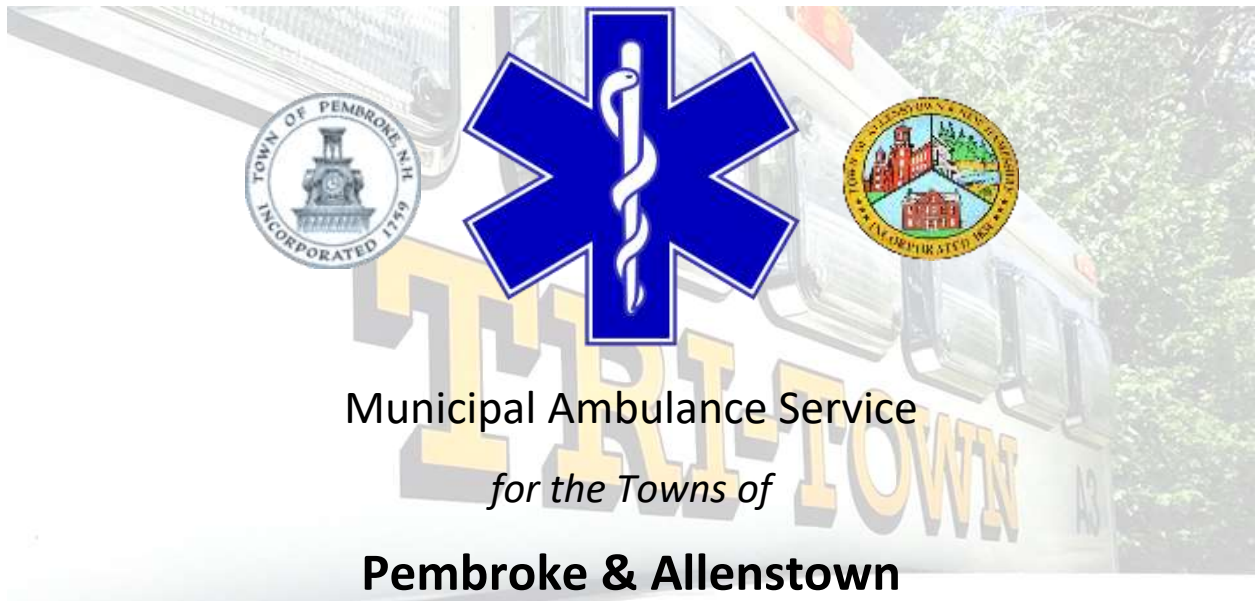


TRI-TOWN Emergency Medical Service

Monthly Director's Report

for the Month of

October 2016



Prepared By: *Christopher Gamache, Director*

November 8, 2016



PREFACE

Tri-Town Emergency Medical Service was started on January 1, 2013 by an Inter-Municipal Agreement between the towns of Allenstown and Pembroke, New Hampshire. The service is managed by the Service Director and Paramedic, Christopher Gamache with oversight by the Tri-Town EMS Board of Directors that is comprised of the Town Administrator and Fire Chief from both towns as well as a member from each community and a Tri-Town EMS employee representative. Tri-Town EMS' primary service area are the two towns, but also provides mutual aid to the Towns of Hooksett, Deerfield, Epsom, Chichester, Bow, the City of Concord, and where ever and whenever requested to do so. Tri-Town EMS is proud to be one of a few ambulance services within the Capital Area with an around the clock, fully staffed ambulance, at the Paramedic level. The service is making great strides to provide those we serve with the highest quality medical care coupled with up-to-date EMS equipment. Our staff is ready and available to answer call for help.

REPORT INTRODUCTION

This report was generated on November 8, 2016 by the Service's Director, Christopher Gamache, and represents the EMS activity of the Tri-Town EMS, current projects, operational concerns and performance projections. The content of this report shall be available for discussion at the Monthly Meeting of the Tri-Town EMS Board of Directors on Wednesday November 9, 2016. This document contains data that was derived from the New Hampshire Department of Safety, Bureau of Emergency Medical Service patient care reporting web site, www.nhtems.org, where Tri-Town EMS documents all EMS related incidents that are dispatched by Concord Fire Alarm. Additionally, this document contains data from the agency's billing contractor, ComStar.

Tri-Town EMS has a Medical Resource Hospital Agreement (MRHA) with Concord Hospital. This agreement entitles the agency to function under the medical oversight of the hospital's Medical Director, Dr. David Hirsch. As part of the MRHA, Tri-Town EMS has a Control Substance Agreement with Concord Hospital, these two agreements afford TTEMS the ability to have Paramedic level medications and Controlled Substances.



SECTION 1: EMERGENCY MEDICAL SERVICE (EMS) ACTIVITY:

- Total Number of EMS Responses / Request for EMS Services112
October 2015.....87
- Total Number of Patient’s Transported71 (63.4%)
October 2015.....56
 - Transports to Concord Hospital 61 (85.9%)
 - Transports to Catholic Medical Center (CMC) 2 (2.8%)
 - Transports to Elliot Hospital 8 (11.3%)
 - Transports to Other Hospital 0 (0%)
- Total Number of EMS Runs Where Mutual Aid was Received7
October 2015.....7
 - Concord Fire Department3
 - Epsom Fire Department2
 - Hooksett Fire Department2
 - Other EMS Agency0
- Total Number of Patient’s Refusing Transport to the Emergency Department20
- Total Number of EMS Responses that Resulted in Another Disposition 21

SECTION 2: EMS RUN DATA

Average Run Times:

- Reaction Time: 1m 4s
- Response Time: 4m 59s
- On-Scene Time: 17m 9s
- Transport Time: 17m 56s
- Back In Service Time: 18m 5s
- Time on Task: 59m 13s

EMS Call Location, by Town:

- Allenstown, NH55 (49.1%)
October 2015.....35
- Pembroke, NH51 (45.5%)
October 2015.....44
- Hooksett, NH5 (4.5%)
- Barnstead, NH1 (0.9%)
- Deerfield, NH0 (0%)
- Epsom, NH0 (0%)



Time of Calls (Time of Day & Day of the Week)

(TIME)	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
0000-0259	2	0	2	1	0	0	3
0300-0559	1	1	0	1	2	0	1
0600-0859	1	1	1	0	2	1	1
0900-1159	4	4	3	1	1	3	1
1200-1459	4	4	2	2	3	1	2
1500-1759	3	8	3	2	4	0	3
1800-2059	3	3	1	3	2	2	1
2100-2359	2	4	2	1	1	3	2
TOTALS:	20	25	14	11	15	10	14

Incidents by Dispatch Reasons

Incident Complaints Reported by Dispatch	Number of Incidents	Percentage of Total Incidents
Falls (17)	15	13.76%
Breathing Problem (6)	14	12.84%
Sick Person (26)	9	8.26%
Medical Alarm (32)	8	7.34%
Chest Pain (10)	7	6.42%
Stroke / CVA/ TIA (28)	7	6.42%
MVC / Transportation Incident (29)	6	5.50%
Unconscious / Syncope (31)	6	5.50%
Assault (4)	4	3.67%
Cardiac Arrest / Death (9)	4	3.67%
Overdose / Misuses of Medications / Poisoning	4	3.67%
Psychiatric / Behavioral / Suicide Attempts (25)	4	3.67%
No Other Choice	3	2.75%
Seizure (12)	3	2.75%
Abdominal Pain / Problems (1)	2	1.83%
Back Pain (5)	2	1.83%
Hemorrhage / Laceration (21)	2	1.83%
Unknown / Person Down (32)	2	1.83%
Allergic Reaction / Sting / Bites (2)	1	0.92%
Altered Mental Status (26)	1	0.92%
Diabetes (13)	1	0.92%
Dizziness (26)	1	0.92%
Lift / Invalid Assist	1	0.92%
Pain (26)	1	0.92%
Walk-in (EMS Related)	1	0.92%

Procedures Performed By EMS Personnel

<u>Procedure Name</u>	<u># of Times Procedure Performed</u>	<u>Percent of Incidents Procedures Performed (%)</u>
Intravenous Catheterization (IV)	72	64.3%
Patient Assessment	33	29.5%
Cardiac Monitoring (4 Lead ECG)	22	19.6%
Cardiac Monitoring (12-Lead ECG)	21	18.8%
Stroke (CVA) Exam	5	4.5%
etCO2 Capnography	3	2.7%
Airway Suctioning	3	2.7%
Cervical Collar	3	2.7%
CPR – Manual	2	1.8%
CPR – Mechanical	2	1.8%
Supraglottic Airway Insertion – King LT	2	1.8%
CPAP	2	1.8%
Intraosseous Cannulation (IO)	2	1.8%
Defibrillation (AED)	1	0.9%
Nasal-Gastric (NG) Tube	1	0.9%
Spinal Motion Restriction	1	0.9%
Airway Device Removed	1	0.9%
BVM Respirations (Mask)	1	0.9%
BVM Respirations (ETT)	1	0.9%
Endotracheal Intubation (ETT)-Bougie	1	0.9%
Endotracheal Intubation (ETT)	1	0.9%
Nasal Pharyngeal Airway (NPA)	1	0.9%
Oral Pharyngeal Airway (OPA)	1	0.9%
Wound Care	1	0.9%

Medications Administered by EMS Personnel

<u>Medication Name</u>	<u># of Times Medication Administered</u>	<u>Percentage of Incidents Medications Administered (%)</u>
Normal Saline	33	29.5%
Oxygen	16	14.3%
Epinephrine 1:10,000	14	12.5%
Ondansetron/Zofran	9	8.0%
Fentanyl	8	7.1%
Nitroglycerine	7	6.3%

Aspirin	6	5.4%
Duo Neb (Albuterol / Atrovent)	4	3.6%
Dextrose 10% (D10)	1	0.9%
Diphenhydramine/Benadryl	1	0.9%
Glucagon	1	0.9%
Ketorolac/Toradol	1	0.9%
Magnesium Sulfate	1	0.9%
Methylprednisolone/Solu-Medrol	1	0.9%
Naloxone/Narcan	1	0.9%
Sodium Bicarbonate	1	0.9%

SECTION 3: TRI-TOWN EMS PERSONNEL:

During the month of October 2016, one per diem Paramedic resigned their position and one per diem EMT upgraded their license to an Advanced EMT. The Service has two EMT's in the process to be hired and one new application. The current staffing of Tri-Town EMS:

- Full Time Employees (4- Paramedics).....4
- Part Time Employees (1-Paramedics, 2-AEMT, 2-EMT).....5
- Per Diem Employees (4-Paramedics, 7-AEMT, 3-EMT).....14
- TOTAL WORK FORCE23

SECTION 4: EQUIPMENT

- The Service's Carbon Monoxide Detectors are at the end of their two (2) year life. Six (6) more Carbon Monoxide Detectors were ordered. These are placed on the Service's First-In Bags, Medication Bags and Cardiac Monitors and are used to warn the EMS crews when Carbon Monoxide is present inside a residence.
- The Services Panasonic Toughpad's key boards have been malfunctioning. The Service tried to order two (2) new keyboards, however, the Service was unable to obtain them. The Service talked with other EMS agencies who use the same devices, and most of the services have either swapped away from Panasonic or plan on doing so, citing the difficulty in replacing the key boards and the problems they have had with the keyboards. The Service ordered two (2) Windows Surface PRO tablets with Rugged Cases.
- The Service had to purchase software for the Medication Vault from KNOX that is being installed in the new ambulance.
- The Service continued to have problems with the ALS mannequin. Assistant Director Locke had an extensive conference call Simulaids about the radio frequency on the mannequin. The conference call was successful, and there have not been any further issues with the ALS mannequin.

SECTION 5: CORESPONDENCE WITH OTHER HEALTHCARE AGENCIES

Allenstown: 1) Tri-Town EMS Crew assisted with Allenstown Fire Department Open House on October 1, 216. 2) The Service participated in a Hazardous Material Drill on October 23 and was at the alternative EOC location for Allenstown. The drill involved the towns of Allenstown, Pembroke, Bow and Hooksett. 3) The Service was notified by Chief Pendergast that one of the Allenstown's fire fighter's son was diagnosed with terminal brain cancer. Tri-town EMS offered to be part of the fund raising efforts and other activities to assist the family. Tri-Town EMS also offered to assist in treatments allowed by NH EMS Protocol to be performed at home to help keep the child out of the hospital. The child's doctor out of Boston reached out to Tri-Town.

Concord Fire Department: Requested Concord Fire Department's Active Shooter Plan from Chief Andrus.

Concord Hospital: 1) Meeting with Dr. Hirsch. Topic is confidential.

New Hampshire Bureau of Emergency Medical Service: Assistant Director Stephanie Locke obtained her EMS Instructor/Coordinator (IC) Licensure.

Capital Area Mutual Aid Compact Meeting: 1) Held at the Boscawen Fire Station. Presentation by Concord Fire Department on Regional Hazardous Materials Incident Planning and Preparation. 2) Talked with Chief Keith Gilbert about mutual aid. Tri-Town's specific situation was discussed as well as how Tri-Town EMS is ending up in Barnstead. He stated each chief (specifically Barnstead) creates a run card for their department and only that chief can make changes to their run card. The Service assured the Chief that Tri-Town would not refuse to respond to any call when dispatched, and that the Service was curious as to how we are relatively routinely being sent to Barnstead. The Chief stated Tri-Town can request station coverage when a similar circumstance happens again. As for mutual aid agreements pertaining to EMS and how it relates to the Compact, NH RSA 153-A:19 (Mutual Aid) was referenced and the first section states EMS service may enter into a mutual aid agreement and thus are not required to do so. Within the same paragraph, the law states that in the absence of a mutual aid agreements the service an EMS service can extend EMS services to other communities, will be under the overall direction of the authority having jurisdiction, and will have the immunities and privileges as if the incident was within the services service area. Chief Gilbert stated the mutual aid compact was signed by the member communities and not the fire departments meaning all mutual aid request involving EMS and Fire calls alike are covered by the Capital Area Mutual Aid Compact, regardless of the agency that provides EMS services (Private, Fire Base or Third Service).

SECTION 6: REVENUE AND EXPENDITURES

Revenues:

Ambulance Billing: \$21,238.91 Legal Document Request: \$25.00
Detail Coverage: \$1,200.00 (billed) Paramedic Intercept: \$0.00
Total: \$22,463.91

Expenses:

- The service paid \$1,234.10 for supplies and oxygen for the month of October.
- Payroll 10/13/16: \$14,191.87



- Payroll 10/27/16: \$15,394.19
- OVERTIME: 32.5 hours, \$943.88

SECTION 7: QUALITY ASSURANCE / QUALITY IMPROVEMENT SUMMARY

- It was discovered that the ambulance crews were working Cardiac Arrest patients by placing a King Airway instead of an endotracheal tube, placing an IO instead of an IV and using the monitor in AED mode and not in manual mode as well as not placing leads on the patient to get a clear view of the rhythm. Paramedics were told to attempt an ETT before placing a King Airway, to use the 4-leads and not rely on viewing the rhythm through the defibrillation pads. Also, crews were told that it is acceptable to place an IO, but at some point during the event, an IV needs to be placed. As always, waveform capnography is to be used on all advanced airways (King Airways and ETT)
- EMS crews are continued to be reminded to enter cardiac and 12-leads as a procedure and to attach a tracing with their patient care reports as well as to obtain Social Security Numbers and insurance information OR add the reason why in the narrative.
- Performance Improvement Plan is still in place for an employee and the progress was discussed with Dr. Hirsch.
- Incident #16-0849, Paramedic Dan Heffernan did a great job recognizing a progressing STEMI by performing repeat 12-lead ECG's, despite a normal initial 12-lead. He appropriately managed the patient's deteriorating status and gave Concord Hospital adequate notice, resulting in the successful management of the patient's condition, with a "Door to Stent" time of 55 minutes.
- Incident #16-0851, Paramedic Michael Langille aggressively treated an unstable patient with a GI bleed.
- October's Training(s):
 - JEMS Article: ETCO2 to Identify Severe Sepsis – 15/24 employees completed the training.
 - EMS World Article: It's Time to Embrace Point of Care Ultrasound – 14/24 employees completed the training.
 - NCCP Training: Pediatric Cardiac Arrest - Course by Stephanie Locke – 8/24 employees attended the training and a total of 30 people were in attendance.
 - Monthly Skills: 12 employees completed all skills training and 11 employees did not complete the skills training.
 - All employees have been instructed to complete EMS in the Warm Zone and High Performance CPR as soon as possible.
- November's NCCP training will be at Allenstown Fire Department on November 15th with the topic being Coronary Artery Disease (CAD) and Congested Heart Failure (CHF), by Michelle Gamache, BSN, PCCN.

SECTION 8: DIRECTOR'S COMMENTS & RECOMMENDATIONS

- Tri-Town EMS provided EMS services to the Pembroke Friends of Football for four (4) football games this fall, concluding in October.
- Tri-Town EMS provided EMS services to the Amoskeag Regatta Club for their annual regatta on October 16.
- Met with the new Post Master for the USPS in Suncook. He was aware of the service's desire to create a Business Reply Mail Account (BRM). He contacted someone within the USPS who

regularly sets up these accounts and emailed the Service with the proper forms and the cost to start Business Reply Account. The Service needs the Business Reply Account to move the survey project forward, which is a Commission on the Accreditation of Ambulance Service (CAAS) requirement. Additionally, the Service intends on mailing out surveys and Health Insurance Portability and Accountability Act (HIPAA) or privacy notices to all patients. This task will be assigned to one of the full time paramedics. The BRM forms have been filled out and vouchers have been submitted to the Town of Pembroke to obtain checks to open the account and to provide return postage for the account. This project should now be up and running for a January 1st start date.

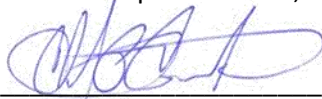
- In October, 90 letters were mailed out to individuals who reside in Pembroke and Allenstown whose accounts are up to be referred to collections.
- Policy on adherence to laws, ordinances, rules, regulations and protocols was drafted. This policy requires Tri-Town employees to follow established governmental directives.

SECTION 9: VEHICLE MAINTENANCE

- Ambulance 2: MILEAGE: 79,150
- Ambulance 3 (Primary): MILEAGE: 78,450
 - Fuel Leak, ambulance crew complain of diesel odor in the cab with the ventilation is on. Leak found on the fuel regulator and was repaired.
 - 3-B found that the oil light came on when the ambulance is idling. The stated it was most likely a pressure transmitter.

SECTION 10: TRI TOWN EMERGENCY MEDICAL SERVICE LEADERSHIP

- | | |
|---|---------------------------------|
| • Chairman of the Board of Directors & Allenstown Town Administrator: | Shaun Mulholland |
| • Pembroke Town Administrator: | David Jodoin |
| • Allenstown Fire Chief: | Dana Pendergast |
| • Pembroke Fire Chief: | Harold Paulsen |
| • Allenstown Member-At-Large: | James O' Mara |
| • Pembroke Member-At-Large: | Robert "Bob" Bourque |
| • Tri-Town EMS Employee Member: | VACANT |
| • Tri-Town EMS Director: | Christopher Gamache BS, NREMT-P |
| • Tri-Town EMS Assistant Director: | Stephanie Locke, NREMT-P |



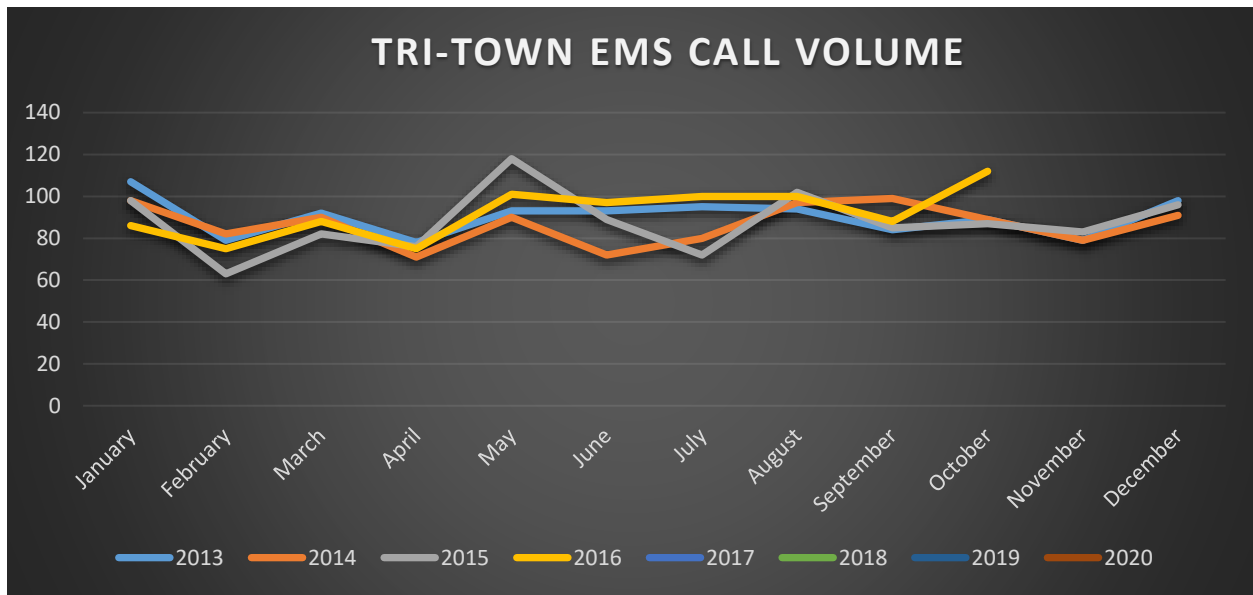
11/9/16

Christopher Gamache - Director

Date



APPENDIX 1: 4-Year Call Volume History



APPENDIX 2: Revenue Chart

