, THRC had not issued any findings regarding the department. However, it reports receiving one complaint related to the department, which was closed. Additionally, the department directly received one complaint, which was also closed.

Below are the department's employees, broken down by gender and ethnicity for each job title, as of July 2014.

The Medical Examiner Advisory Council does not receive any federal funding; therefore, it is not addressed in the Title VI Compliance Program. However, the composition of the council, as of July 2014, follows the presentation of the department's staff.

Staff of the Department of Health by Ethnicity and Gender As of July 2014

Title	Gender		Ethnicity					
	Male	Female	American Indian	Asian	Black	Hispanic	Other	White
Account Clerk	0	2	0	0	1	0	0	1
Accountant 1	0	1	0	0	1	0	0	0
Accountant 2	3	3	0	0	1	0	0	5
Accountant 3	6	12	0	0	1	0	1	16
Accounting Manager	0	2	0	0	0	0	0	2
Accounting Technician 1	2	11	0	0	1	0	0	12
Accounting Technician 2	0	6	0	2	2	0	0	2
Administrative Assistant 1	3	36	0	0	6	0	0	33
Administrative Assistant 2	0	2	0	0	0	0	0	2
Administrative Secretary	0	16	0	0	1	0	1	14

Title	Gender		Ethnicity					
	Male	Female	American Indian	Asian	Black	Hispanic	Other	White
Administrative Services Assistant 1	0	1	0	0	0	0	0	1
Administrative Services Assistant 2	8	56	0	0	21	1	1	41
Administrative Services Assistant 3	6	66	0	0	20	2	0	50
Administrative Services Assistant 4	10	44	0	0	13	1	0	40
Administrative Services Assistant 5	6	21	0	0	2	0	1	24
Administrative Services Manager	2	5	0	0	0	0	0	7
Agency CIO	1	0	0	0	0	0	0	1
Animal Health Technician	3	0	0	0	0	0	0	3
Assistant Commissioner 1	1	1	0	0	0	0	0	2
Assistant Commissioner 2	0	3	0	0	1	0	0	2
Attorney 2	2	1	0	0	0	0	0	3
Attorney 3	5	8	0	1	2	0	0	10
Attorney 4	2	1	0	0	0	0	0	3
Audiologist 2	0	1	0	0	0	0	0	1
Audit Director 3	1	0	0	0	0	0	0	1
Auditor 2	3	0	0	0	0	0	0	3
Auditor 3	3	2	0	0	0	0	0	5
Auditor 4	3	1	0	0	0	0	0	4
Biologist 3	5	1	0	0	0	0	0	6
Biologist 4	0	1	0	0	0	0	0	1
Board Member	101	81	0	0	26	0	3	153
Cancer Registrar	1	3	0	0	1	0	0	3
Cancer Registrar 1	0	4	0	0	0	0	1	3
Cancer Registrar 2	1	0	0	0	0	0	0	1
Chemist 2	8	4	0	2	2	0	1	7
Chemist 3	3	3	0	2	1	0	0	3
Chemist 4	3	3	0	0	0	0	0	6
Chief Ph Informatics Officer	1	0	0	0	0	0	0	1
Clerk 2	1	8	0	0	5	0	0	4
Clerk 3	4	17	0	0	10	0	1	10
Clinical Application Coordinator 1	1	2	0	0	0	0	0	3
Clinical Application Coordinator 2	0	2	0	0	0	0	0	2
Commissioner 2	1	0	0	0	0	0	0	1

Title	Gender		Ethnicity					Other	White
	Male	Female	American Indian	Asian	Black	Hispanic			
Community Health Council Coordinator 1	3	19	0	0	6	0	0	16	
Community Health Council Coordinator 2	0	7	0	0	1	0	0	6	
Counseling Assistant	0	8	0	0	0	0	0	8	
Creative Services Coordinator 2	1	0	0	0	0	0	0	1	
Custodial Worker 1	0	1	0	0	0	0	0	1	
Custodial Worker Supervisor 1	1	0	0	0	0	0	0	1	
Data Entry Operator	1	4	0	0	2	0	0	3	
Database Administrator 2	1	0	0	0	0	0	0	1	
Database Administrator 4	1	0	0	0	1	0	0	0	
Dental Assistant 2	0	14	0	0	1	0	0	13	
Dental Board Director	0	1	0	0	0	0	0	1	
Dentist	9	9	0	1	2	0	0	15	
Deputy Commissioner 2	2	0	0	0	0	0	0	2	
DHS Program Manager	0	1	0	0	0	0	0	1	
Dietetics Consultant	0	1	0	0	0	0	0	1	
Distributed Computer Operator 2	0	1	0	1	0	0	0	0	
Emergency Medical Services Assistant Director	1	0	0	0	0	0	0	1	
Emergency Medical Services Consultant 1	3	1	0	0	0	0	0	4	
Emergency Medical Services Consultant 2	4	1	0	0	0	0	0	5	
Emergency Medical Services Director	0	1	0	0	0	0	0	1	
Environmental Health Field Office Manager	2	1	0	0	1	0	0	2	
Environmental Health Program Director	1	0	0	0	0	0	0	1	
Environmental Health Program Manager 1	1	2	0	0	0	0	0	3	
Environmental Health Program Manager 2	1	0	0	0	0	0	0	1	
Environmental Health Specialist 1	1	1	0	0	0	0	0	2	
Environmental Health Specialist 3	50	17	1	0	3	0	0	63	
Environmental Health Specialist 4	15	5	0	0	4	0	0	16	

Title	Gender		Ethnicity					
	Male	Female	American Indian	Asian	Black	Hispanic	Other	White
Environmental Health Specialist 5	2	3	0	0	3	0	0	2
Environmental Health Specialist 6	4	1	0	0	0	0	0	5
Epidemiologist	10	21	0	6	4	1	0	20
Epidemiologist 1	2	8	0	2	3	0	0	5
Epidemiologist 2	10	7	0	0	0	0	1	16
Epidemiologist 3	4	2	0	0	0	1	0	5
Executive Administrative Assistant 1	0	1	0	0	0	0	0	1
Executive Administrative Assistant 2	3	5	0	0	1	0	0	7
Executive Administrative Assistant 3	3	2	0	0	0	0	0	5
Executive Secretary 1	0	2	0	0	0	0	0	2
Executive Secretary 2	0	1	0	0	1	0	0	0
Facilities Program Director 1	1	0	0	0	0	0	0	1
Facilities Construction Director	1	0	0	0	0	0	0	1
Facilities Construction Specialist 3	6	0	0	1	0	0	0	5
Facility Administrator 3	0	1	0	0	0	0	0	1
Fire Safety Specialist Supervisor	1	0	0	0	0	1	0	0
Fire Safety Specialist 1	7	2	0	0	1	0	0	8
Fire Safety Specialist 2	3	0	0	0	0	0	0	3
Fiscal Director 1	4	1	0	0	0	2	1	2
Fiscal Director 2	1	0	0	0	0	0	0	1
Fiscal Director 3	0	1	0	0	1	0	0	0
General Counsel 4	0	1	0	0	0	0	0	1
Health Facilities Program Manager 1	0	2	0	0	0	0	0	2
Health Facilities Survey Director	1	0	0	0	1	0	0	0
Health Facilities Survey Manager	1	0	0	0	0	0	0	1
Health Planner 3	1	0	0	0	0	0	0	1
Health Regional Emergency Response Coordinator 1	2	5	0	0	0	0	0	7
Health Regional Emergency Response Coordinator 2	6	3	0	0	0	0	0	9
Health Related Boards Director	0	1	0	0	0	0	0	1

Title	Gender		Ethnicity					Other	White
	Male	Female	American Indian	Asian	Black	Hispanic			
Health Related Boards Inventory Director	0	1	0	0	0	0	0	1	
Health Services Dental Hygienist	0	33	1	0	2	0	0	30	
Health Statistics Info Manager	0	1	0	0	0	0	0	1	
HR Analyst 2	0	4	0	0	1	0	0	3	
HR Analyst 3	0	2	0	0	0	0	0	2	
HR Director 3	0	1	0	0	0	0	0	1	
HR Manager 1	0	1	0	0	0	0	0	1	
HR Manager 2	0	1	0	0	0	0	0	1	
HR Technician 2	0	1	0	0	1	0	0	0	
HR Transactions Supervisor	0	1	0	0	0	0	0	1	
Information Resource Support Specialist 2	3	2	0	0	2	0	2	1	
Information Resource Support Specialist 3	14	6	0	0	2	0	0	18	
Information Resource Support Specialist 4	10	4	0	1	2	0	0	11	
Information Resource Support Specialist 5	9	3	0	0	2	0	0	10	
Information Systems Analyst 3	3	0	0	0	0	0	0	3	
Information Systems Analyst 4	3	1	0	0	0	1	1	2	
Information Systems Analyst Supervisor	1	1	0	0	1	0	0	1	
Information Systems Associate	2	0	0	0	0	0	0	2	
Information Systems Consultant	1	0	0	0	0	0	0	1	
Information Systems Director 2	1	1	0	0	0	0	0	2	
Information Systems Manager 1	1	0	0	0	0	0	0	1	
Information Systems Manager 2	1	0	0	0	0	0	0	1	
Information Systems Manager 3	2	2	0	0	0	0	0	4	
Information Systems Specialist 4	0	2	0	0	0	0	1	1	
Laboratory Supervisor 1 (Certified)	0	1	0	0	0	0	0	1	
Laboratory Supervisor 3 (Certified)	2	0	0	0	0	0	0	2	
Laboratory Technician 1	1	0	0	0	0	0	0	1	
Laboratory Technician 2	1	11	0	0	5	0	0	7	

Title	Gender		Ethnicity					Other	White
	Male	Female	American Indian	Asian	Black	Hispanic			
Legal Assistant	1	11	0	0	3	0	0	9	
Legal Services Director	0	1	0	0	0	0	0	1	
Licensed Practical Nurse 2	0	27	0	0	2	0	0	25	
Licensed Practical Nurse 3	0	5	0	0	0	0	0	5	
Licensing Technician	4	24	0	0	18	1	0	9	
Mainframe Computer Operator 2	0	1	0	0	0	0	0	1	
Managed Care Operator	4	18	0	1	12	1	0	8	
Managed Care Program Manager 1	1	0	0	0	0	0	0	1	
Managed Care Specialist 3	2	1	0	0	1	0	1	1	
Managed Care Technician	1	1	0	0	0	0	0	2	
Media Producer/Director	1	0	0	0	0	0	0	1	
Medical Board Director	0	1	0	0	0	0	0	1	
Medical Records Assistant	0	3	0	0	3	0	0	0	
Medical Social Worker 2	0	2	0	0	0	0	0	2	
Medical Technologist Consultant 1	2	2	0	0	0	0	0	4	
Medical Technologist Consultant 2	1	3	0	0	1	0	0	3	
Microbiologist 1 (Certified)	2	2	0	0	0	0	0	4	
Microbiologist 2 (Certified)	14	26	0	4	6	1	3	26	
Microbiologist 3 (Certified)	2	8	0	0	1	0	0	9	
Microbiologist 4 (Certified)	1	6	0	0	2	0	0	5	
Molecular Biologist	0	1	0	0	0	0	0	1	
Network Technical Specialist 3	3	0	0	0	1	0	0	2	
Nurse Practitioner	2	84	0	0	4	2	0	80	
Nurse's Assistant 2	1	98	0	1	17	2	0	79	
Nursing Board Director	0	1	0	0	0	0	0	1	
Nutrition Educator	1	18	0	0	0	0	0	19	
Nutritionist 1	0	2	0	0	0	0	0	2	
Nutritionist 2	0	24	0	1	0	0	0	23	
Nutritionist 3	0	11	0	1	0	0	0	10	
Nutritionist 4	0	5	0	0	2	0	0	3	
Office Automation Specialist	0	3	0	0	0	0	0	3	
Office Supervisor 2	1	0	0	0	0	0	0	1	
Office Supervisor 3	0	1	0	0	0	0	0	1	
Pharmacist 2	9	10	0	0	0	0	0	19	
Pharmacy Board Director	1	0	0	0	0	0	0	1	
Pharmacy Technician	0	8	0	0	0	0	0	8	
Physician	26	27	0	3	7	0	1	42	

Title	Gender		Ethnicity					
	Male	Female	American Indian	Asian	Black	Hispanic	Other	White
Planning Analyst 5	1	0	0	0	0	0	0	1
Procurement Officer 1	5	4	0	0	3	0	0	6
Procurement Officer 2	1	3	0	0	0	0	0	4
Program Monitor 3	0	1	0	0	0	0	0	1
Programmer/Analyst 2	1	0	0	0	0	0	0	1
Programmer/Analyst 3	3	2	0	0	1	0	0	4
Programmer/Analyst 4	2	0	0	0	1	0	0	1
Public Health Administrator 1	1	5	0	0	1	0	0	5
Public Health Administrator 2	1	7	0	0	3	0	0	5
Public Health County Director 3	12	25	0	0	2	0	1	34
Public Health Educator 2	1	19	0	0	5	0	0	15
Public Health Educator 3	2	8	0	0	2	0	0	8
Public Health Laboratories Director	1	0	0	0	0	0	0	1
Public Health Nursing Consultant 1	11	81	0	0	10	0	0	82
Public Health Nursing Consultant 2	3	39	0	0	5	0	0	37
Public Health Nursing Consultant Manager	1	9	0	1	1	0	0	8
Public Health Nursing Director	0	1	0	0	0	0	0	1
Public Health Office Assistant	4	192	0	1	17	2	1	175
Public Health Office Supervisor 1	0	40	0	0	1	0	0	39
Public Health Office Supervisor 2	0	24	0	0	4	0	0	20
Public Health Office Supervisor 3	0	13	0	0	0	0	0	13
Public Health Program Director 1	6	20	0	1	9	0	0	16
Public Health Program Director 2	6	18	0	1	9	0	1	13
Public Health Program Director 3	2	12	0	1	3	0	0	10
Public Health Regional Assistant Director	0	5	0	0	0	0	0	5
Public Health Regional Director	2	6	0	0	0	0	0	8
Public Health Representative 1	0	1	0	0	0	0	0	1
Public Health Representative 2	5	20	0	0	9	1	0	15
Public Health Representative 3	2	6	0	0	0	0	0	8

Title	Gender		Ethnicity					Other	White
	Male	Female	American Indian	Asian	Black	Hispanic			
Public Health Representative 4	1	1	0	0	0	0	1	1	
Regulatory Board Administrative Assistant 1	1	6	0	0	3	0	0	4	
Regulatory Board Administrative Assistant 2	3	16	0	0	6	0	0	13	
Regulatory Board Administrative Assistant 3	1	2	0	0	0	0	0	3	
Regulatory Board Administrative Director 1	0	1	0	0	1	0	0	0	
Regulatory Board Administrative Director 2	0	1	0	0	0	0	0	1	
Regulatory Board Administrative Manager	0	2	0	0	2	0	0	0	
Registered Nurse 1	0	1	0	0	0	0	0	1	
Registered Nurse 2	1	230	0	1	12	0	0	218	
Registered Nurse 3	3	104	0	0	2	1	0	104	
Registered Nurse 4	1	83	0	0	2	1	0	81	
Registered Nurse 5	0	8	0	0	0	1	0	7	
Registered Nurse - Expanded Skills	0	7	0	0	1	0	0	6	
Secretary	0	24	1	0	3	0	0	20	
Social Counselor 2	1	23	0	0	3	0	0	21	
Social Counselor Supervisor	0	4	0	0	2	0	0	2	
Social Services Specialist 2	0	3	0	0	1	0	0	2	
Social Worker 2	0	5	0	0	3	0	0	2	
Statistical Analyst 2	1	1	0	0	1	0	0	1	
Statistical Analyst 3	2	0	0	0	1	0	0	1	
Statistical Analyst 4	4	2	0	2	2	0	1	1	
Statistical Analyst Supervisor	4	0	0	0	0	0	1	3	
Statistical Programmer Specialist 1	4	0	0	1	1	0	0	2	
Statistical Programmer Specialist 2	5	5	0	1	5	0	2	2	
Statistical Research Specialist	3	3	0	1	1	0	0	4	
Statistician 2	1	2	0	0	2	0	0	1	
Statistician 3	0	2	0	0	2	0	0	0	
Storekeeper 1	1	1	0	0	2	0	0	0	
Storekeeper 2	2	0	0	0	0	0	0	2	
Student Intern	0	1	0	1	0	0	0	0	
Systems Programmer 2	3	0	0	0	0	0	0	3	
Systems Programmer 3	1	0	0	0	0	0	0	1	

Title	Gender		Ethnicity					
	Male	Female	American Indian	Asian	Black	Hispanic	Other	White
Tandem Mass Spectrometry Manager	0	1	0	0	1	0	0	0
Telephone Operator 1	0	1	0	0	0	0	0	1
Training Officer 2	0	1	0	0	0	0	0	1
Veterinarian Staff	1	0	0	0	0	0	0	1
Veterinary Board Director	0	1	0	0	0	0	0	1
Vital Records Field Representative	1	2	0	0	2	0	0	1
Vital Records Information Assistant	1	19	0	0	10	1	0	9
Vital Records Manager	0	3	0	0	2	0	0	1
Vital Records Supervisor	0	4	0	0	3	0	0	1
Word Processing Operator 1	0	1	0	0	0	0	0	1
Total	625	2,243	3	42	414	24	29	2,356

**Medical Examiner Advisory Council
Members by Gender and Ethnicity
As of July 2014**

Representation	Gender	Ethnicity
Commissioner of Health	Male	White
District Attorney General	Male	White
Licensed Funeral Director	Male	White
Medical Examiner (West Tennessee)	Male	White
Medical Examiner (East Tennessee)	Female	White
Medical Examiner (Middle Tennessee)	Male	White
Director of the Tennessee Bureau of Investigation	Male	Black
District Public Defender	Male	White
Public Citizen	Male	White

APPENDIX 2
Performance Measures Information

As stated in the Tennessee Governmental Accountability Act of 2013, “accountability in program performance is vital to effective and efficient delivery of government services, and to maintain public confidence and trust in government.” In accordance with this act, all executive-branch state agencies are required to submit annually to the Department of Finance and Administration a strategic plan and program performance measures. The Department of Health’s priority goals, as reported for April 2014 on the Governor’s Customer Focused Government Monthly Results website, are as follows:

Performance Standards and Measures

Performance Standard 1: Reduce the milligrams of morphine equivalents prescribed in Tennessee by improving the ease of use and capability of the Controlled Substances Database by March 31, 2014.

Purpose of the Goal:

Constrain the supply of these addictive and potentially harmful medications available for non-medical use; support timely interventions and referrals for potentially harmful abuse and misuse behaviors; and increase awareness of the potential for harm from otherwise beneficial medications in order to reduce overdose deaths, overdoses, drug-dependent newborns, children in state custody, correctional and treatment costs, and negative impacts to the business climate in Tennessee.

Measuring the Goal:

	Baseline	Current	Target
Milligrams of morphine equivalents prescribed in TN	9,930,000,000	8,118,529,706	-

Performance Standard 2: Protect the health of people in Tennessee by initiating at least one primary prevention project in each county and making all recommended routine vaccines available at rural health departments by June 2014.

Purpose of the Goal:

To protect the health of people in Tennessee by leading local initiatives in all 95 counties to improve key areas associated with better overall health and prosperity by (1) helping make regular physical activity an integral part of daily life; (2) improving nutrition by making healthy food and beverages the easy choice; (3) encouraging enjoyment of life free from tobacco exposure, nicotine and other addictions; (4) promoting and encouraging breast-feeding; (5) shrinking the number of babies that die in their first year of life from preventable causes; (6) eradicating vaccine preventable communicable diseases (like whooping cough, influenza, mumps, chicken pox, meningitis, measles, human papilloma virus (HPV), hepatitis A and B, to name a few); and (7) ensuring in every possible way that our children receive the best possible start in life.

Measuring the Goal:

	Baseline	Current	Target
# of counties with Primary Prevention Initiative projects completed	0	95	95
# of rural county immunization service goals met	0	89	89

APPENDIX 3
Revenues and Expenditures

Expenditures by Account
For the Fiscal Year Ended June 30, 2014
(Unaudited)

<i>Account</i>	<i>Amount</i>	<i>% of Total</i>
Executive Administration	\$19,399,368	3%
Laboratory Services	\$18,258,839	3%
Policy Planning and Assessment	\$9,465,297	2%
Bureau of Health Licensure and Regulation	\$15,880,026	3%
Trauma System Fund	\$10,149,961	2%
Emergency Medical Services	\$1,654,619	0%
Division of Animal Welfare	\$458,488	0%
Health Related Boards	\$14,708,225	3%
General Environmental Health	\$11,988,968	2%
Maternal and Child Health	\$29,709,208	5%
Communicable and Environmental Disease Services	\$62,444,290	11%
Community and Medical Services	\$36,523,563	6%
Women, Infants, and Children (WIC)	\$123,231,460	22%
Local Health Services	\$209,845,275	37%
Total Expenses	\$563,717,588	100%

Source: Edison report as of September 9, 2014.

Estimated Budget
For the Fiscal Year Ended June 30, 2014

<i>Source</i>	<i>Amount</i>	<i>% of Total</i>
State	\$209,469,800	32%
Federal	\$244,954,800	41%
Others*	\$140,602,900	27%
Total Revenue	\$595,027,500	100%

Source: *The Budget 2014-2015*.