



February 2019



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. Robert Rix. 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 March 9, 2019, 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

- Call volume is down for the year and for the month. Also down is mutual aid being provided by the Service. Transport volume is on pace to be greater than 2018.
- Ambulance 8 was sent to Gilbert's Driveline in Manchester to have a vibration evaluated. Gilbert's found multiple issues and corrected them, but the vibration still exists. The problem is now believed to be in the front end of the ambulance
- Training and competencies continue on the Zoll AEV Ventilator.
- The Service went mutual aid to Barnstead for station coverage again in February. The concern of the Service were expressed and Tri-Town is no longer going to be dispatched to Barnstead for station coverage.
- Ambulance 8 failed to start at the hospital. It was determined the crew shut the ambulance down without plugging it in. The ambulance was jumped started by Concord Hospital Security.
- New Hampshire Bureau of Emergency Medical Service's inspected both ambulances and re-licensed them until 2021.
- In February, the Service ordered and took delivery of:
 - Ambulance Ventilator Bracket
 - Carbon Monoxide Monitors
 - Ambulance Pediatric Restraint System (both ambulances)
- Equipment to be ordered (Wait list)
 - Stairchair for ambulance 3 (Stryker)
 - Desktop Computer for Stephanie Locke
 - Medication Pumps service



AMBULANCE 8

- Ambulance 8 was used on 60 incidents in February.
- The AC system exterior fans and connections were taken care of by PL Custom.
- Ambulance 8 repairs of damages resulting from a minor collision with a structure is scheduled for March 18th at Above All Collision in Concord. PRIMEX has accepted the quotes and has sent a check to the Service minus the deductible.
- The ambulance failed to start at Concord Hospital. The crew shut the ambulance down without plugging it in. They were instructed to either keep the ambulance running or plug it in as there is too many items running which draws down the batteries.
- GILBERT'S DRIVELINE found the following:
 - Center baring needed to be replaced.
 - Driveshaft angle is too shallow (out of specification per Ford)

- Each of the four shafts, Front Shaft, Main (or Drive) Shaft, Rear Shaft and Shaft to 4x4 transfer case were all out of Ford's specification (factor defect) and needed to be machine, balanced and reinstalled.
- Driver's Side Rear wheel "wobble" – no work done by Gilbert's
- Vibration still exists and is believed to be in the front end assembly of the ambulance.



AMBULANCE 3

Ambulance 3 was used on 27 runs in February. Current issues with Ambulance 3:

- Rear Driver's Side Door latch does not work, relies on the other door to remain closed.
- Stretcher (Ferno Power Cot) relies on the "Hook" method to keep the stretcher from being completely pulled out of the ambulance and poses a potential safety concern for patients and staff. Ambulance 8 has a load system which keeps the stretcher from being inadvertently removed from the ambulance. Also, the stretcher is very jerky in its operations causing pain or increase pain for certain patients.
- Stairchair needs to be replaced. (stated earlier)
- Battery charger/inverter showing signs of needing to be replaced.



STAFFING

- The Service hired one (1) per diem employees in February. Her orientation will take place in March with all of his ride time occurring in March. She should be ready for the April schedule.
- The Service is pursuing one (1) more applications.
- The Service didn't see the difficulty seen in late summer and fall of 2018. However, there have been a lot of call outs during January and into February.



Ventilator

The Service continued with training the staff and going over the Ventilator. The bracket was completed and is now scheduled to be installed by PL Custom. Oxygen connections with quick connects were ordered for the quick attachment and detachment from ambulance or portable oxygen sources. Quick reference carts and sheets were developed to assist providers with the settings. Tri-Town EMS is working with Concord Hospital to standardize the in-line nebulizer and in-line suctioning equipment. I would like to state that Craig Clough and William Walden were very instrumental in getting this project to where it is today. The Ventilator should be in Service by the end of the week of March 11th.



New Hampshire Bureau of Emergency Medical Services

- Ambulance inspections:
 - Ambulance 3 & 8 were both inspected by the State.
 - Both pediatric seats/restraints needed to be replaced. The ACR pediatric restraint system was purchased for both ambulances. The system attaches directly to the stretcher and is color coded based upon the child's weight.
 - Ambulance 3 failed to start for the state. It had to be jumped started. This was attributed to the ambulance being checked by the crew the day before with all the lights on and the truck not running. Days later, the truck started fine when responding to a call.
- Rapid Sequence Intubation (RSI)
 - The Service has been in contact with Concord Hospital about applying for permission to perform Rapid Sequence Intubation medication.
 - Due to some of our outlying areas, we opted to ensure the Ventilator was fully in-service prior to submission of our application. The rationale is to give our paramedics more precise control over ventilation and respiration decreasing the chance of hyper/hypoventilation (and oxygenation)
 - The state was contacted about training. They developed and recently completed beta testing and on-line training and asked that we hold off until the training is released so that we could use this training as part of our provider education. This training should be released any day now.
 - Those providers who will be part of the RSI Application Packet had their qualification researched through the state and/or internally.
 - The application packet is ready for submission.
 - Thanks goes to Assistant Director Stephanie Locke for her work on this project.



VEHICLE MAINTENANCE

AMBULANCE 3 (79A3):

- Mileage – 88,674
 - No Maintenance

AMBULANCE 8 (79A8):

- Mileage – 44,827
- Replaced AC Fan (exterior / passenger side) and replaced all associated connections.

- Gilbert's Driveline:
 - Replaced Center Baring
 - Machined and balanced all Driveline shafts.



QUALITY ASSURANCE

- Less opiate related calls have been observed, but an increase in suspected methamphetamine use has resulted in our providers needing to sedate more patients with Versed (midazolam).
- Paramedic Mary Woo and Paramedic Ryan Hornblower were commended for the care they provided to a Victim of an Assault.
- Continue to notify staff about obtaining billing information, and appropriately documenting medications and procedures.

<u>AVER. %</u>	<u>IV</u>	<u>IO</u>	<u>ETT w/ Bougie</u>	<u>ETT</u>	<u>King SGA</u>	<u>Ventilator Care</u>
February '19	43/60 (72%)	--	--	--	--	--
12 Month	630/915 (69%)	12/12 (100%)	1/1 (100%)	4/10 (40%)	3/3 (100%)	--



EMS EDUCATION

- February's NCCP training: "Adult Cardiac Arrest" by Stephanie Locke, (2.0 hrs), 7/25
- Journal of Emergency Medical Service (JEMS) article – "Deadly Respiratory Arrest Mimics" (0.25 hours). 12/25 completed the article.
- EMS World article – "*Decreased LOC: An Approach to Common Causes*" (0.25). 13/25 employees completed the article.
- Monthly Skills Training – 11/25 completed the training.
- Monthly Shift Training – "*Wound Packing*" (0.25 hours). 13/25 completed the training.



STAFFING

During the month of February 2019, one (1) per diem AEMT was added to the Service's roster. One employee requested and was granted a 90 day Leave of Absence. There is currently one (1) application of which the Service is pursuing. The current staffing for the service is as follows:

FULL TIME	4	Paramedics					4
PART TIME	0	Paramedics	0	AEMTs	0	EMTs	0
PER DIEM	4	Paramedics	13	AEMTs	5	EMTs	22
TOTAL	8	Paramedics	13	AEMTs	5	EMTS	26



CORRESPONDANCE WITH OTHER HEALTHCARE & PUBLIC SAFETY AGENCIES

During February 2019, Tri-Town EMS was in contact with the following Healthcare and Public Safety Agencies to better serve individuals and our community.

1. *ALLENSTOWN, Town Of*
 - a. Deliberative Session
2. *CAPITAL AREA MUTUAL AID COMPACT*
 - a. Mutual Aid to Barnstead
3. *CONCORD HOSPITAL*
 - a. Supplies Update
4. *ELLIOT HOSPITAL*
 - a. Monthly EMS Meeting with area departments.
5. *HOOKSETT FIRE DEPARTMENT*
 - a. Ambulance Vibrations
6. *NEW HAMPSHIRE BUREAU OF EMS*
 - a. Staffing updates
 - b. Ambulance Inspections
7. *PEMBROKE POLICE DEPARTMENT*
 - a. Active Shooter Event Meetings
8. *PEMBROKE, Town Of*
 - a. Budget Presentation



FINANCES

LINE NAME	BUDGETED	MONTH	YTD
Ambulance Revenue	\$435,000.00	\$36,144.62	\$72,751.06
Allenstown Payment	\$118,189.00	--	--
Pembroke Payment	\$147,822.00	--	--
Miscellaneous Revenue	\$6,650.00	--	\$15.00
Interest	\$1.00	--	--
TOTAL REVENUE	\$707,662.00	\$36,144.62	\$72,766.06
Full Time Salaries	\$233,800.00	\$17,887.80	\$35,851.57
Per Diem Salaries	\$228,370.00	\$19,709.03	\$40,726.05
Overtime	\$28,000.00	\$1,042.79	\$3,681.65
Health Insurance	\$49,500.00	\$333.68	\$5,788.06
Dental Insurance	\$6,500.00	--	\$977.12
Life Insurance	\$150.00	--	\$12.00
Disability Insurance	\$2,800.00	--	\$256.26
Social Security	\$30,002.00	\$2,359.66	\$4,976.07
Medicare	\$7,453.00	\$595.05	\$1,235.99
NH Retirement	\$29,621.00	\$2,141.05	\$4,471.21
Uniforms	\$6,500.00	\$583.80	\$583.90
Training & Certification	\$16,500.00	\$55.00	\$135.00
Legal Services	\$5,000.00	\$1,950.15	\$1,950.15
Telephone	\$5,964.00	\$515.92	\$742.08
Contracted Billing Services	\$20,500.00	\$2,167.38	\$2,167.38
Accounting Services	\$5,800	--	--
Building Maintenance	\$1.00	--	--
Ambulance & Life Pack Lease	\$1.00	--	--
Liability Insurance	\$7,500.00	--	\$7,450.00
Unemployment Compensation	\$650.00	--	\$617.77
Worker's Compensation	\$13,250.00	--	\$7,233.35
Department Supplies	\$14,500.00	\$2,394.49	\$3,183.62
Postage	\$1,900.00	--	--
Fuel	\$7,500.00	\$548.80	\$548.80
Office Supplies	\$3,500.00	\$1,002.06	\$1,075.05
Transcription Service	\$900.00	--	--
Medical Equipment (Maint.Repl)	\$7,000.00	\$3,132.98	\$3,132.98
Radio/Communications Equipment	\$2,500.00	--	--
Medical Evaluation	\$4,500.00	\$634.50	\$1,270.00
Vehicle Maintenance & Repair	\$5,500.00	\$2,775.18	\$4,897.22
Computer/Software	\$2,000.00	--	--
Equipment & Vehicle Replacement	\$365,000.00	--	--
TOTAL EXPENDITURES	\$1,112,662.00	\$59,865.32	\$132,963.18
REVENUE (-) EXPENDITURES	\$0.00	(\$23,720.70)	(\$60,197.12)
TRANSFER from FUND BALANCE	\$405,000.00	--	--

****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	\$166,598.19	\$379,708.31	\$279,883.82	\$99,824.49
2015	700	\$660,833.70	\$234,122.20	\$426,711.50	\$317,595.32	\$109,116.18
2016	724	\$842,970.00	\$337,222.18	\$505,747.82	\$368,251.72	\$137,496.10
2017	819	\$952,516.00	\$393,550.90	\$558,965.10	\$421,967.18	\$136,997.92
2018	869	\$1,200,084.00	\$564,300.68	\$635,783.32	\$414,886.31	\$220,897.01
2019	124	\$169,056.00	\$73,763.43	\$95,292.57	\$16,856.02	\$78,436.55
TOTAL	3849	\$4,371,766.20	\$1,769,557.58	\$2,602,208.62	\$1,819,404.37	\$782,768.25

Revenue per Transport (\$/Trip) 2014: \$456.58 2015: \$453.71 2016: \$508.63 2017: \$515.22
2018: \$477.43 2019: \$135.94



ADMINISTRATION

- Allenstown Town Administrator Derik Goodine
- Pembroke Town Administrator David Jodoin
- Allenstown Fire Chief Chief Paul St. Germaine
- Pembroke Fire Chief Chief Harold Paulsen
- Allenstown Public Representative Michael O'Mara
- Pembroke Public Representative Robert "Bob" Bourque
- Tri-Town EMS Employee Representative William Amos, NRP, FTO
- Tri-Town EMS Director Christopher Gamache, BS, NRP
- Tri-Town EMS Assistant Director Stephanie Locke, NRP, I/C



EMS INCIDENT DATA

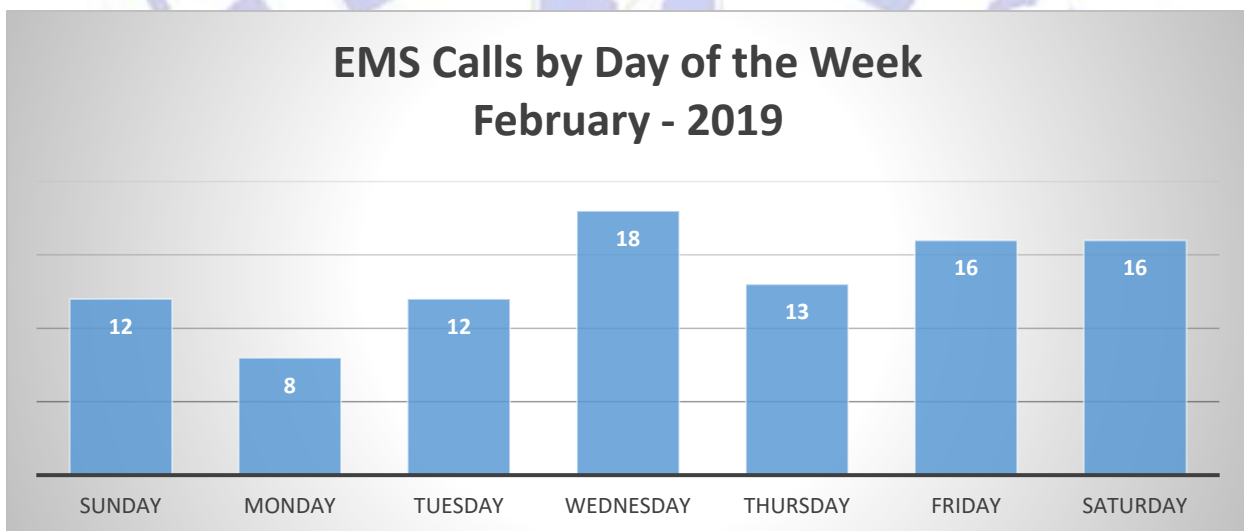
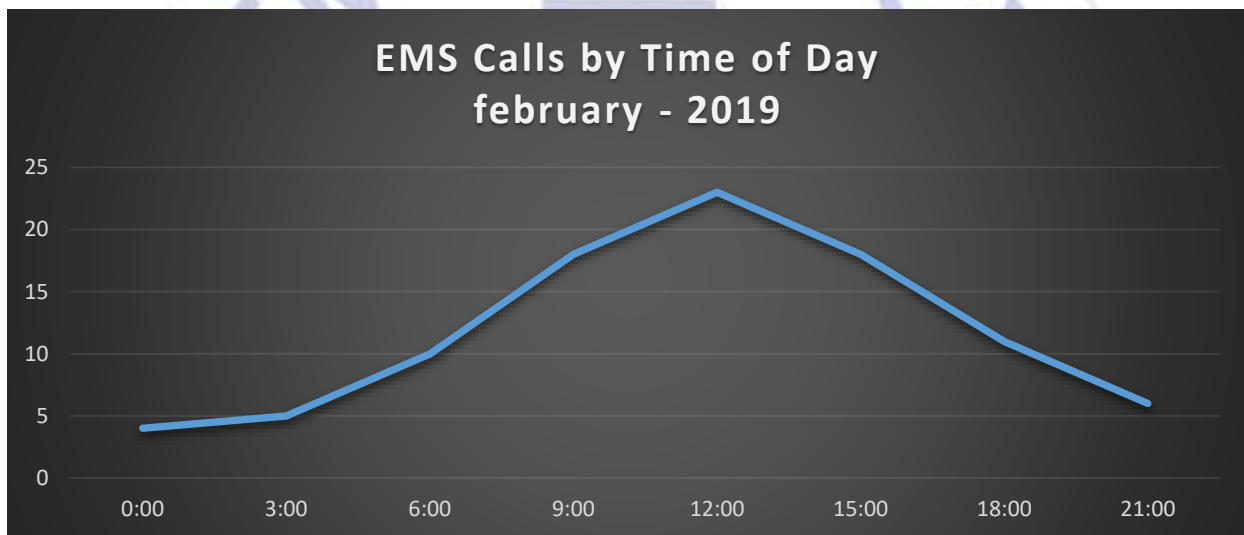
TOTAL Number of INCIDENTS	95 (February 2018 – 117)
Allenstown.....	44 (46.32%) (February 2018 - 42)
Pembroke	45 (47.37%) (February 2018 – 68)
Barnstead	1
Bow	0
Chichester	0
Concord	3
Deerfield	0
Epsom	0
Hooksett	2
Pittsfield	0
INCIDENTS Handled by Tri-Town EMS	87 (February 2018 - 107) (91.58%)
Mutual Aid RECEIVED from other Departments	8 (February 2018 – 10) (8.42%)
Bow Fire Department	0
Concord Fire Department	3
Epsom Fire Department	3
Hooksett Fire Department	2
Chichester Fire Department	0
Mutual Aid GIVEN to other COMMUNITIES	6 (February 2018 - 16) (6.32%)
TOTAL Number of PATIENTS TRANSPORTED to the HOSPITAL ...	70 (February 2018 - 73) (73.68%)
Catholic Medical Center (CMC)	6 (8.6%)
Concord Hospital	55 (78.6%)
Elliot Hospital	9 (12.8%)
Average REACTION Time (Dispatch to Responding).....	50 Seconds
Average RESPONSE Time (Dispatch to On-Scene)	5 Minutes 16 Seconds
Average ON-SCENE Time	18 Minutes 46 Seconds
Average TRANSPORT Time	20 Minutes 36 Seconds
Average AT HOSPITAL Time	40 Minutes 3 Seconds
Average CALL LENGTH Time (Dispatch to In-Service)	1 Hour 15 Minutes 31 Seconds



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

TIME	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	TOTALS
0:00-2:59	0	0	0	2	0	2	0	4
3:00-5:59	0	1	0	0	0	1	3	5
6:00-8:59	0	1	0	1	3	3	2	10
9:00-11:59	3	1	3	3	2	4	2	18
12:00-14:59	4	2	3	4	6	2	2	23
15:00-17:59	2	2	3	5	2	3	1	18
18:00-20:59	2	1	2	2	0	1	3	11
21:00-23:59	1	0	1	1	0	0	3	6
TOTALS	12	8	12	18	13	16	16	

*Excludes some Mutual Aid Received Runs





EMS INCIDENTS by DISPATCHED REASONS

INCIDENT COMPLAINT REPORTED by DISPATCH (EMD CODE)	OCCURANCE
Breathing Problem (6)	13
Fall (17)	12
Sick Person (26)	10
Unconscious / Syncope (31)	9
MVC / Transportation Incident (29)	7
Chest Pain (Non-Traumatic) (10)	6
Heat / Cold Exposure (20)	4
Hemorrhage / Laceration / Bleeding (21)	3
Psychiatric / Behavioral / Suicide Attempt (25)	3
Unknown Problem / Person Down (32)	3
Assault (4)	2
Back Pain (Non-Traumatic) (5)	2
Medical Alarm (32)	2
Overdose / Misuse of Meds / Poisoning (32)	2
Seizure (12)	2
Stroke / CVA / TIA (28)	2
Abdominal Pain / Problem (1)	1
Alcohol Intoxication	1
Carbon Monoxide / Hazmat / Inhalation / CBRN (8)	1
Chocking (11)	1
Diabetic Problem (13)	1
Dizziness (26)	1
Head Injury (30)	1
Heart Problems / AICD (19)	1
Lift / Invalid Assist	1
No Other Appropriate Choice	1
Pain (26)	1
Pregnancy / Childbirth / Miscarriage (24)	1
Traumatic Injury (30)	1



PROCEDURES ADMINISTERED

PROCEDURE PERFORMED	OCCURANCE
Vascular: IV / Extremity Vein Catheterization	60
Cardiac: 12-Lead ECG Obtained	46
Cardiac: ECG Monitoring (4-Lead / Defib Pads)	49
Assessment: Patient Assessment	38
Assessment: Stroke Exam	5
Respiratory: etCO ₂ Digital Capnography	3
Assessment: Orthostatic Vital Signs	1
Soft Tissue: Pressure Dressing Application	1
Vascular: IV Access via existing Peripheral IV	1



MEDICATIONS ADMINISTERED

MEDICATION ADMINISTERED	OCCURANCE
Nitroglycerin	11
Nitroglycerine Infusion	1
Normal Saline	11
Oxygen	9
Albuterol mixed w/ Ipratropium Bromide (DuoNeb)	7
Fentanyl	7
Aspirin	6
Ondansetron / Zofran	4
Albuterol	3
Dextrose 10% (D10)	2
Methylprednisolone / Solu-Medrol	2
Midazolam (Versed)	2
Metoclopramide / Reglan	2
Diltiazem / Cardizem	1
Diphenhydramine / Benadryl	1
Ipratropium Bromide	1
Prochlorperazine / Compazine	1

