

**Nassau County
Office of the Comptroller
Field Audit Bureau**



**Operational Review of
Nassau County Police Department
Emergency Ambulance Bureau**

HOWARD S. WEITZMAN
Comptroller

MA06

February 16, 2006

NASSAU COUNTY
OFFICE OF THE COMPTROLLER

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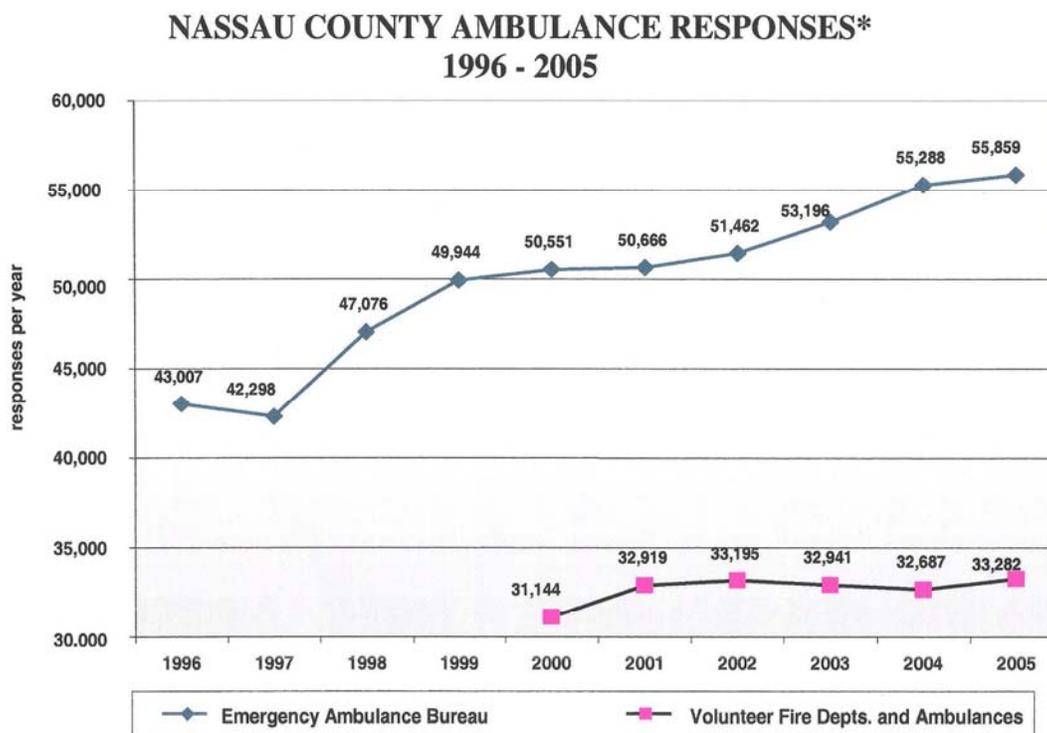
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Executive Summary

Background

The County Police Department's Emergency Ambulance Bureau (Bureau) was established in 1953 to provide for a coordinated response to emergency calls. Nassau is the only major suburban county in the State with a centralized paid emergency ambulance service. In 2005, the Bureau responded to 55,859 emergency calls, or approximately 63% of the total emergency ambulance calls routed through the county's Police and Fire Emergency Reporting System. Volunteer fire and ambulance companies are the other primary responders to emergencies in Nassau County. Suffolk County relies on an all-volunteer force, while Westchester municipalities have responders that are either paid or voluntary. The State Department of Health (DOH) regulates emergency services, and periodically audits the Bureau for compliance with DOH's regulations.

In recent years, the Bureau has responded to increasingly larger numbers and greater percentages of the county's emergency calls.



* Unaudited data from NCPD-EAB and FireComm. Does not include direct responses by volunteer services outside of county 911 or FireComm systems.



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FEBRUARY 2006

The number of calls plotted on the chart represents all calls routed through the County's Police and Fire Emergency Reporting System (911 and FireComm). The statistics do not include direct responses by volunteer services outside of the county 911 or FireComm systems.

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At the same time, the number of county residents who volunteer to serve as firefighters and as emergency medical technicians has been decreasing, and we have every reason to believe this trend will continue. Also, partially fueled by the growth in the county's elderly population, the demand for emergency medical services in Nassau has been increasing. Emergency medical calls outnumber fire calls, and have done so since the early 1970's. To avoid a crisis developing from the widening disparity between available volunteer resources and the need for services, it is imperative that the Bureau has the resources to respond effectively to emergency ambulance calls, including up-to-date technology and appropriately trained and licensed staff, and that it maintain adequate operating statistics (including response time statistics).

A police deputy inspector serves as commanding officer of the Bureau. As of December 31, 2004, there were 146 civilian employees assigned to the Bureau as follows:

Title	Number of Employees
Ambulance Medical Coordinator (AMC)	4
Ambulance Medical Technician Supervisor (AMTS)	14
Ambulance Medical Technician (AMT)	127
Clerk-Typist	1

Staffing levels were similar in 2003. Eighteen employees, including the clerk, are assigned to administrative or teaching duties in the Bureau. Those civilian employees assigned to the Bureau who perform teaching duties work at the Fire/Police Academy and the Police Academy (Academy). The Fire/Police Academy is a joint venture of the Nassau County Fire Commission and the Nassau County Police Department, with the Fire Commission providing funding for facilities and equipment while the Police Department provides the staff. The Fire/Police Academy provides emergency services training and recertification to various emergency service organizations throughout the county as required by the New York State Department of Health.

In 1990, the Board of Supervisors authorized the Bureau to bill for its services. In 2002, the police department entered into a contract with a new billing vendor and, as a result, revenue collection has increased significantly.

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Audit Scope, Objective and Methodology

The objective of the audit is to provide reasonable assurance that the resources of the Emergency Ambulance Bureau are used effectively. We reviewed the operations of the Bureau focusing on several major areas: response time, revenue collection, redeployment of highly trained civilians who perform clerical duties and general operations. The two major issues for the Bureau are to increase revenue collections and to maintain an acceptable level of response time to ensure the reliability of emergency medical services.

This audit was conducted in accordance with generally accepted government auditing standards. These standards require that the audit is planned and performed to obtain reasonable assurance that the audited information is free of material misstatements. The audit includes examining documents and other evidence to substantiate the accuracy of information tested, including all relevant records and contracts. It includes testing for compliance with applicable laws and regulations and any other auditing procedures necessary to complete the examination. We believe that the audit provides a reasonable basis for the audit findings and conclusions.

Summary of Significant Findings:

Ambulance Response Time

The Bureau is Nassau County's main responding agency for emergency ambulance services. The Bureau, however, does not maintain any ambulance response time statistics, despite the importance of tracking the average time from the receipt of a request for help until the dispatch of an ambulance and the time from ambulance dispatch until its arrival at the scene. Adequate response time is critical to the provision of adequate emergency services and integral to the efficient operation of the Bureau. State Department of Health regulations require written protocols governing "call receipt intervals" (the maximum allowable interval between the time 911 calls are received and the time ambulances are dispatched); however, these have not been established by the Bureau.

Automatic Vehicle Locator Technology

We found that the Bureau does not have the available technology to make its operations more efficient. Ambulances are not equipped with Automatic Vehicle Locator (AVL) technology to track ambulance locations and ensure the dispatch of the vehicle closest to the emergency. In addition, the radio console used by the medical control unit is no longer manufactured, replacement parts are not available and the Bureau has no backup unit if the unit should malfunction.

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Overtime

The Bureau reduced overtime from 2003 to 2004 by 11% (from \$1,000,000 to \$890,000), primarily through management prerogatives, such as reducing the number of ambulances on the overnight shift. It has not, however, completed an analysis of the cost-benefit of using overtime instead of hiring additional employees and the effect, if any, of the use of overtime on safety.

Emergency Services Personnel Performing Clerical Functions

We found that the Bureau was using highly trained AMTs and an AMTS to perform clerical duties, such as time and leave, roll call, and billing functions, which could be performed by other civilians in lower paying titles. This would result in an annual savings of approximately \$190,000.

Professional Certifications

County employees providing instruction to staff and medical assistance to the public may not be properly certified to do so:

- The police are frequently First Responders (the first to respond) to accident cases and aided cases where knowledge of proper emergency procedures can be critical. The New York State Department of Health requires First Responders to be recertified every three years; however, the police department no longer recertifies police officers. Therefore, police may not be adequately trained in the latest emergency procedures.
- There are currently five AMTs assigned to teaching duties at the Police Academy on a permanent basis. Only three of the five has provided documentation to the Bureau that they are certified by New York State Department of Health as instructors. The remaining two are not qualified to instruct and any training that they perform, without supervision by a certified instructor, is not recognized by the State toward the student's certification as a New York State Certified First Responder.

Lack of Supervision

We found that the Bureau may have inadequate supervision:

The Medical Control Unit, which provides pre-arrival care instructions to the AMTs, has only one supervisor. When that employee is off duty, there is no supervision in that Unit. In addition, employees must sometimes seek medical

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advice from Nassau University Medical Center doctors who work in the adjacent emergency room.

- Only three of five AMTCs are actually supervising in the field. The other two are assigned to other duties. As a result 32% of total field work hours are unsupervised.

Inadequate Revenue Collection Efforts

As of December 31, 2004, accounts receivable for the Bureau totaled \$4.6 million. One million dollars or 22% of accounts receivable are over 120 days old. Two areas of accounts receivable where collections could be maximized while still adhering to the county's collection policy are:

1. obtaining insurance information. Of the \$4.6 million outstanding receivables, \$2.6 million relate to accounts where insurance information was not obtained, often due to the condition of the patient. The county, however, has not entered into a *Business Associates Agreement* whereby it would be able to obtain patient insurance information directly from the receiving hospitals.
2. direct insurance reimbursement. The county is not a participating provider with major insurance companies. As a result, reimbursement is sent directly to the insured, who may not remit it to the county.

This report makes additional recommendations regarding the operation of the Bureau and improving emergency service delivery to the public.

On November 30, 2005, we submitted a draft report to department officials with a request for comments. The department's comments were received on December 16, 2005. The department's comments and our response to those comments are included as an addendum to this report (Appendix 1).

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Ambulance Response Time

Audit Finding (1):

The Bureau does not maintain any statistics on the time periods that elapse between 911 calls for help and the arrival of AMTs to assist patients. In addition, the Bureau depends on its outside billing vendor to gather statistics on the geographic areas most heavily serviced.

The time period that elapses between 911 calls for help and the arrival of AMTs to assist patients is comprised of two components:

- the *call receipt interval* or time from the 911 call to the time an ambulance is dispatched to the scene¹; and
- the *response time*, or the interval between the time the ambulance is dispatched and its arrival on the scene.

An analysis of call receipt intervals and response time is a critical part of providing quality emergency services to the taxpayers. We found that the Bureau does not produce reports that track these critical time intervals to detect delays and to identify problem areas in order to take corrective actions.

Call Receipt Intervals

The Bureau has not established any protocols, regarding maximum call receipt interval as required by the New York State Public Health Law². A maximum call receipt interval protocol would help to decrease the overall response time of the ambulances. If a call exceeds the protocol, it is supposed to be dispatched to the next responder on the list. The Bureau acknowledges that it frequently has to dispatch ambulances out of their regular zones to respond to calls. The call receipt interval is a good measure of response time because it tracks the time from the receipt of 911 calls to the arrival time of ambulances at the scene, not merely the time from ambulance dispatch to arrival. We note that Suffolk County recently enacted a two-minute protocol for responding agencies to confirm that they are able to mobilize a crew to respond to a call.

The county 911 system records the time that calls are received and the time of ambulance dispatch. Although this data is available, it is not compiled and reported as a management tool. In May 2005, Suffolk County enacted legislation to improve emergency services response time by mandating that all emergency services agencies in the county report data regarding dispatch time, en-route times, on-scene times, and hospital arrival and departure times in a uniform manner so that the county can adequately monitor response times.

¹ N.Y. Comp. Codes. R & Regs. Tit.10, S 800.3 (cc) (2004)

² N.Y. Comp. Codes. R & Regs. Tit 10, S 800.21 (p)(3) (2004)

Response Time

The National Institutes of Health (NIH) recommends that 90% of all top priority emergency calls receive an Advanced Life Support (ALS) response to the scene in less than 9 minutes from the time of call dispatch³. The Bureau does not know whether it complies with this recommendation because it does not maintain statistics on response time.

The Bureau's Patient Care Reports (PCRs) are currently handwritten. AMTs must enter their arrival time at the scene of the incident on the PCR. We reviewed a small sample of PCRs from March 17, 2004, and found that the most frequent response time entered on the PCRs was 8 minutes, which is within the time limit recommended by the NIH.⁴ Although the Bureau has the capability to scan their PCRs into a database and then perform periodic studies to generate statistics and to ensure that its response time is adequate, it is not currently being done.

Audit Recommendations:

The Bureau should:

- a. take steps to establish protocols regarding the maximum call receipt interval as required by state law and conform to all of the rules and regulations issued by the New York State Department of Health;
- b. produce management reports and use them to monitor call receipt intervals and response times to ensure that they are within acceptable levels;
- c. consider using laptop computers or handheld personal data assistants (PDA) to enter the PCR information. This would enable management to compile data on response time as well as generate other types of reports desired by management.

³ National Institutes of Health: Staffing and Equipping Emergency Medical Services Systems. NIH Pub #93-3304 (1993). P 11.

⁴ We only examined a small sample of the PCRs because of the lack of reliability of the time data contained in them. Because the time entries are manually entered, they are not particularly useful from an audit test perspective.

Automatic Vehicle Locator Technology

Audit Finding (2):

The Bureau does not utilize Automatic Vehicle Locator (AVL) technology for its ambulances. AVL technology uses a global positioning system to identify the exact location of each ambulance at all times. In contrast, the North Shore Hospital ambulance system is equipped with vehicle locator and mapping technology that enables dispatchers to dispatch the nearest available ambulance to the scene. Geographic Positioning (GPS) technology is in use in a number of jurisdictions for the dispatching of emergency services personnel. GPS, when used in conjunction with Geographic Information System (GIS) technology, which the Bureau already has available for its use, can be a useful tool to ensure that the nearest available ambulance is dispatched. In addition, this technology will assist management in tracking its fleet of ambulances to ensure that all sectors within the county have adequate coverage. It will also identify ambulances that are out of service for inordinate amounts of time after having delivered patients for admission to hospitals.

Audit Recommendation:

The Bureau should consider installation of AVL technology in its ambulances. This will assist the Bureau in monitoring the location of its ambulances and will be a useful management tool. The police department would be required to upgrade its CAD system as part of the implementation of the AVL technology.

Overtime

Audit Finding (3):

Overtime costs, which peaked in 2003, have been substantial:

<u>Year</u>	<u>Overtime</u>
2004	\$ 890,000
2003	\$ 1,000,000
2002	\$ 671,000
2001	\$ 700,000

Overtime represented approximately 11% of total salaries during both 2003 and 2004. Nevertheless, at the time of our review in early 2004, the Bureau had not performed any analyses to determine the cost-effectiveness of paying overtime rather than hiring additional employees or to ensure that the use of overtime to provide emergency services is not compromising safety.

Over the past four years, the staff assigned to the Bureau was as follows:

Title	2001	2002	2003	2004
AMT Coordinator	2	1	1	4
AMT Supervisor	14	14	14	14
Ambulance Medical Technician	138	133	133	127
Clerk-Typist	1	1	1	1
Deputy Inspector	1	1	1	1
Lieutenant	1	0	0	0
Police Officer	1	1	0	0

Overtime has been used by the Bureau to cover regularly scheduled tours because not enough full-time employees have been available. The number of full-time AMTs decreased from 138 in 2001 to 127 as of the end of 2003, and remained relatively constant through 2004. The Bureau's internal minimum staffing requirements are not mandated by the Civil Service Employment Association (CSEA) contract, and management can make staffing changes as circumstances dictate.

Although eight recruits completed training in 2004, they merely replaced employees who had left during the year. Overtime was reduced in part by not staffing a number of ambulances on the overnight tours. Although Bureau management informed us it had concluded that nighttime coverage could be reduced based on the number of calls received and the areas from which calls originated, it could not produce evidence of any analysis performed. Because the Bureau does not keep response time statistics, it could not demonstrate to us that this method of reducing overtime does not compromise public safety.

Audit Recommendations:

1. The Bureau should do a cost-benefit analysis to determine optimal staffing so that a proper balance between adding staff and incurring overtime can be achieved, without compromising public safety.
2. If the Bureau determines it is cost effective to hire more employees, it should request approval to do so.
3. The Bureau should maintain statistics on ambulance response time to be able to ensure that the practice of not staffing certain ambulances during periods of perceived decreased need does not compromise public safety.

Inadequate Revenue Collection Efforts

Audit Finding (4):

In 2002, the Bureau contracted with a new billing vendor, MedBill, Ltd. (MedBill), to process and collect bills for ambulance services. Under the new procedure, all ambulance runs result in a patient care report which includes insurance and other pertinent billing information. All patient care reports are electronically sent to MedBill so that a bill can be processed. There has been a significant improvement in revenue collections:

Annual Revenues Collected
(in \$ Millions)

<u>Year</u>	<u>Amount</u>
2004	\$ 13.6
2003	\$ 12.0
2002	\$ 8.3
2001	\$ 4.0

However, as of December 31, 2004, accounts receivable due from both insurance companies and individuals totaled \$4.6 million; and \$1million or 22% of the receivables were over 120 days old.

In 2004, the Bureau billed \$20.5 million, collected \$13.6 million, had \$4.6 million in accounts receivable and wrote off approximately \$2.3 million as uncollectible. Historically, the Bureau has had difficulty in collecting all revenues due. This was due in part to the poor controls that the Bureau had in place over the transmission of billing data to its previous vendor, as well as a lack of a comprehensive collection policy. The Bureau has corrected most of the control weaknesses, but during the audit period still did not have a collection policy in place, or a payment plan for those patients who are uninsured. The county’s contract with MedBill states that all collection efforts must be approved by the police department. In the spring of 2005, the county contracted with a collection vendor that will assist the Bureau in collecting delinquent accounts.

Two kinds of uncollected revenue where collections could be better maximized are:

- uncollected revenue from individuals with insurance, but whose insurance information was not obtained; and
- individuals who receive insurance payments for ambulance services directly from their insurance company but do not forward the money to the Bureau.

Of the \$4.6 million in outstanding receipts there is \$2.6 million due from individuals whose insurance information was not obtained. We found that the county does not follow best business practices to obtain insurance billing information. Obtaining insurance information is critical because there is a much greater chance of collecting ambulance fees directly from an insurer than from the patient. The Bureau attempts to obtain insurance information at the scene prior to transporting patients to the hospital.

However, there is often an urgency to transport the patient as soon as possible, making obtaining insurance information problematic. As an alternative to obtaining the insurance information from the patient the Bureau should be able to obtain it from the hospital. The Bureau advised us that hospitals often require a *Business Associates Agreement* prior to providing patient insurance information. We understand that the *Business Associates Agreement* is a common practice in the industry and complies with the Health Insurance Privacy and Protection Act (HIPPA). MedBill has recommended obtaining a *Business Associates Agreement* with the major receiving hospitals in the county so that MedBill could then download patient insurance information. The county does not have such agreements with the major receiving hospitals.

In addition, the Bureau has not been recognized as a participating provider by the major insurance companies. As a participating provider the insurance company would reimburse the Bureau directly and not the insured. The Bureau has found that several large insurance companies, US Healthcare, Empire and GHI, directly reimburse their policyholders for services provided because the Bureau is not one of the insurance companies' participating providers. Based on payment information provided by the insurance companies, the Bureau is aware that there are individuals who are keeping ambulance service payments from their insurance company rather than remitting them to the Bureau.

Audit Recommendations:

1. The county should:
 - a) establish a reasonable payment plan for those patients that are uninsured; and
 - b) work with the Long Island Council of Hospitals to facilitate a *Business Associates Agreement*.
2. The Bureau should become a participating provider for all the major insurance companies.

Emergency Services Personnel Performing Clerical Functions

Audit Finding (5):

There are five AMTs of a total of 127 assigned to the Bureau whose main duty consists of performing clerical functions. These functions include maintaining the Bureau's time and leave records, the roll call schedules, and readying daily PCRs for transmission to the billing vendor, MedBill. They earned an average of \$66,000 each in 2004. Their compensation includes \$500 annually in "Hazardous Duty Pay" as required by the CSEA contract⁵. These clerical duties do not require the specialized skills of AMTs and do not appear to be hazardous. The AMTs are not working in the delivery of emergency medical services. There is one AMTS, earning an average of \$79,000, assigned full-time to the billing function. The billing function is an important revenue collection function, but primarily a clerical one that should be staffed by clerical personnel with a background in financial processing.

Audit Recommendations:

The AMTs and the AMTS performing clerical functions should be replaced by accounting assistant IIs, accounting assistant III s, police service aides or other appropriate civilian titles. In addition:

1. the AMTs performing time and leave functions should be replaced by accounting assistant IIs or another appropriate civilian title;
2. the AMT performing roll call functions should be replaced by a police service aide or another appropriate civilian title;
3. an accounting assistant III or another appropriate civilian title, who would have the requisite training in the important supervisory billing function, should replace the AMTS;
4. accounting assistant IIs or another appropriate civilian title, who would be better suited to perform clerical duties related to the billing function, replace the two AMTs; and
5. AMT personnel should be deployed to work exclusively in the delivery of emergency medical services.

We estimate that these initiatives could result in an annual savings of \$190,000, exclusive of overtime. These salary savings are based on an average salary over the first three years not including the start steps.

⁵ County of Nassau Agreement with the CSEA Section 25-9

Time Sheets

Audit Finding (6):

Administrative Staff

We found that the time and leave record keeping process for the administrative staff has the following internal control weaknesses:

- Employees do not sign in or out for themselves, an AMTS does the sign in/out, although the employees all work in the same area where the time sheet is located.
- When the supervisor is out, attendance records are not maintained. For example, on April 22, 2004, we examined the time book for evidence of attendance on April 20 and April 21, 2004, two days when the supervisor was out. There were no entries for those dates; all entries were made after the fact on April 22, 2004.
- For a typical day, five of the eight employees signed out by the administrative supervisor worked a later shift than the supervisor. Therefore, the supervisor attested to employee's attendance without direct knowledge.
- The Bureau does not utilize the county timesheet (Comptroller Form 3024) for its administrative employees, although this time sheet is in use in other areas of the police department. The Bureau's time record consists of a summary listing of employees and the tours that they are scheduled to work, all entered by the AMTS in a diary. This represents a fundamental control weakness because there is no requirement that the employee attest to the time worked.

Audit Recommendation:

Employees should sign in and out for themselves. We recommend the Bureau consider utilizing the county timesheet that requires an affirmative attestation of time worked by the administrative employees at the end of the pay period, as well as a daily initialing by a designated timekeeper to ensure the records are accurately maintained.

Monitoring Leave Time

Audit Finding (7):

The Computerized History Information Enforcement File (CHIEF) system used to record leave time is insufficient for the needs of the Bureau. We reviewed one pay period's roll calls and leave events to ensure that all entries were properly entered in the department's CHIEF system. We found one category of leave called *holiday compensatory time* that is not entered into the CHIEF system, because there is no such category for civilian employees in CHIEF. This category is therefore only maintained on the employee's manual timecard (PDCN 230). The Bureau maintains all other records of employee time and leave both in CHIEF as well as on the manual timecards. This is a duplicative process.

Audit Recommendation:

The CHIEF system should be updated or replaced with a system that can adequately meet the police department's needs, and will be able to track the various leave entitlements and events for both sworn and civilian employees. Employee records of time and leave should not be maintained manually when an electronic system exists and is being utilized. The deficiency in CHIEF was brought to the attention of the police department in our audit of the police department's Records, Information Services Bureau and Court Liaison Units, issued in October 2002. The county Accenture human resources/personnel reporting/time & leave project has identified the need to replace the CHIEF system, and this need will be addressed in the county's RFP for a new human resources/personnel reporting/time & leave system.

Director of Emergency Services

Audit Finding (8):

There is no medical director for emergency services in Nassau County. The National Institute of Health has stated “the single most important element in any EMS system is strong medical direction by a capable physician or group of physicians with a system for continuous evaluation of the system (quality improvement)⁶.” Based on our interviews with the Executive Director of the Nassau Regional EMS Council, Nassau is the only region in the state that does not have a Medical Director for emergency services.

Audit Recommendation:

The administration should take a proactive role in ensuring that a medical director for emergency services in Nassau County is appointed in order to be in compliance with NIH guidelines. A physician’s involvement would enhance the Bureau’s ability to keep informed as to the newest techniques and standards in emergency care.

⁶ National Institutes of Health: Staffing and Equipping Emergency Medical Services Systems. NIH Pub #93-3304 (1993) p 12.

Professional Certifications

All New York State certifications for emergency services personnel are required to be renewed every three years, including any police officers certified as Emergency First Responders, the lowest level of emergency responder recognized by the state⁷. All AMTs are certified, at a minimum, as emergency medical technicians critical care, as a requirement of their job. In addition, employees assigned to the Fire/Police Academy are also certified as laboratory instructors or certified instructor trainers. Records pertaining to employees' current levels of certification are maintained by Bureau personnel at the Fire/Police Academy.

Audit Finding (9):

We found that the department no longer provides training for sworn members to maintain required or desirable certifications, and that some instructional personnel have not filed the necessary documentation to establish their credentials to teach as required by the state⁸.

- The police are frequently First Responders to accidents and aided cases where knowledge of proper emergency procedures can be critical. The concept of a qualified First Responder is one that is nationally recognized as a key component of competent pre-hospital care. However, the department no longer recertifies police officers as part of their on-going training as First Responders. First Responder is the lowest level of certified emergency services, and certifications must be maintained⁹. Currently, officers receive First Responder training as part of their initial Police Academy training only. The initial certification is only valid for three years. In Nassau County, the average police officer has more than 10 years of service, and therefore may not be familiar with many of the improvements made in pre-hospital emergency care. The Nassau County Police Department's 2003 Staffing Plan cited the importance of First Responder qualifications given that the department is responding to an increasing number of aided calls due to the aging population of the county¹⁰. Currently, only selected commands of the department, such as the Marine and Aviation Bureau, are recertified through courses offered by the Fire/Police Academy.
- There are currently five AMTs and one AMTC, selected by the Police Academy, assigned to teaching duties at the Academy on a permanent basis. It is our understanding that these individuals provide training to new recruits and employees of the department. However, only three of the five AMTs have provided documentation to the Bureau that they are certified by the New York State Department of Health as instructors. The remaining two are not qualified to train and any training that they perform would not be recognized by the state

⁷ NYCRR Part 800.8 and 800.17

⁸ NYCRR Part 800.6

⁹ NYCRR Part 800.8 and 800.17

¹⁰ Nassau County Police Department Staffing Plan (12/2003) page 2

health department for certification purposes. In addition, because the police no longer recertify first responders on an on-going basis, the permanent assignment of six employees may no longer be necessary.

Audit Recommendations:

1. We recommend that the department provide First Responder recertification so that police officers remain current with emergency procedures and are in compliance with NYS Department of Health requirements.
2. Only qualified teaching personnel, certified as instructors by NYS Department of Health, should be assigned to instructional duties at the Police Academy. All instructors acting in a teaching capacity should have appropriate credentials.
3. The teaching position should be evaluated to determine whether the six members of the Bureau on assignment to the Academy could be rotated back to duty within the Bureau and assigned on an as-needed basis.

Lack of Supervision

Audit Finding (10):

The Bureau has five AMTCs; an AMTC is the equivalent of a shift supervisor for his or her assigned tour. Of the five AMTCs, only three perform fieldwork coordinating ambulance services and associated activities. Two of the five are assigned to supervisory duty at the Fire/Police Academy and the Police Academy respectively. All field AMTCs work an 1100-2300 tour, to cover both the day and night tours. With that schedule, at least 50% of the total tour hours are not covered within a typical week. Therefore, the Bureau may not have adequate supervisory staff in the event of an off-hours emergency.

Another supervisory title at the Bureau is AMTS. One of these AMTSs supervises the Medical Control Unit. The AMTS has ultimate responsibility for the Medical Control Unit that provides pre-arrival care instructions to the AMT in the field. These instructions can be critical in saving lives and readying the patient for transport to the hospital. There is only one AMTS assigned to the Medical Control Unit on a full-time basis, and the Unit does not have full-time access to a physician to give medical advice. The unit is inadequately staffed at the supervisory level. We note that with only one AMTS assigned to the unit, there is supervisory coverage only for three twelve hour tours during a typical week.

Audit Recommendations:

We recommend that:

- the Bureau consider reassigning the AMTCs presently assigned to the Police Academy and Police/Fire Academy back to the field; and
- adequate supervisory staff be assigned to the Medical Control Unit. We recommend that a supervisor currently performing clerical duties, such as billing, be reassigned to properly cover the workload of this important component of emergency medical care.

Inefficient Use of Police Officers

Audit Finding (11):

There is only one AMT assigned to each ambulance. The AMT's responsibility is to respond to the scene and treat the patient. This is the minimum number of AMTs required under New York State Department of Health Rules.¹¹ A police officer drives the ambulance from the scene to the hospital. This practice evolved from the time when many police officers were also emergency medical technicians, and could assist at the scene. However, that is no longer the case, as noted in the previous finding. This procedure takes the police officer off patrol rendering the officer unable to respond to any other calls. We estimate that this practice costs \$2.9 million annually in police salaries assuming each call takes the officer out of service for one hour. The AMT drives the officer back to the patrol car, or another officer is dispatched from the precinct to pick the officer up. As a result, there are up to two officers engaged in post emergency response and unable to respond to other calls.

Audit Recommendation:

The Police Department should evaluate the practice of having police officers drive ambulances and the cost benefit of hiring drivers, or additional AMTs who can double as drivers. The only requirement in New York State for driving an ambulance is a driver's license¹².

¹¹ N.Y. Comp. Codes R & Regs. Sect. 800.21 (h)

¹² N.Y. Comp. Codes R & Regs. Sect. 800.21 (h)

Radio Console Obsolescence

Audit Finding (12):

The 911 operators transfer calls to the Medical Control Unit so that Medical Control Unit personnel can provide AMTs with pre-arrival advice on patient care. It is crucial that this system operate in a reliable manner. However, the radio console used by the Medical Control Unit of the Bureau to provide AMTs with advice on pre-hospital emergency care is obsolete. The console was installed in 1985 and is no longer manufactured by the vendor. The Bureau pointed out that one of the consoles has been cannibalized in order to provide parts. There is a substantial risk that the system will eventually break down, have no backup and be unable to be repaired, thus depriving the Bureau of the vital function of providing a link to the hospital as the ambulance is en route from the scene of the emergency.

Audit Recommendation:

The Bureau should upgrade the technology used to communicate with the ambulance that is transporting a patient to the hospital. The Bureau should also ensure that it is provided with adequate backup, in case the primary unit is temporarily out of service.



OPERATIONAL REVIEW

Of the

NASSAU COUNTY POLICE DEPARTMENT

EMERGENCY AMBULANCE BUREAU

POLICE DEPARTMENT RESPONSES

**James H. Lawrence
Commissioner
December 16, 2005**

**OPERATIONAL REVIEW OF NASSAU COUNTY POLICE DEPARTMENT
EMERGENCY AMBULANCE BUREAU**

POLICE DEPARTMENT RESPONSES:

AUDIT FINDING # 1:

Recommendation:

- a) The Department Emergency Ambulance Bureau (EAB) is certified as an Ambulance Service by the New York State Department of Health. As part of the process, Part 800.21, (p) (3) NYS EMS Law requires ambulance services to “have and enforce written policies concerning the maximum call receipt interval for all emergency calls for assistance...” The NYS Department of Health has accepted Nassau County Police Department Rules (Article 10. Rule 19, sub.3) as meeting the requirements and has certified the Bureau as an Ambulance Service. The recertification process occurred after the field audit component of the Audit. The auditors may not have been aware of the NYS Department of Health acceptance and certification.
- b) Since the Comptroller’s Audit, the Bureau has issues a new directive to have the Medical Control staff of EAB record the 10-80 (responding) time and 10-81 (at scene) time in a column on the ambulance run number master sheet. The response time for each call can now be calculated by subtracting the 10-80 time from the 10-81 time. This information is currently hand written on to a form and the information is not automatically available at this time. However, a ‘spread sheet’ program will be created to make this data available by computer. The “call receipt interval” (time from 9-1-1 call to dispatch time) can be calculated by Communications Bureau and monitored by their supervisors. However, there are issues with the reliability of the information because of deficiencies with the current Computer Aided Dispatch System (CAD). The 10-81 time only indicates the first Nassau County Police Unit at scene, which could be a patrol post car, not the ambulance. The Department is currently in the process of selecting a vendor to replace the current CAD System. The new system will provide better report writing capabilities and should address these concerns.
- c) The Department agrees with this finding, however there are many issues that must be addressed before laptops can be installed in the Department’s ambulances. The primary concern is how to fund this project. The current radio system capital project doesn’t include funding for laptops. The TRAC’s program will only provide a limited number of laptops and are only for patrol vehicles. The County’s Grant Office is investigating the possibility of obtaining funding from the “HEAL NY” program offered by the New York State Department of Health and the Dormitory Authority for the State of New York. The program mainly focuses on improving the State’s data infrastructure, which will be critical to the development of effective HIT (Health Information Technology) in New York. HIT can provide better and timelier access to information and can enhance information sharing throughout the continuum of care.

EAB has proposed an electronic PCR system and envisions that the PCR's could act as a gateway to the HEAL database. We would be looking for a grant to enable us to purchase and install the hardware and software for the prototype system. The County will be seeking \$4 million to establish a "centralized data warehouse". In the first phase, (two years), implementation will be at hospitals only. After this phase is completed, EAB will look to hook into this database using onboard laptops in the ambulances. Information will be electronically transmitted directly to the hospital and billing institution, increasing the accuracy and timeliness of such. We are currently providing the County's consultant Jeffery Thorpe the information he needs for this project. All Ambulance Medical Technicians would have to be trained accordingly.

Auditor's Follow-up Response:

- a) *We concur with the actions taken by the department to obtain Ambulance Service recertification by the New York State Department of Health.*
- b) *We recommend that the department give a high priority to the completion of its "spread sheet" program so that the response times can be calculated and monitored by management.*
- c) *We concur with the corrective actions to be taken by the department.*

AUDIT FINDING # 2:

Recommendation:

Automatic Vehicle Locator Technology (AVL) technology requires the use of a laptop computer in the ambulances and systems within the Department to track these ambulances. See Audit Finding 1, response "c" for additional information. Once laptops are installed in the Department's ambulances AVL will be installed in the laptops.

Auditor's Follow-up Response:

AVL does not necessarily require the use of a laptop and could be installed in the ambulances without waiting for the purchase of laptops that will be used for mobile data entry (as discussed in Finding #1).

AUDIT FINDING # 3:

Recommendation:

- a) The Department's primary concern is public safety; however, the reduction of overtime is a priority. The Department will do a cost benefit analysis to determine optimal staffing by the Emergency Ambulance Bureau. The analysis will consider the financial and operational aspects of overtime versus hiring.
- b) If it is cost effective to hire more employees, EAB should do so. The Commanding Officer of EAB in his 2006 budget proposal requested additional Ambulance Medical Technicians and AMT supervisors. Seven AMTs were hired on December 7, 2005. Additionally, the approved 2006 budget for AMT headcount was increased by nine additional positions.
- c) The Emergency Ambulance Bureau maintains statistics to ensure that the practice of NOT staffing two "overtime" ambulances from 0300 to 0700 does not compromise public safety. The EAB reviews this policy periodically. In November 2005, EAB reviewed the number of runs during this over night period and determined there were on average only approximately 11.3 calls for service, of which an average of 8.6 required transport to hospitals.

Auditor's Follow-up Response:

The 2006 budget passed by the county legislature and signed by the County Executive includes \$250,000 for the engagement of an independent, outside consultant to study police staffing. We understand that a request for proposals has already been issued, and that it does not include the Bureau's staffing. We recommend that the Bureau and the administration negotiate the inclusion of the Bureau's staffing requirements in this study. It is important for an outside consultant to reexamine appropriate staffing levels in the county police department, including the Emergency Ambulance Bureau, and the cost-benefits, and adequacy and appropriateness of using overtime versus hiring additional personnel to meet staffing requirements.

AUDIT FINDING # 4:

Recommendation:

- a) This finding is referencing 'uncollected' revenue that could be 'better maximized'. The report states that there was uncollected revenue from individuals with insurance but whose insurance was not obtained and insurance payments to patients who did not forward the money to the Emergency Ambulance Bureau. EAB has been working with county officials for over a year to try to meet with the hospitals to make arrangements to share information. When HIPAA was implemented in 2004, it was a new concept to everyone, including hospitals, and every entity was reluctant to share information. In the year and a half that HIPAA has passed, the stringent rules that

entities had applied have been relaxed; in that there is the realization that sharing patient information for billing purposes is allowed by HIPAA. Medbill has recently admitted that they receive patient information from the hospitals, just through a phone call. The patients who receive payment and do not forward the money to the County are now referred to the collection agency, NCO, which began processing accounts for 'collection', after the "billing" process failed to obtain payment. This contract is administered through the County Treasurer and NCPD has been very careful to send only those accounts that fit certain criteria, and failing to forward insurance payments is one of the criteria. The residents of Nassau County pay taxes for the ambulance service, and NCPD strived to ensure that the billing process is not perceived as an undue burden on the patients already paying taxes for the service.

- b) The Audit recommendation that the EAB work with the Long Island Council of Hospitals to facilitate a "Business Associates Agreement" is an idea that EAB is looking at. There are currently meetings being held, with County HIPAA privacy officer Carolyn Ashe attending, to determine whether there still exists a need for the agreements. The audit recommendation that EAB become a "participating provider" with the major insurance companies is an idea that was looked at three years ago. Captain Barbara Green met with Aetna and Empire in 2001, and both companies explained that in order to become "participating providers", a contract would be drawn up and the County would be required to accept a lower reimbursement rate in exchange for the benefits of being a participating provider. At that time, it did not appear feasible. The Department can revisit this issue and determine if the participating provider payments have increased making this option feasible. The County is a participating provider of Medicare and Medicaid, and both reimburse at substantially lower rates than billed.

Auditor's Follow-up Response:

We believe the department should revisit becoming a participating provider. County Ordinance 506-1991 authorizes the police department to accept reduced fees when the individual is insured through a contract or by operation of the applicable law which establishes a lesser fee benefit.

AUDIT FINDING # 5:

Recommendation:

The department agrees with the finding that most of these positions should be staffed with other more appropriate titles. Attempts have been made to hire clerical staff for several of these positions but approval from the Administration is needed. As suggested in finding 3, the Department will include these positions in a cost benefit analysis to determine if hiring is appropriate.

- a) Clerk typists are being utilized in precincts and other Commands within the Department to perform time and leave functions.
- b) The appropriate title for roll call function would have to be determined.
- c) It is necessary to have an AMT Supervisor familiar with medical billing perform this function.
- d) Accounting Assistants should be hired to perform these billing functions.

Auditor's Follow-up Response:

We found that the cost-benefit of civilianizing these positions is clear. Civilianization of the positions is a separate issue from a study of optimum staffing. The department should renew its request with the administration to civilianize these positions.

We recommend that the department reconsider its position that medical billing must be performed by an AMT supervisor. We believe that it is feasible for a civilian who is familiar with medical billing to perform this function and that the AMT Supervisor's special skills should be utilized in the delivery of emergency medical services.

AUDIT FINDING # 6:

Recommendation:

- a) Internal control weaknesses in record keeping are being addressed. Management Analysis & Planning (MAP) has written a more formalized procedure requiring all members of the NCPD to sign on and off duty. Specifically, ADM 4205 Signing On/Off duty, was written to comply with the Nassau County Dept of Human Resources policy to maintain accurate, timely and verifiable attendance records for all employees. The new procedure must be reviewed by a "Chief's Review Panel" and approved by the Commissioner before it can be issued. This process should be completed shortly and issued in beginning of 2006.
- b) The EAB has already instituted a policy wherein office personnel in the FPA, EAB Office and the Medical Control Supervisors must individually sign in and out. AMTs working ambulances in the field sign on with Medical Control operators, who write this time on the daily EAB Roll Call. These sheets are kept on file in the EAB Office. It is important to note that a number of ambulances relieve at 'satellite' locations, not precinct stationhouses

Auditor's Follow-up Response:

We concur with the corrective actions taken by the department.

AUDIT FINDING # 7:

Recommendation:

The Audit recommends the replacement of the CHIEF system and the Department is working with the County and Accenture at this time to develop a RFP to select a new County-wide Time and Leave System. Captain Barbara Green is on the "Evaluation Team" for the RFPs and is familiar with the contractual needs of the employees of NCPD. The proposals have been submitted to the County, and a proposal and vendor product must meet the needs of Department.

Auditor's Follow-up Response:

We concur with the corrective actions taken by the department.

AUDIT FINDING # 8:

Recommendation:

The Nassau County EMS SYSTEM needs a Medical Director. This is not someone that the Nassau County Police Department appoints. The Nassau Regional EMS Council (REMSCO) encourages the appointment of a system-wide EMS medical director for Nassau County. The Regional Medical Advisory Committee (ReMAC), in the absence of a single system medical director, serves in that capacity.

Auditor's Follow-up Response:

We recommend that the department take a proactive role in ensuring that a medical director for the EMS SYSTEM is appointed.

AUDIT FINDING # 9:

Recommendation:

- a) The Nassau County Police Department will provide Certified First Responder (CFR) training and recertification classes even though there is no requirement to do so. This training is discretionary and the prior police administration decided to let this certification lapse. The current administration has decided to reinstitute the recertification process.
- b) As for the Police Academy, there are two AMTs and one AMT Coordinator permanently assigned to the Police Academy. Three AMTs are temporarily assigned to the Police Academy to assist with recruit and AMT training and will return to EAB when no longer needed. Three of the five AMTs are certified, and the other two have taken the State test and are awaiting results. They must pass with an 85 and then attend a two-week course. These two AMTs only instruct under the supervision of a certified instructor.

Auditor's Follow-up Response:

- a) *We concur with the department's corrective action to provide Certified First Responder training and recertification classes.*
- b) *We concur with the corrective actions taken by the department to require all instructors to maintain NYS Department of Health certification.*

AUDIT FINDING # 10:

Recommendation:

- a) The Emergency Ambulance Bureau has only three AMT Coordinators assigned to the unit, not five. One AMT/C is the Deputy Commanding Officer of EAB. He also supervises the personnel assigned to the FPA. Two AMT Coordinators are supervising their subordinate AMT supervisors in the field. The fourth AMT/C is on full time release and now works full time in the CSEA office. The fifth AMT/C has been assigned to the Police Academy.
- b) One AMT Supervisor is designated as being responsible for Medical Control's overall functioning. However, ALL AMT Supervisors on duty can supervise the two AMTs who are working in Medical Control on their shift. The AMT Supervisors working in Medical Control do not give "pre-arrival care instructions to the AMTs in the field". "Care instruction" to AMTs is provided via physician approved standing orders or actual physician direction via radio.
- c) There will soon be one promotion to the rank of AMT Supervisor.

Auditor's Follow-up Response:

The department's response indicates that the problem has been exacerbated by union release time and the reassignment of an AMTC. The response does not address our finding that there are an inadequate number of AMTCs to provide for continuous supervision. We reiterate our recommendation that an adequate number of AMTCs be employed.

AUDIT FINDING # 11 :

1. The Department will review the policy of having police officers drive the ambulance. Presently, Nassau County Police Officers respond to all aided cases, which are received at 911 Emergency Operation Center and are within their area of employment. They are trained as Certified First Responders. A Police Officer response time to life-threatening emergencies is within a few minutes. Their abilities to begin life saving medical attention include CPR and the use of the AED, which is in each RMP. This response is a quality of life policy, which is not available in all municipalities, and is an important service the Department provides to the citizens of Nassau County.
2. The Department operates at a minimum staffing level, which is not subject to reduction. The resources on the street are sufficient to meet all police calls for service other than major disasters. The time necessary to drive the ambulance to the hospital would average less than a half hour. Therefore, the police officers needed to drive ambulances are available and do not reduce the efficiency of the Department.
3. Police Officers are trained in the drive emergency response vehicles to include ambulances. Their knowledge of the routes to hospitals and their ability to direct other police vehicles in an extreme emergency is often critical
4. A cost analysis of staffing over 130 drivers would include salary, benefits and training costs. The payout would be much larger then the noted savings and with lesser-qualified personnel. However, the Department my revisit a previous proposal to staff certain high call areas with two person ambulances. This would allow Police Officers to return to patrol duties sooner in these high call areas.

Auditor's Follow-up Response:

1. *We concur with the department's plan to review its policy of having police officers drive the ambulances. We are not proposing that the county eliminate the policy of police officers responding to aided cases.*
2. *While it may average less than half an hour for the police officer to drive the ambulance to the hospital, the department's response does not address our finding that two officers are then required to drive the responding officer back to the patrol car. This process takes two officers away from normal patrol duties.*
3. *AMT's can also be knowledgeable about routes to the hospital. Police officers should not be precluded from driving the ambulances in extreme emergencies.*
4. *We concur with the departments plan to review its previous proposal.*

AUDIT FINDING # 12:

Recommendation:

- a) The Department agrees with the audit finding that the Medical Control radio console is old and requires upgrading. The estimated cost of this upgrade is about 1.6 million dollars. Medical Control is located in Nassau University Medical Center. NUMC has offered a new office in the proposed expanded Emergency Department. The expansion project has not yet started. Back-up communications (voice only, no telemetry) are located in O.E.M. EAB is in the process of outfitting a mobile, back-up, Medical Control.
- b) The Department will submit a proposal for capital project funding to upgrade Medical Control.

Auditor's Follow-up Response:

We concur with the corrective actions taken by the department.