



January 2018



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 February 12, 2018, 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.





SUMMARY

January 2018 was the busiest January on record, seeing 126 total runs for the service area with 117 of the calls being handled by the Service. When possible, we try to respond our second ambulance when multiple EMS incidents are occurring simultaneously. In January, we responded Ambulance 3 on a second run, twice.

During the month of January, the Service hosted a CPR course, attended meetings of the Medical Control Board, Capital Area Public Health Network (CAPHN), and Continuum of Care / Substance Abuse Disorder (CoC/SuD) Workgroup and represented the Service at a New Hampshire Senate Hearing on determining a patient's destination (SB 552). The Service also provided two (2) EMS Education nights in January (one scheduled and one was a make-up). Finally, three (3) new employees were given an orientation and started their orientation ride time with Tri-Town EMS.



MEDICAL CONTROL BOARD MEETING

I attended the Medical Control Meeting at the New Hampshire Fire Academy on January 18th, 2018. Concord Hospital's Medical Director (subsequently our Medical Director), Dr. Nicholas Larochelle was accepted as a member of the Board. Dr. James Suozzi resigned his position as the Chairman of the Board / State Medical Director. Dr. Joey Scollan expressed her interest in the position and was accepted by the Board to replace Dr. Suozzi.

EMS IN THE WARM ZONE: The EMS in the Warm Zone – On-line Training, which is a requirement of the grant the Service received last year, has been developed and is in the final stages of testing. The training should be available soon for EMS providers to complete. This training is intended to be an Operations Level for an Active Shooter Event.

READY, CHECK & INJECT: Due to the high cost of Epi-Pens [™], New Hampshire Bureau of Emergency Medical Services has been looking at Vermont's program to train EMT's in drawing up and injecting Epinephrine. The program is called "READY, CHECK, INJECT". The program is intended to train EMT's on how to draw-up the medication into a syringe, check the amount drawn-up and then appropriately inject the medications. This procedure, is intended to be used by two (2) EMT's to ensure the correct dose is being administered and in the appropriate location. There is an allotment for if only one (1) EMT is present. Paramedics and Advance EMT's are licensed to draw-up Epinephrine and as such this program is not necessarily applicable to them. It appears the state will be moving forward with this and will be a significant cost savings to agencies and pharmacies.

STOP THE BLEED: Stop the Bleed is an effort by many organizations involved in Emergency Medicine to teach the public basic bleeding control techniques, to control major bleeding until help arrives. Concord Hospital, through Craig Clough came out to Allentown Fire Department

and put on a train-the-trainer to fire and EMS personnel. This training is also being looked at and/or considered by CAPHN for inclusion in a C.R.A.S.E (Civilian Response to Active Shooter Event) which may be offered later this year in the Capital Area. I expressed my interest in hosting such a course for Allenstown and Pembroke.

PROTOCOL UPDATES: In reference to Protocol 2.14, "Obstetrical Emergencies", the Board clarified treatment for a present cord during child birth. The insertion of provider's fingers to take pressure of the cord is indicated anytime the only presentation is the cord. Also discussed was Protocol 4.8, "Tranexamic Acid (TXA)" as it pertains to the mixing of the medications. Paramedic providers can mix the medication in 50-100ml's of Normal Saline. Dilaudid is now able to be administered Intra-Muscular (IM). Last item, is there is a shortage of normal saline in small bags. The state issued a Clinical Bulletin providing services with means to reduce the use of normal saline and to extend the life of the current supplies.



CAPITAL AREA PUBLIC HEALTH NETWORK (CAPHN)

The meeting was held on January 10th at the New Hampshire Hospital Association Building at 125 Airport Road in Concord. A brief presentation on Health Care Coalition, an initiative by the state to assist hospitals for preparation of a regional disaster. (Hospital Preparedness Program HPP).

During the close of 2017 and into 2018, New Hampshire experienced an extended period of cold weather. Vulnerable families and individuals had a hard time getting fuel for their homes for heating and relied on local communities for heating assistance. Local EMD's were being notified for people in need.

CAPHN is continuing on with the project to create a Sheltering Operations Task List and Manual. Copies of the Task List was disseminated to those present. The goal is to make it easier for communities to open a shelter and give them the managerial tools needed.

The flu virus this year is H3N2 which is the virus that historically causes the most hospitalizations and deaths. The flu vaccine this year is not as effective as years past.

Citizen Emergency Response Team (C.E.R.T.) course is being offered in Bow on March 9th, 10th and 11th.

CAPHN has coordinated the distribution of Narcan to a few police departments for force protection. Pembroke PD was interested in this program last year. There is a possibility Pembroke PD (and Allenstown PD) can get Narcan through CAPHN for force protection.



SUBSTANCE ABUSE DISORDER (SuD) / CONTINUUM OF CARE (CoC)

The SuD/CoC workgroup met on January 30, 2018. The workgroup was initially set up to look at the Substance Abuse Disorder needs in the Capital Area. The group is now part of the Capital Health Improvement Plan. Topics discussed at the meeting include:

- It was mentioned that Lakes Regional Health Care is closing their Maternity Floor and as part of that, Concord area will be seeing more people with substance abuse disorders from the lakes region and others.
- A brief description on the capabilities of Riverbend was presented
- Details of “Drug Court”.
- The treatment programs used in the prison/jails
- Serenity Place
- Function of “Work Place” in identifying at risk individuals. (to include EAP)
- ADA views on Termination of Workers with S.U.D. – Potential violation of ADA.
- Funding for recovery is a problem (Prevention, Identification, Treatment, then RECOVERY)



DOG SAVED

On January 15, 2018, Pembroke Fire Department, Allenstown Fire Department and Tri-Town EMS responded to a house fire. During their efforts the fire fighters removed an unresponsive dog from the residence. The crew of Ambulance 8, Stephanie Locke, Kyle Haas and Robert Vodra administered oxygen using Pembroke’s Fire Department’s K-9 oxygenation kit and the Service’s oxygen. The ambulance crew actively warmed the dog to prevent hypothermia. A veterinarian was called and fire and EMS crew got the dog to a Pembroke Police Cruiser. The dog was transported to Pembroke Animal Hospital with EMT Kyle Haas attending to her. She was subsequently transferred to C.A.V.E.S. in Concord, NH. The dog recovered and was released to the owners a few days later.



VEHICLE MAINTENANCE

AMBULANCE 3 (79A3):

- Mileage – 84,540
- No Maintenance, Repairs

AMBULANCE 8 (79A8):

- Mileage - 23,410
- Lube and Filter Service.



QUALITY ASSURANCE

Tri-Town EMS through its clinical coordinator reviews all EMS incidents for adherence to the current New Hampshire Patient Care Protocols.

- During the QA process, it was discovered that some staff entered the wrong run number, using the prefix “17” and not “18”.
- Few calls in January were not turned over to billing.
- There were a few mutual aid runs that were not entered.
- Minor clinical deficiencies noted and applicable staff was notified.



EMS EDUCATION

- January 9th, 2018 at the Allenstown Fire Station – “Pediatric Rate Disturbances” (1 Hour) and “ALS Equipment Review” (1 Hour) by Stephanie Locke, NRP, I/C. 9/25 attended, 4 from other agencies attended.
- January 23rd, 2018 at the Allenstown Fire Station – “Crew Resource Management” (1 hour) and “Rhythm Interpretation” (2 hours) by Christopher Gamache, BS, NRP. 11/25 attended, 8 from other agencies attended.
- Journal of Emergency Medical Service (JEMS) article – “Resuscitation after a Massive PE” (0.25 hours). 17/25 completed the article.
- EMS World article – “Interacting with the Mental Health Crisis Victim” (0.25). 16/25 completed the article.
- Monthly Skills Training – 6/25 completed the training.
- Monthly Shift Training – Protocol Rollout (0.5 hours). 6/25 completed the training.



STAFFING

During the month of January 2018, Tri-Town EMS hired two (2) Per Diem EMT’s and one (1) Per Diem Advanced EMT. Two (2) Per Diem EMT’s resigned their positions. Three (3) employees have completed their initial orientation and are in working on their third ride time. The current staffing for the service is as follows:

FULL TIME	4	Paramedics					4
PART TIME	1	Paramedics	1	AEMTs	1	EMTs	3
PER DIEM	3	Paramedics	8	AEMTs	7	EMTs	18
TOTAL	8	Paramedics	9	AEMTs	8	EMTs	25



CORRESPONDANCE WITH OTHER HEALTHCARE & PUBLIC SAFETY AGENCIES

During 2017, Tri-Town EMS was in contact with the following Healthcare and Public Safety Agencies to better serve individuals and our community.

1. *ALLENSTOWN FIRE DEPARTMENT*

- a. Chief Murray requested Opiate Overdose Information, Naloxone Administration and Deaths from Opiate use in the Town of Allenstown for 2017. Currently the Service is unable to differentiate between communities. The Service is working with the New Hampshire Bureau of Emergency Medical Services to create a report so such a report can be generated.

2. *ALLENSTOWN POLICE DEPARTMENT*

- a. Requested a CPR Course

3. *ALLENSTOWN, Town Of.*

- a. AED Instruction to town employees.

4. *CAPITAL AREA PUBLIC HEALTH NETWORK (CAPHN)*

- a. Meeting January 10th, 2018

5. *CONCORD HOSPITAL*

- a. Facility Notified the service of upcoming trainings in the area:
 - i. Shriners Burn Class – April 19ths
 - ii. P.E.A.R.S (Pediatric Emergency Assessment Recognition & Stabilization) – February 6, 2018
- b. Clinical Advisory for the 2017 Protocol Rollout, by Dr. Nicholas Larochelle going over some of the major changes to the protocols and setting a deadline of February 1, 2018 for all EMS providers to complete the NH EMS Protocol Roll Out. Tri-Town EMS completed this in December.
- c. Service roster updated with the hospital.
- d. EMS Coordinator Craig Clough sent out a reminder to agencies to request patients with Flu like symptoms be masked prior to entry into the emergency department.
- e. Notification of a Meet and Great, with Dr. Nicholas Larochelle at the Loudon Fire Department on January 22, 2018.
- f. EMS Coordinator Craig Clough reached out to the area agencies about updates to medications being supplied by Concord Hospital.
- g. Follow-Up on a cardiac arrest worked by our staff and Pittsfield Fire Department. Patient expired. All involved were commended for their efforts.

6. *ELLIOT HOSPITAL*

- a. Notified the Service (and others) about construction and maintenance in and around the ambulance entrance to the Emergency Department.
- b. Notification of an EMS Conference on February 8th, 2018.

7. *NEW HAMPSHIRE BUREAU of EMERGENCY MEDICAL SERVICES*

- a. Contacted Aaron McIntyre about creating a report in NHTEMSIS so that individual community data can be extrapolated and with other treatment and disposition filters added.
- b. Medical Control Board Meeting.
- c. Service roster was updated with the State.
- d. State was looking for support to help defeat SB 552 which would give a patient's family member the right to determine the patient's destination, regardless of patient's presentation and facility capabilities. As Director I attended the public hearing at the Capital on January 18th, 2018.

8. *PEMBROKE FIRE DEPARTMENT*

- a. Chief Paulsen notified the Service, and others, that 422 Cross Country Road has been condemned.

9. *PEMBROKE POLICE DEPARTMENT*

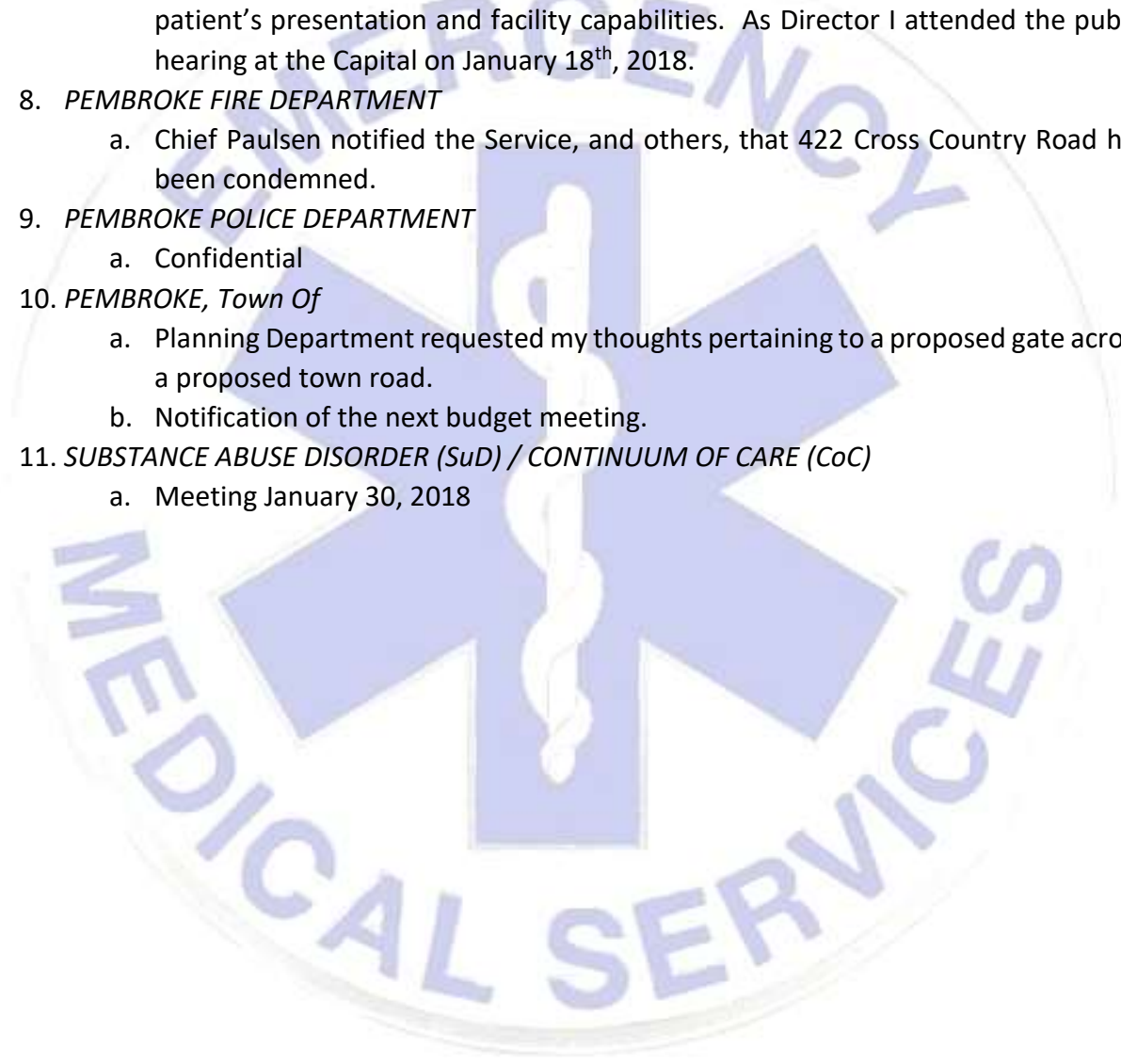
- a. Confidential

10. *PEMBROKE, Town Of*

- a. Planning Department requested my thoughts pertaining to a proposed gate across a proposed town road.
- b. Notification of the next budget meeting.

11. *SUBSTANCE ABUSE DISORDER (SuD) / CONTINUUM OF CARE (CoC)*

- a. Meeting January 30, 2018





FINANCES

LINE NAME	BUDGETED	MONTH	YTD
Ambulance Revenue	\$352,800.00	\$46,010.82	
Allenstown Payment	\$180,333.00	--	
Pembroke Payment	\$224,635.00	--	
Miscellaneous Revenue	\$20,390.00	\$1,098.00	
Interest	\$1.00	--	
TOTAL REVENUE	778,159.00	\$47,108.82	
Full Time Salaries	\$214,777.00	\$8,703.54	
Per Diem Salaries	\$245,286.00	\$7,558.20	
Overtime	\$28,153.00	\$958.47	
Health Insurance	\$43,037.00	\$5,285.82	
Dental Insurance	\$6,000.00	\$955.18	
Life Insurance	\$150.00	\$24.00	
Disability Insurance	\$2,660.00	\$512.52	
Social Security	\$30,270.00	\$1,067.65	
Medicare	\$7,519.00	\$265.19	
NH Retirement	\$27,476.00	\$1,092.77	
Uniforms	\$6,500.00	\$555.00	
Training & Certification	\$33,500.00	\$539.99	
Legal Services	\$15,000.00	--	
Telephone	\$5,280.00	\$219.13	
Contracted Billing Services	\$18,000.00	--	
Accounting Services	\$5,800.00	--	
Building Maintenance	\$250.00	--	
Ambulance & Life Pack Lease	--	--	
Liability Insurance	\$7,500.00	\$6,605.00	
Unemployment Compensation	\$600.00	\$616.00	
Worker's Compensation	\$13,000.00	\$13,307.00	
Department Supplies	\$14,500.00	\$2,430.00	
Postage	\$1,900.00	--	
Fuel	\$6,000.00	--	
Office Supplies	\$3,358.00	\$43.00	
Transcription Service	\$800.00	--	
Medical Equipment (Maint.Repl)	\$15,303.00	\$1,428.00	
Radio/Communications Equipment	\$1,000.00	--	
Medical Evaluation	\$4,500.00	\$1,041.00	
Vehicle Maintenance & Repair	\$5,500.00	\$175.63	
Computer/Software	\$2,000.00	--	
Equipment & Vehicle Replacement	\$120,000.00	--	
TOTAL EXPENDITURES	886,159.00	\$55,683.64	
REVENUE (-) EXPENDITURES	(\$108,000.00)	(\$8,574.82)	
TRANSFER from FUND BALANCE	\$108,000.00	--	

****NOTE**** All Numbers Are Estimations and are Subject to Changes Based Upon Audit Adjustments and Results.



AMBULANCE BILLING

<u>YEAR</u>	<u>XPORTS</u>	<u>CHARGES</u>	<u>REDUCTION</u>	<u>ALLOWABLE</u>	<u>PAYMENTS</u>	<u>BALANCE</u>
2014	613	\$546,306.50	\$166,318.19	\$379,988.31	\$273,058.84	\$106,929.47
2015	700	\$660,833.70	\$234,122.20	\$426,711.50	\$316,127.65	\$110,583.85
2016	725	\$844,130.00	\$338,189.89	\$505,940.11	\$361,890.14	\$144,049.97
2017	819	\$952,772.00	\$389,504.18	\$563,267.82	\$384,756.83	\$178,510.99
TOTAL	2,857	\$3,004,042.20	\$1,128,134.46	\$1,875,907.74	\$1,335,833.46	\$540,074.28



EQUIPMENT

- The Mermaid Refrigerator, paid for in 2017, was installed into Ambulance 8 in January.
- The Service is now performing routine (monthly or sooner) checks on Durable Medical Equipment and the ambulances. These reports are being completed by one of the full time employees and forward to the Service Director each month. This will help ensure the proper working function of each piece of equipment and help identify any issues early.



ADMINISTRATION

- Allenstown Town Administrator Michael Stark (Acting)
- Pembroke Town Administrator David Jodoin
- Allenstown Fire Chief Chief Shawn Murray
- Pembroke Fire Chief Chief Harold Paulsen
- Allenstown Public Representative Michael O'Mara
- Pembroke Public Representative Robert "Bob" Bourque
- Tri-Town EMS Employee Representative Hearshell VanLuven, NRP, FTO
- Tri-Town EMS Director Christopher Gamache, BS, NRP
- Tri-Town EMS Assistant Director Stephanie Locke, NRP, I/C



EMS INCIDENT DATA

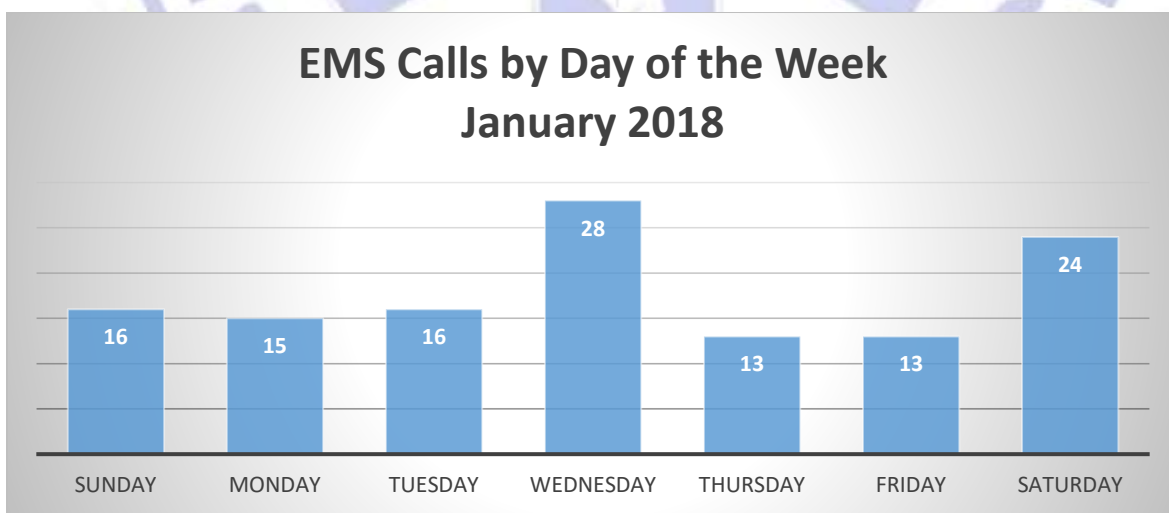
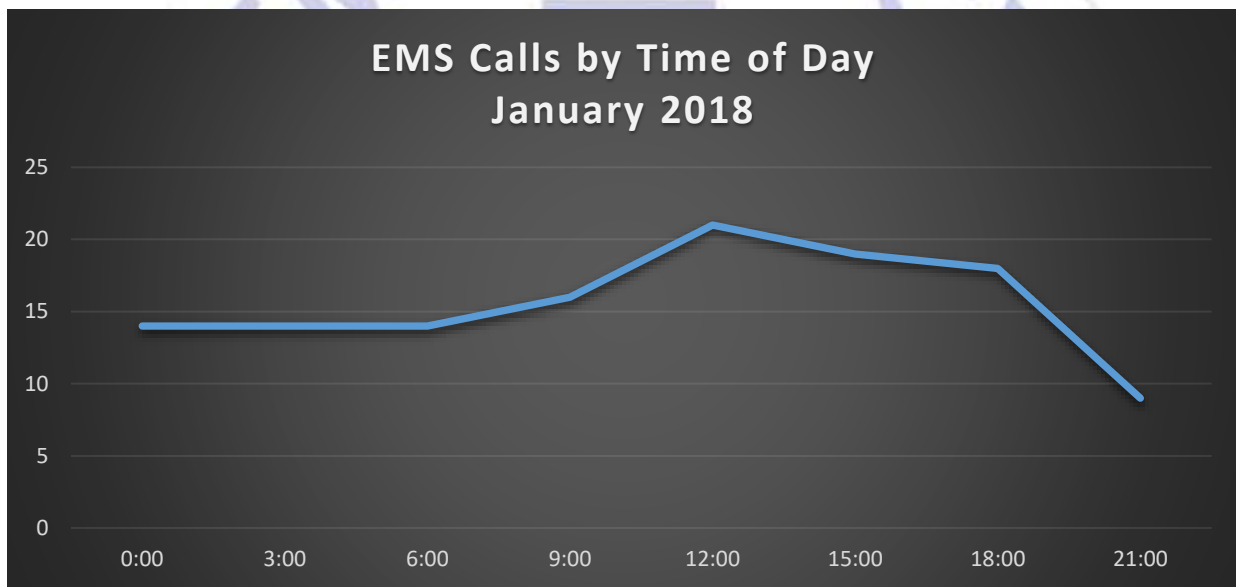
TOTAL Number of INCIDENTS	126 (January 2017 – 101)
Allenstown.....	56 (44.44%) (January 2017 - 39)
Pembroke	54 (43.86%) (January 2017 – 61)
Barnstead	0
Bow	1
Chichester	0
Concord	5
Deerfield	0
Epsom	1
Hooksett	8
Pittsfield	1
INCIDENTS Handled by Tri-Town EMS	117 (January 2017 - 91) (92.86%)
Mutual Aid RECEIVED from other Departments	9 (January 2017 – 10) (7.14%)
Bow Fire Department	0
Concord Fire Department	5
Epsom Fire Department	3
Hooksett Fire Department	1
Mutual Aid GIVEN to other COMMUNITIES	16 (January 2017 - 1) (12.7%)
TOTAL Number of PATIENTS TRANSPORTED to the HOSPITAL ...	97 (January 2017-60) (76.98%)
Catholic Medical Center (CMC)	7 (7.22%)
Concord Hospital	80 (82.47%)
Elliot Hospital	10 (10.31%)
Average REACTION Time (Dispatch to Responding).....	48 Seconds
Average RESPONSE Time (Dispatch to On-Scene)	5 Minutes 40 Seconds
Average ON-SCENE Time	18 Minutes 12 Seconds
Average TRANSPORT Time	19 Minutes 29 Seconds
Average AT HOSPITAL Time	18 Minutes 56 Seconds
Average CALL LENGTH Time (Dispatch to In-Service)	1 Hour 3 Minutes 5 Seconds



TIME OF CALLS (*Time of Day & Day of the Week*)

TIME	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	TOTALS
0:00-2:59	3	1	3	3	1	0	3	14
3:00-5:59	2	2	1	0	2	3	4	14
6:00-8:59	1	3	2	2	2	2	2	14
9:00-11:59	1	3	1	5	2	2	2	16
12:00-14:59	2	3	3	6	3	3	1	21
15:00-17:59	1	3	2	8	2	1	2	19
18:00-20:59	2	0	2	4	1	1	8	18
21:00-23:59	4	0	2	0	0	1	2	9
TOTALS	16	15	16	28	13	13	24	125

*Excludes some Mutual Aid Received Runs





EMS INCIDENTS by DISPATCHED REASONS

<u>INCIDENT COMPLAINT REPORTED by DISPATCH (EMD CODE)</u>	<u>OCCURANCE</u>
Falls (17)	18
Chest Pain (Non-Traumatic) (10)	15
Breathing Problem (6)	13
Sick Person (26)	12
MVC / Transportation Incident (29)	10
Psychiatric / Behavioral / Suicide Attempt (25)	6
Unconscious / Syncope (31)	6
Medical Alarm (32)	5
Seizure (12)	5
Back Pain (Non-Traumatic) (5)	4
Cardiac Arrest / Death (9)	3
Hemorrhage / Laceration / Bleeding (21)	3
Overdose / Misuse of Meds / Poisoning (23)	3
Abdominal Pain / Problem (1)	2
Altered Mental Status (26)	2
Diabetic Problem (13)	2
No Other Appropriate Choice	2
Pain (26)	2
Alcohol Intoxication	1
Allergic Reaction / Stings / Bites (2)	1
Automated Crash Notification (34)	1
Dizziness (26)	1
Head Injury (30)	1
Headache (18)	1
Heart Problems / AICD (19)	1
Lift / Invalid Assist	1
Medication Reaction (Not Allergic)	1
Standby	1
Stroke / CVA / TIA (28)	1
Unknown Problem / Person Down (32)	1



PROCEDURES ADMINISTERED

<u>PROCEDURE PERFORMED</u>	<u>OCCURANCE</u>
Vascular: IV / Extremity Vein Catheterization	87
Cardiac: 12-Lead ECG Obtained	75
Cardiac: ECG Monitoring (4 Lead or Defib Pads)	65
Assessment: Patient Assessment	50
Respiratory: etCO2 Digital Capnography	6
Cardiac: Defibrillation (Manual)	5
Respiratory: ETT / Intubation (Orotracheal)	5
Ortho: Spinal Motion Restriction Applied w/ C-Collar	3
Respiratory: BVM / Bagged Ventilations via Mask	3
Vascular: IO / Intraosseous Cannulation	3
Cardiac: CPR (Manual)	2
Cardiac: CPR (Mechanical)	2

Respiratory: CPAP	2
Respiratory: King Supraglottic Airway Insertion	2
Respiratory: Suction Airway	2
Movement: C-Collar Applied for Stabilization	1
Respiratory: BVT / Bagged Ventilations via ETT	1
Respiratory: OPA / Oropharyngeal Airway Insertion	1



MEDICATIONS ADMINISTERED

MEDICATION ADMINISTERED	OCCURRENCE
Oxygen	19
Normal Saline	18
Epinephrine 1:10,000 (0.1mg/ml)	17
Nitroglycerin (1-infusion)	12
Ondansetron / Zofran	11
Aspirin	10
DuoNeb / Ipratropium Bromide w/ Albuterol	8
Naloxone / Narcan	8
HYRDOMorphone	6
Fentanyl	5
Methylprednisolone / Solu-Medrol	3
Midazolam / Versed	3
Albuterol	2
Sodium Bicarbonate	2
Acetaminophen	1
Amiodarone	1
Calcium Chloride	1
Diphenhydramine / Benadryl	1
Epinephrine 1:1,000 (1mg/ml)	1
Epi-Pen (Auto Injector)-Adult	1
Ketorolac / Toradol	1
Magnesium Sulfate (Infusion)	1
Prochlorperazine / Compazine	1

