

Audit Report

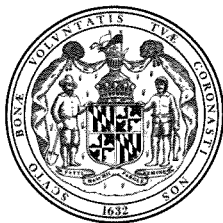
**Department of Health and Mental Hygiene
Vital Statistics Administration**

May 2014



OFFICE OF LEGISLATIVE AUDITS
DEPARTMENT OF LEGISLATIVE SERVICES
MARYLAND GENERAL ASSEMBLY

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DEPARTMENT OF LEGISLATIVE SERVICES
OFFICE OF LEGISLATIVE AUDITS
MARYLAND GENERAL ASSEMBLY

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May 27, 2014

Thomas J. Barnickel III, CPA
Legislative Auditor

Senator James C. Rosapepe, Co-Chair, Joint Audit Committee
Delegate Guy J. Guzzone, Co-Chair, Joint Audit Committee
Members of Joint Audit Committee
Annapolis, Maryland

Ladies and Gentlemen:

We have audited the Vital Statistics Administration (VSA) of the Department of Health and Mental Hygiene (DHMH) for the period beginning October 15, 2009 and ending February 24, 2013. VSA is primarily responsible for registering all births and deaths occurring in the State; issuing certified copies of birth, death, and marriage certificates; and compiling and analyzing various vital statistics data.

Our audit disclosed that VSA headquarters had not established adequate procedures and controls over its issuance of certificates, blank certificate inventories, and vital records system. In addition, VSA did not exercise adequate oversight of certificate issuances at the local health departments and related cash receipts. As a result, there was a lack of assurance that transactions processed were proper. We also noted that database and application controls were not sufficient to protect critical data. For example, critical security and audit events occurring on the vital records system were not logged to identify possible security violations.

DHMH's response to this audit, on behalf of VSA, is included as an appendix to this report. We wish to acknowledge the cooperation extended to us during the course of this audit by VSA.

Respectfully submitted,

Thomas J. Barnickel III, CPA
Legislative Auditor

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Background Information

Agency Responsibilities

The Department of Health and Mental Hygiene's (DHMH) Vital Statistics Administration (VSA) is responsible for registering all births and deaths occurring in the State; issuing certified copies of birth, death, and marriage certificates; and compiling and analyzing various vital statistics data. Certified copies of these certificates are available at the VSA headquarters location in Baltimore. Birth certificates and certain death certificates are also available at 22 local health departments (LHDs). Previously, VSA was audited and reported on as part of our audit of the DHMH – Office of the Secretary. The audit report for the previous audit of DHMH – Office of the Secretary, which was dated August 9, 2011, covered the period September 1, 2006 to October 14, 2009.

According to the State's records, during fiscal year 2012, VSA operating expenditures were approximately \$3.9 million. According to its records, VSA collected approximately \$9.2 million in vital record fees during fiscal year 2012 for the issuance of approximately 600,000 certified copies of certificates, of which approximately \$2.8 million was collected by LHDs.

Status of Findings From Preceding Audit Report

Our audit included a review to determine the status of the four findings contained in our preceding audit report, dated August 9, 2011, on DHMH – Office of the Secretary related to VSA. We determined that VSA satisfactorily addressed these findings.

Findings and Recommendations

Vital Records

Background

The Department of Health and Mental Hygiene's (DHMH) Vital Statistics Administration (VSA) issues certified copies of birth, death, and marriage certificates. Information for births since 1939 is maintained on DHMH's Electronic Vital Record System (EVRS) which is a web-enabled system used for the registration of births; issuance of certified copies of birth certificates; and preparation of vital statistics, data files, and reports. EVRS serves all entities providing birth data to VSA including the local health departments (LHD), hospitals, and birthing centers. All death and marriage records, as well as birth information prior to 1939, are manually maintained (that is, a paper copy of the record is maintained on file). Applicants for certified copies of birth, death, or marriage certificates are required to pay a fee for each copy and to provide sufficient identification and other relevant information to substantiate that the applicant is eligible to request and receive the certificate in accordance with law and regulations.

The control and accountability of these documents, especially birth certificates, is critical because false identification could be a major factor in many types of crimes, including illegal immigration and flight from justice. In addition, falsified or stolen vital statistics could allow the holder to obtain other critical documents (such as passports and driver's licenses) and improper benefits (such as Social Security benefits and temporary cash assistance).

Finding 1

Adequate controls were not established over the issuance of certificates, blank certificate inventories, and EVRS.

Analysis

Adequate controls were not established over the issuance of certificates, blank certificate inventories, and EVRS at VSA headquarters. As a result, there was a lack of assurance that transactions processed were proper.

- VSA did not always document that proper identification was sighted prior to issuing certified copies of birth and death certificates, as required by State regulations. Specifically, for 15 of the 30 certificate applications tested which were received in person, electronically, or through the mail, VSA did not document that it verified the identity of the applicant (for example, by sighting

photo identification) prior to the issuance of the certificate. In addition, although we were informed that death certificates issued resulting from mail or electronic requests were independently verified to the related applications prior to issuance, this verification was not documented.

- The employee who accounted for the blank certificate forms as to certificates issued, voided, or on hand had routine access to the blank certificates and the related collections and could print certificates. As a result, certificates could be issued improperly without detection.
- User access in EVRS was not adequately controlled and monitored. Although we were advised in April 2013 that a review of access capabilities assigned to EVRS users was last performed in December 2012, this review was not documented. In addition, changes to user capabilities were made based on management's verbal requests, which were not documented. As a result, VSA lacked assurance that employee access to EVRS was proper. As of March 2013, there were 602 userids, of which 165 were for its central headquarters location. The remaining userids were assigned to LHD and hospital employees.

Recommendation 1

We recommend that VSA

- a. document the verification of proper identification prior to issuance of certificates and verify that certificates issued were properly supported by completed applications prior to issuance, as required;**
- b. separate the duties of certificate issuance, access to blank certificates, and access to cash receipts; and**
- c. document its periodic review of user access capabilities and ensure that modifications to user access are authorized in writing.**

Finding 2

VSA did not exercise adequate oversight of certificate issuances at LHDs and related cash receipts.

Analysis

VSA's oversight of certificate issuances and related collections at the LHDs was not adequate. Our review disclosed the following conditions:

- During the period from March 2012 to May 2013, VSA conducted reviews of procedures and controls over cash receipts and critical records management at 19 of the 22 LHDs (VSA scheduled reviews for the remaining three LHDs)

and concluded that certain duties were not properly segregated at 18 LHDs. However, VSA could not provide us with documentation that the results of the reviews were communicated to the LHDs.

During our audit, we reviewed procedures and controls at two LHDs, which issued 32,037 birth and death certificates during fiscal year 2012, with related collections of approximately \$490,000. For the two LHDs we visited, VSA had identified procedural weaknesses related to collections and the processing of related certificates, which were confirmed during our review. For example, at one LHD, one employee unilaterally issued birth certificates, processed the related collections, and maintained custody of the certificate stock. At the other LHD, certain employees periodically processed collections and issued related certificates. As a result, employees could process transactions and misappropriate related funds without detection. Personnel at both LHDs advised us that the results of the aforementioned VSA reviews were not shared with them, as of September 2013. Consequently, corrective actions had not been taken. The reviews for these two LHDs were conducted by VSA in March and April 2013.

- VSA headquarters did not use available output reports from EVRS to ensure birth certificates printed at the LHDs were issued in sequential order and to reconcile certificates issued to related collections. Rather, VSA relied on monthly manual reports of certificates printed and issued prepared by LHD personnel to perform this review and reconciliation. This is critical since headquarters was responsible for accounting for birth certificates issued at all locations.

Recommendation 2

We recommend that VSA

- a. communicate the results of reviews of operations in writing to the LHDs, including the aforementioned reviews and take appropriate follow-up action to ensure the identified deficiencies are corrected; and**
- b. use output reports from the EVRS to ensure birth certificates were issued in sequential order and to reconcile certificates issued to related collections.**

Finding 3

Database and application controls were not sufficient to protect critical data.

Analysis

Database and application controls were not sufficient to protect critical data.

- Certain critical security-related events affecting the EVRS database were not logged. For example, events relating to granting and revoking database privileges, and modifying and stopping auditing were not logged, although the database had the capability to log these events. In addition, although failed sign-on attempts were logged, they were not reviewed. Accordingly, significant database security violations could go undetected thereby potentially affecting the integrity of the EVRS data.
- Certain EVRS application password and account settings were not in compliance with the requirements of the Department of Information Technology's (DoIT) *Information Security Policy*. For example, the EVRS application did not require passwords to be periodically changed and account lockout, after a predetermined number of failed logon attempts, was not enforced.

Recommendation 3

We recommend that VSA

- a. log critical EVRS database security and audit events, document the review and investigation of these events, as well as failed database logon attempts, and retain such documentation for verification; and**
- b. ensure that all EVRS application password and account settings are in compliance with the requirements of the DoIT *Information Security Policy*.**

Audit Scope, Objectives, and Methodology

We have audited the Vital Statistics Administration (VSA) of the Department of Health and Mental Hygiene (DHMH) for the period beginning October 15, 2009 and ending February 24, 2013. The audit was conducted 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.

As prescribed by the State Government Article, Section 2-1221 of the Annotated Code of Maryland, the objectives of this audit were to examine VSA's financial transactions, records and internal control, and to evaluate its compliance with applicable State laws, rules, and regulations. We also determined the status of the four findings contained in our preceding audit report on DHMH – Office of the Secretary, dated August 9, 2011 related to VSA.

In planning and conducting our audit, we focused on the major financial-related areas of operations based on assessments of materiality and risk. The areas addressed by the audit included cash receipts, certificate issuance, and information systems.

To accomplish our audit objectives, our audit procedures included inquiries of appropriate personnel, inspections of documents and records, observations of the VSA's operations, and tests of transactions. We also performed various data extracts of pertinent information from the VSA Electronic Vital Records System (EVRS) for the purpose of testing user access and the issuance of certificates. We performed various tests of the relevant data and determined that the data were sufficiently reliable for the purposes the data were used during the audit. Finally, we performed other auditing procedures that we considered necessary to achieve our audit objectives. The reliability of data used in this report for background or informational purposes was not assessed.

Our audit did not include certain support services provided to VSA by DHMH's Office of the Secretary and related units. These support services (such as payroll, purchasing, maintenance of accounting records, related fiscal functions, and certain aspects of the network information systems related to EVRS) are included within the scope of our audits of the Office of the Secretary.

VSA's management is responsible for establishing and maintaining effective internal control. Internal control is a process designed to provide reasonable

assurance that objectives pertaining to the reliability of financial records, effectiveness and efficiency of operations including safeguarding of assets, and compliance with applicable laws, rules, and regulations are achieved.

Because of inherent limitations in internal control, errors or fraud may nevertheless occur and not be detected. Also, projections of any evaluation of internal control to future periods are subject to the risk that conditions may change or compliance with policies and procedures may deteriorate.

Our reports are designed to assist the Maryland General Assembly in exercising its legislative oversight function and to provide constructive recommendations for improving State operations. As a result, our reports generally do not address activities we reviewed that are functioning properly.

This report includes findings related to conditions that we consider to be significant deficiencies in the design or operation of internal control that could adversely affect VSA's ability to maintain reliable financial records, operate effectively and efficiently, and/or comply with applicable laws, rules, and regulations. Our report also includes findings regarding significant instances of noncompliance with applicable laws, rules, or regulations. Other less significant findings were communicated to VSA that did not warrant inclusion in this report.

DHMH's response, on behalf of VSA, to our findings and recommendations is included as an appendix to this report. As prescribed in the State Government Article, Section 2-1224 of the Annotated Code of Maryland, we will advise DHMH regarding the results of our review of its response.

APPENDIX



STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene

201 W. Preston Street • Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

May 20, 2014

Mr. Thomas J. Barnickel III, CPA
Acting Legislative Auditor
Office of Legislative Audits
301 West Preston Street
Baltimore, MD 21201

Dear Mr. Barnickel:

Thank you for your letter regarding the draft audit report for the Department of Health and Mental Hygiene – Vital Statistics Administration. Enclosed you will find the Department's response and plan of correction that addresses each audit recommendation. The Office of Inspector General's Division of Internal Audits will follow-up on the recommendations to ensure compliance.

If you have any questions or require additional information, please do not hesitate to contact Thomas V. Russell of my staff at (410) 767-5862.

Sincerely,

Joshua M. Sharfstein, M.D.
Secretary

Enclosure

cc: Laura Herrera Scott, MD, MPH, Deputy Secretary of Public Health Services, DHMH
Shawn Cain, Chief of Staff, Deputy Secretary of Public Health Services, DHMH
Patrick D. Dooley, Chief of Staff, Office of the Secretary, DHMH
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Ellwood L. Hall, Jr., Assistant Inspector General, DHMH
Lisa J. Ellis, Chief Administrative Officer, DHMH
Isabelle Horon, DrPH, Director, Vital Statistics Administration, DHMH
Geneva Sparks, State Registrar, DHMH

Finding 1

Adequate controls were not established over the issuance of certificates, blank certificate inventories, and EVRS.

Auditor's Recommendations:

We recommend that VSA

- a. document the verification of proper identification prior to issuance of certificates and verify that certificates issued were properly supported by completed applications prior to issuance, as required;**
- b. separate the duties of certificate issuance, access to blank certificates, and access to cash receipts; and**
- c. document its periodic review of user access capabilities and ensure that modifications to user access are authorized in writing.**

Administration's Response:

- a. We concur with the finding and are currently following the auditor's recommendation. The Administration will continue to document the verification of proper identification prior to issuance of certificates and verify that certificates issued were properly supported by completed applications prior to issuance, as required. In the future, the Administration will check the "mailed out" box on the application rather than writing "mailed out" on the application, as has been the practice when certificates are mailed to customers who provide alternative identification documents.
- b. The Administration will separate the duties of certificate issuance, access to blank certificates, and access to cash receipts to the extent possible.
- c. We concur with the finding. The Administration will document its periodic review of user access capabilities and ensure that modifications to user access are authorized in writing. All EVRS supervisors have acknowledged by signing user agreement that they will inform IT staff of changes to user status and access needs. In addition, bi-annually we send out a listing of user access to the supervisors for review to determine whether any changes are needed. All change requests are stored electronically in an email folder on a password protected computer.

Finding 2

VSA did not exercise adequate oversight of certificate issuances at LHDs and related cash receipts.

Auditor's Recommendations:

We recommend that VSA

- a. communicate the results of reviews of operations in writing to the LHDs, including the aforementioned reviews and take appropriate follow-up action to ensure the identified deficiencies are corrected; and**
- b. use output reports from the EVRS to ensure birth certificates were issued in sequential order and to reconcile certificates issued to related collections.**

Administration's Response:

- a. The Administration concurs with the recommendation that it should communicate to LHDs in writing, in addition to verbally, the results of the periodic review of procedures and controls over cash receipts and critical documents. This will be done within 14 days of completion of reviews. Currently, deficiencies are shared with the Local Health Officers. Going forward, DVR will provide this information to the supervisory staff at the local health departments as well. DVR will communicate to Local Health Officers by June 30, 2014 that duties should be segregated and that an employee who does not work in the vital records unit must conduct a periodic inventory of security paper on hand.
- b. The Administration concurs and has implemented the recommendation that output reports from EVRS should be utilized to ensure the birth certificates are issued in sequential order and to reconcile certificates issued to related collections.

Finding 3

Database and application controls were not sufficient to protect critical data.

Auditor's Recommendations

We recommend that VSA

- a. log critical EVRS database security and audit events, document the review and investigation of these events, as well as failed database logon attempts, and retain such documentation for verification; and**
- b. ensure that all EVRS application password and account settings are in compliance with the requirements of the DoIT *Information Security Policy*.**

Administration's Response:

- a. We concur with the finding and have obtained the auditing tool which is a server and database auditing and compliance utility. We have implemented a variety of reports to log critical EVRS database security, audit security and logon events. Daily reports are reviewed by staff. The review is documented and stored electronically on a password protected computer.
- b. We concur with the recommendation and have implemented the application password and account settings per the DoIT Information Security Policy.

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