



ALLENSTOWN & PEMBROKE
TRI*TOWN
Emergency Medical Service
Paramedic Ambulance Service



Monthly Director's Report
for the month of
July 2017

PREFACE

Tri-Town Emergency Medical Service was created in June of 2012 and began operation in January of 2013. Prior to that date the Tri-Town Volunteer Emergency Ambulance Service was a non-profit entity that once provided ambulance service to the Towns of Allenstown, Hooksett and Pembroke. The Town of Hooksett now provides ambulance services through its fire department.

Under New Hampshire RSA 53-A, the Towns of Allenstown and Pembroke entered into an inter-municipal agreement to create a public entity to provide ambulance service for both communities. A Board of Directors is the governing body for the Service in accordance with this agreement. The ambulance is housed at the Pembroke Safety Center. The Service is staffed 24 hours per day, 7 days per week at the *Paramedic* Level. The cost of the Service is partially subsidized by funding provided from each town on a percentage basis in accordance with the provisions of the agreement. The Service also bills patients through a third party billing firm making up the remainder of the revenues that pay for the cost of operations.

Tri-Town EMS utilizes Concord Hospital as its Medical Resource Hospital and provides Emergency Medical Care under the coordination and guidance of Dr. David Hirsch. As part of the Medical Resource Hospital Agreement (MRH), Tri-Town EMS receives many of the medications and supplies the Service needs from Concord Hospital.

This report was created on August 21, 2017, by the Service Director, Christopher Gamache BS, NRP. This document contains data that was obtained from the New Hampshire Department of Safety, Bureau of Emergency Medical Service patient care reporting website, www.NHTEMSIS.org/elite, where all patient records for the Service are maintained. Tri-Town EMS is dispatched by Concord Fire Alarm who maintains all the times associated with the Service's EMS Incidents. Financial data has been provided by the Town of Pembroke and by ComStar Ambulance Billing.



SECTION 1: EMERGENCY MEDICAL SERVICE (EMS) ACTIVITY:

| | | |
|---|------------|-----------|
| 1.1 Total Number of EMS Incidents / Request for Services: | | 116 |
| | July 2016: | 100 |
| Allenstown, NH: | | 46 39.7% |
| | July 2016: | 38 |
| Pembroke, NH: | | 59 50.9% |
| | July 2016: | 51 |
| Barnstead, NH (Incl. Center Barnstead): | | 0 0% |
| Bow, NH: | | 0 0% |
| Chichester, NH | | 0 0% |
| Concord, NH: | | 6 5.2% |
| Deerfield, NH: | | 0 0% |
| Epsom, NH: | | 2 1.8% |
| Hooksett, NH: | | 3 2.6% |
| 1.2 Total Number of EMS Incidents Assigned to Tri-Town EMS: | | 110 94.9% |
| 1.3 Total Number of EMS Incidents where Mutual Aid was GIVEN: | | 11 4.7% |
| 1.4 Total Number of EMS Incidents where Mutual Aid was RECEIVED: | | 6 5.2% |
| | July 2016: | 9 |
| Concord Fire Department: | | 3 |
| Epsom Fire Department: | | 3 |
| Hooksett Fire Department: | | 2 |
| DHART (Air Medical Transport): | | 0 |
| Pembroke Fire Department (Lift Assist): | | 0 |
| 1.5 Total Number of Patients Transported to the Hospital: | | 68 50.79% |
| Catholic Medical Center (CMC), Manchester, NH | | 5 7.4% |
| Concord Hospital, Concord, NH | | 56 82.4% |
| Elliot Hospital, Manchester, NH | | 7 10.2% |
| 1.6 Number of Patients who Refused Transport to the Emergency Department: | | 17 14.7% |
| 1.7 Total Number of EMS Responses that Resulted in Another Disposition: | | 25 21.6% |

SECTION 2: EMS RUN DATA: (H:MM:SS)

| | |
|--|-------|
| 2.1 Average Reaction Time: | 0:50 |
| 2.2 Average Response Time: | 4:26 |
| 2.3 Average On-Scene Time: | 16:49 |
| 2.4 Average Transport Time: | 19:11 |
| 2.5 Average Time the Ambulance was Unavailable at the Hospital: | 19:11 |
| 2.6 Average Total Time On Task: (Tone to Back in Service or Available) | 59:42 |



2.7 TIMES OF CALLS (*Time of Day & Day of the Week*)

| (TIME) | SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
|----------------|-----------|-----------|-----------|-----------|-----------|-----------|----------|
| 0000-0259 | 0 | 3 | 2 | 0 | 0 | 1 | 1 |
| 0300-0559 | 1 | 3 | 1 | 1 | 1 | 0 | 0 |
| 0600-0859 | 3 | 0 | 2 | 2 | 1 | 2 | 0 |
| 0900-1159 | 2 | 4 | 6 | 2 | 2 | 3 | 1 |
| 1200-1459 | 4 | 1 | 3 | 5 | 1 | 6 | 1 |
| 1500-1759 | 2 | 4 | 3 | 3 | 4 | 3 | 3 |
| 1800-2059 | 0 | 1 | 4 | 1 | 2 | 5 | 0 |
| 2100-2359 | 0 | 7 | 2 | 1 | 0 | 1 | 1 |
| TOTALS: | <i>12</i> | <i>23</i> | <i>23</i> | <i>15</i> | <i>11</i> | <i>21</i> | <i>7</i> |

2.8 INCIDENT by DISPATCH REASONS

| Incident Complaints Reported by Dispatch | Number of Incidents |
|---|----------------------------|
| Sick Person (26) | 14 |
| MVC / Transportation Incident (29) | 12 |
| Lift / Invalid Assist | 9 |
| Medical Alarm (32) | 8 |
| Breathing Problems (6) | 7 |
| Chest Pain (Non-Traumatic) (10) | 7 |
| Overdose / Misuse of Meds / Poisoning (23) | 5 |
| Unknown Problem / Person Down (32) | 5 |
| Abdominal Pain / Problems (1) | 4 |
| Assault (4) | 3 |
| Falls (17) | 3 |
| Hemorrhage / Laceration / Bleeding (21) | 3 |
| Pain (26) | 3 |
| Psychiatric / Behavioral / Suicide Attempt (25) | 3 |
| Unconscious / Syncope (31) | 3 |
| Altered Mental Status (26) | 2 |
| Animal Bite / Attacks (3) | 2 |
| Cardiac Arrest / Death (9) | 2 |
| Diabetic Problem (13) | 2 |
| Heart Problems / AICD (19) | 2 |
| Standby | 2 |
| Allergic Reaction / Stings / Bites (2) | 1 |
| Auto vs Pedestrian (29) | 1 |
| Automated Crash Notification (34) | 1 |
| Back Pain (Non-Traumatic) (5) | 1 |
| Carbon Monoxide/Hazmat/Inhalation/CBRN (8) | 1 |
| Dizziness (26) | 1 |
| Hanging (30) | 1 |



| | |
|--------------------------------------|---|
| Head Injury (30) | 1 |
| Seizure (12) | 1 |
| Stab/Gunshot/Penetrating Trauma (27) | 1 |
| Stroke / CVA / TIA (28) | 1 |

2.9 PROCEDURES PERFORMED by EMS PERSONNEL

| <u>Procedure Name</u> | <u># of Times Procedure Performed</u> |
|--|---------------------------------------|
| Vascular: IV / Extremity Vein Catheterization | 63 |
| Assessment: Patient Assessment | 51 |
| Cardiac: ECG Monitoring (4-Lead / Defib. Pads) | 39 |
| Cardiac: 12-Lead ECG Obtained | 37 |
| Assessment: Stroke Exam | 4 |
| Ortho: Spinal Motion Restriction Applied w/ C-Collar | 3 |
| Respiratory: etCO2 Digital Capnography | 2 |
| Soft Tissues: General Wound Care | 2 |
| General: Patient Cooling (Cold Pack or General) | 1 |
| Movement: C-Collar for Stabilization During Movement | 1 |
| Ortho: Spinal Restriction Applies w/o C-Collar | 1 |
| Ortho: Splinting | 1 |
| Respiratory: BVM / Bagged Ventilations via Mask | 1 |
| Vascular: IO / Intraosseous Cannulation | 1 |

2.10 MEDICATIONS ADMINISTERED BY EMS PERSONNEL

| <u>Medication Name</u> | <u># of Times Medication was Administered</u> |
|--------------------------|---|
| Normal Saline | 28 |
| Ondansetron / Zofran | 13 |
| Fentanyl | 11 |
| Nitroglycerin | 7 |
| Naloxone / Narcan | 6 |
| Oxygen | 5 |
| Aspirin | 3 |
| Epi 1:10,000 | 2 |
| Hydromorphone / Dilaudid | 2 |
| Dextrose 10% (D10) | 1 |
| Diltiazem / Cardizem | 1 |
| Ketorolac / Toradol | 1 |



SECTION 3: TRI-TOWN EMS PERSONNEL:

During the Month of July 2017, there were no changes to the Service roster. The current staffing level is as follows:

| | | | | | |
|--------------------------|---|------------|----|------|----------|
| 3.1 Full Time Employees: | 4 | Paramedics | | | 4 |
| 3.2 Part Time Employees: | 1 | Paramedic | 1 | AEMT | 2 EMT 4 |
| 3.3 Per Diem Employees: | 2 | Paramedics | 9 | AEMT | 5 EMT 16 |
| 3.4 TOTAL WORK FORCE: | 7 | Paramedics | 10 | AEMT | 7 EMT 24 |

3.5 Director's Hours – (24 hours on Ambulance, 16 hours for Administrative per week)
 Amb. Hours: 102 Admin Hours: 49 Hol. / Paid Time Off: 44 Details 0
 Required: 72 Required: 48 Available: 44

3.6 Injury Report: No Injuries to Report
 Number of Lost Time Incidents: 0 Number of Lost Time Hours: 0
 Complaint Number: N/A Incident Type: N/A
 Complaint Number: N/A Incident Type: N/A

SECTION 4: EQUIPMENT:

4.1 New Equipment Purchased: No Equipment Purchases
 1. Cost:
 2. Cost:
 3. Cost:

4.2 Equipment Maintenance: No Equipment Maintenance to Report
 1. Equipment Name: Maintenance Item:
 2. Equipment Name: Maintenance Item:

4.3 Durable Medical Equipment (DME) Failure No Failures to Report
 1. DME Name: A8 Refrigerator Failure Date: 7/20/17
 Failure Description: Failed to unlock
 Failure Reported To: Manufacturer Chairman of the BOD Medical Director
 NH EMS Federal Agency No Reporting Required
 DME Disposition: Repaired Replaced Disposed Completed Pending



SECTION 5: CORRESPONDENCE WITH OTHER HEALTHCARE & PUBLIC SAFETY AGENCIES

1. ALLENSTOWN FIRE DEPT. / Town of.
 1. Conducted training with tactics and equipment to be used in the upcoming Active Shooter Drill in Allenstown.
2. CONCORD FIRE DEPARTMENT
 1. Met with Battalion Chief Sean Brown about standardizing Active Shooter gear between Tri-Town EMS and Concord FD. 2. A letter was sent to Concord FD requesting Mutual Aid Coverage during the Active Shooter Drill in Allenstown in August. CFD confirmed they will render assistance and also stated they will send resources to the drill.
3. CONCORD HOSPITAL
 1. Craig Clough sent the new/updated Medications and Control Substance forms to the Service. 2. Dr. Hirsch assisted in final preparations with Tri-Town for the Active Shooter Training. 3. Correspondence between Concord Hospital and Tri-Town for the purpose of Chest Pain / STEMI follow-up. 4. C Gamache is signed up for the August 18 ACLS refresher course and C Gamache and S Locke are signed up for the Paramedic Refresher course in September being offered at Concord Hospital in the Sim Lab. 5. Pertaining to LE carrying Naloxone, Concord Hospital will not provide LE agencies with the medication, particularly because they are not licensed and do not have an agreement with the hospital.
4. PEMBROKE POLICE DEPARTMENT
 1. On-going communications pertaining to Officer's carrying Naloxone for force protection.
5. BUREAU OF EMERGENCY MEDICAL SERVICES
 1. Bureau Chief Nick Mercuri sent documents to the Service pertaining to Police Officers carrying Naloxone for force protection and not for patient administration. Force protection does not fall under EMS jurisdiction and therefore Officers carrying Naloxone for force protection is allowed.
6. EPSOM FIRE DEPARTMENT
 1. Letter was sent to Chief Stewart Yeaton requesting Mutual Aid



coverage during the Active Shooter Drill in Allenstown in August. The Chief replied in the affirmative.

7. HOOKSETT FIRE DEPARTMENT

- Letter was sent to Hooksett Fire Department requesting Mutual Aid coverage during the Active Shooter Drill in Allenstown in August. The EMS Captain, Capt. Stalker stated HFD would be able to do so.

SECTION 6: FINANCIALS

| | | | |
|--------|--|---|---------------------|
| 6.1 | REVENUES | | |
| 6.1.1 | Ambulance Billing (Based on ComStar Reports) | | \$29,396.56 |
| 6.1.2 | Details | | \$0.00 |
| 6.1.3 | Paramedic Intercept | | \$0.00 |
| 6.1.4 | Administrative Fees (PCR requests, etc) | | \$0.00 |
| 6.1.5 | Educational Charges (CPR, EMS related courses) | | \$0.00 |
| 6.1.6 | Town of Allenstown Payment | | \$47,684.75 |
| 6.1.7 | Town of Pembroke Payment | | \$56,658.00 |
| 6.1.8 | Donations | | \$0.00 |
| 6.1.9 | TOTAL REVENUE for MONTH | | \$133,739.31 |
| 6.1.10 | NOTES: | Allenstown & Pembroke made payments in June 2017, \$47,884.75 and \$56,658.00 respectively. | |

| | | | |
|--------|---------------------------------|---|--------------------|
| 6.2 | EXPENSES | | |
| 6.2.1 | Payroll #1 | Employee Compensation | \$16,733.13 |
| 6.2.2 | Payroll #2 | Employee Compensation | \$16,247.63 |
| 6.2.3 | Payroll #3 | Employee Compensation | \$0.00 |
| 6.2.4 | Over Time | (included in Payroll #1 & #2 Figures) | \$2,281.31 |
| 6.2.5 | EMS Supplies | (Tactical EMS Grant Items included) | \$5,709.33 |
| 6.2.6 | Equipment | | \$0.00 |
| 6.2.7 | Office Expenses | Phone, Copier, Supplies, etc. | \$637.09 |
| 6.2.8 | Insurances | Health, Dental, Disability, Life, W/C, Unemployment & Liability | \$7,500.20 |
| 6.2.9 | Fuel | | \$925.28 |
| 6.2.10 | Veh. Maintenance | (DEF Fluid & A8 Lube and Filter Service) | \$128.55 |
| 6.2.11 | Uniforms | | \$157.84 |
| 6.2.12 | OTHER | (Legal Fee, ComStar Fee, Training & Eval) | \$8,371.95 |
| 6.2.13 | TOTAL EXPENSES for MONTH | | \$58,692.31 |
| 6.2.14 | NOTES: | | |



| | | | | | |
|--|--|--|-----------------|---------------|------------------|
| 6.3 | | AMBULANCE BILLING SUMMARY <i>for the MONTH</i> | | | |
| | | Payer | # of Transports | Gross Charges | Adjusted Charges |
| 6.3.1 | | Medicare | 32 | | \$17,515.69 |
| 6.3.2 | | Medicaid | 8 | | \$1,511.60 |
| 6.3.3 | | BC/BS, Anthem | 3 | | \$3,520.00 |
| 6.3.4 | | Cigna | 1 | | \$1,140.00 |
| 6.3.5 | | Other Comm. Ins | 12 | | \$13,520.00 |
| 6.3.6 | | Self Pay, No Ins. | 12 | | \$11,330.00 |
| 6.3.7 | | TOTALS | 68 | \$75,700.00 | \$48,537.29 |
| <i>Medicare Allowable Rates: BLSE: \$372.49 ALS1E: \$442.34 ALS2E: \$640.22 Mileage: \$10.79</i> | | | | | |
| <i>NH Medicaid Rates: BLS: \$145.00 ALS: \$175 Mileage: \$2.60</i> | | | | | |
| <i>Tri-Town EMS Rates: BLS: \$750.00 ALS1: \$1,000.00 ALS2: \$1,250.00 Mileage: \$20.00</i> | | | | | |
| NOTES: | All charges are subject to adjustment as payer information is confirmed and contractual obligations are applied. | | | | |

| | | | | | |
|--------|--|---|---------------------|---------------------|---------------------|
| 6.4 | | AMBULANCE BILLING SUMMARY <i>for the YEAR (Charges & Balance are Service Estimates)</i> | | | |
| | | MONTH | ADJUSTED CHARGES | RECEIVED | BALANCE |
| 6.4.1 | | January | \$41,828.67 | \$31,257.05 | \$10,571.62 |
| 6.4.2 | | February | \$38,512.53 | \$31,188.19 | \$7,324.34 |
| 6.4.3 | | March | \$38,724.75 | \$29,203.00 | \$9,521.75 |
| 6.4.4 | | April | \$43,120.19 | \$27,962.21 | \$15,157.98 |
| 6.4.5 | | May | \$42,530.19 | \$22,972.21 | \$19,557.98 |
| 6.4.6 | | June | \$43,821.42 | \$20,594.89 | \$23,226.53 |
| 6.4.7 | | July | \$48,537.29 | \$0.00 | \$48,537.29 |
| 6.4.8 | | August | | | |
| 6.4.9 | | September | | | |
| 6.4.10 | | October | | | |
| 6.4.11 | | November | | | |
| 6.4.12 | | December | | | |
| 6.4.13 | | TOTALS | \$297,075.04 | \$163,177.55 | \$133,897.49 |

| | | | | | |
|-------------|-------|---|-----------------------|---------------------|---------------------|
| 6.5 | | AMBULANCE BILLING SUMMARY <i>for PAST YEARS</i> | | | |
| | | YEAR (\$/XPORT) | ADJUSTED CHARGES | RECEIVED | BALANCE |
| (11 Months) | 6.5.1 | 2014 (\$444.95) | \$379,988.31 | \$272,754.88 | \$107,233.43 |
| | 6.5.2 | 2015 (\$446.74) | \$427,970.94 | \$312,715.14 | \$115,255.80 |
| | 6.5.3 | 2016 (\$496.63) | \$506,494.31 | \$359,558.66 | \$146,935.65 |
| | 6.5.4 | TOTALS | \$1,314,453.56 | \$945,028.68 | \$369,424.88 |



SECTION 7: QUALITY ASSURANCE/QUALITY IMPROVEMENT & TRAINING

| | | | | |
|-------|---------------------------|---|---------------------------|--|
| 7.1 | TRAINING REPORT | | | |
| 7.1.1 | JEMS Monthly Article | Progressive Dyspnea 0.25cr | EMPLOYEE PARTICIPATION | 17/24 |
| 7.1.2 | EMS World Article | On the Frontlines: EMS and the Battle for Mosul | EMPLOYEE PARTICIPATION | 16/24 |
| 7.1.3 | MONTHLY SKILLS | Completed – 11/24; Partial Complete – 1/24 | | |
| 7.1.4 | MONTHLY SHIFT TRAINING | “Domestic Violence Response” 0.25cr | EMPLOYEE PARTICIPATION | 11/24 |
| 7.1.5 | NCCP TRAINING | Active Shooter / EMS in the Warm Zone; 4.25 cr; July 11, 2017 | By: Dr. David Hirsch | 16/24 |
| 7.1.6 | NEXT NCCP TRAINING | OB Emergencies, Communicable Diseases | Stephanie Locke | September 12 at the Allenstown Fire Department |
| 7.1.7 | ORIENTATION | | | |

7.2 GENERAL UPDATES

7.2.1 AED trainers were replaced.

7.2.2 Clinical manual was updated.

7.2.3 F/T Paramedic Hornblower was trained on how to prepare PCR's for billing. She will be assuming this role.

7.3 QUALITY ASSURANCE (QA) / CONTINUOUS QUALITY IMPROVEMENT (CQI) ACTIVITIES

7.3.1 July's call volume was over 100 calls for the third month. Two clinical issues were discovered, one being a documentation error.

7.3.2 Trends:

7.3.2.1 Several employees were reminded to attach copies of 12-Leads to the PCR.

7.3.2.2 Employees were reminded to document the Cardiac Monitor and 12-Lead ECG's in the procedure section.

7.3.2.3 Some employees are not signing their PCR.

7.3.2.4 Employees were reminded to obtain billing information and Social Security Numbers.

7.3.2.5 Employees were reminded to enter in all medications administered.



7.3.2.6 Missing and incomplete run reports are a problem. Missing run reports are generally mutual aid runs of which the crew is instructed to document the assigned run number and when possible, the service providing the Mutual Aid.

7.3.3 Performance Improvement Plan (PIP)

7.3.3.1 None at this time.

7.3.4 Positive Feedback:

7.3.4.1 William Amos has been distributing the Vial of Life kits and documents it in his PCR's, thus allowing the service the ability to track who is receiving these kits.

7.3.4.2 Ryan Hornblower writes a thorough and complete narrative.

7.3.5 Recommendations:

7.3.5.1 Complete the process for transferring data from the LP 15's to the PCR.

7.3.5.2 Work towards point-of-care testing (Labs) in the pre-hospital setting.

7.3.5.3 Start working towards Rapid Sequence Intubation (RSI)

SECTION 8: VEHICLE MAINTENANCE

| | | | |
|-----|--------------------|--------------------------|----------|
| 8.1 | Ambulance 3 (79A3) | | |
| | 8.1.1 | Mileage | 83,792 |
| | 8.1.2 | Preventative Maintenance | None |
| | 8.1.3 | Vehicle Repair(s) | None |
| 8.2 | Ambulance 8 (79A8) | | |
| | 8.2.1 | Mileage | 10,066.2 |
| | 8.2.2 | Preventative Maintenance | None |
| | 8.2.3 | Vehicle Repair(s) | None |

SECTION 9: DIRECTOR'S COMMENTS AND RECOMMENDATIONS

9.1 This year is seeing a significant increase in our call volume, by the end of July the service has seen an 18% increase in runs. Some of this increase is attributed to a resident who has physical disabilities and frequently relies on the service to render assistance. However, this patient aside, the call volumes is still greater than last year and years past. The increase in calls has put a strain on the administrative functions of the service. A typical non-transport will utilize the crew for about an hour from the time of the dispatch and a typical transport will utilize the crew for at least two hours and in some cases, up to three hours. When the Director or Assistant Director are on the ambulance, the number of calls and the time associated with them, have been using up the day time hours, making it difficult to complete Service business during normal business hours.

9.2 In July, the Service with the assistance of Dr. Hirsch of Concord Hospital, Chief Sean Brown of Concord Fire Department and Lt(?) Michael Pearl of the Concord Police Department, hosted an



Active Shooter Tactics (for fire/EMS) and EMS in the Warm Zone training intended for Tri-Town EMS and Allenstown Fire Department personnel. The training was well attended with participants coming from other fire, police and ems departments. This training preempted the August table top exercise and full scale Active Shooter Drill.

9.3 Chief Dwayne Gilman of the Pembroke Police Department approached Tri-Town EMS on how to get naloxone (Narcan™) for police officers to be used for police exposure to opiates and not for patient administration. The Service communicated with Concord Hospital, NH Bureau of EMS, the Pembroke Police Department and the Allenstown Police Department on how to move forward with this. From the EMS Bureau, police departments may carry naloxone for law enforcement use for other officers, and that is allowed under force protection rules, and does not require EMS licensure to do so. Training and policies will need to be developed by the police departments in order to obtain and use naloxone for force protection purposes.

SECTION 10: ADMINISTRATION

- Chairman of the Board, Allenstown Town Administrator: Shaun Mulholland
- Pembroke Town Administrator: David Jodoin
- Allenstown Fire Chief: Chief Dana Pendergast
- Pembroke Fire Chief: Chief Harold Paulsen
- Allenstown Public Member: Michael O'Mara
- Pembroke Public Member: Robert "Bob" Bourque
- Tri-Town EMS Employee Member: Hearshell VanLuven, NRP
- Tri-Town EMS Service Director: Christopher Gamache, BS, NRP
- Tri-Town EMS Assistant Director: Stephanie Locke, I/C, NRP

RESPECTFULLY SUBMITTED BY:



Christopher Gamache, Service Director





