

2021 Annual Report



Town of Colonie
Department of Emergency Medical Services

Issued Aug 2022



About the Town of Colonie

The Town of Colonie has an area of more than 57 square miles with a population of nearly 90,000, located in northeast corner of Albany County. A suburb of the New York State capital, we are often referred to as the Crossroads of the Capital District as we are bordered by the Towns of Guilderland, Rotterdam, Niskayuna, Clifton Park, and Halfmoon as well as the Cities of Cohoes, Green Island, Troy, Watervliet, Albany, and Schenectady, and the Mohawk and Hudson rivers. Three major Interstates, 2 villages, an international airport, a regional shopping center, many chain and even more local restaurants, several office and health complexes are located within the Town. Colonie boasts Town owned, operated and maintained major parks, neighborhood parks, an Olympic size pool and splash pad, several large sports complexes for football, baseball, softball, soccer, pickleball, as well as a 36 hole golf



The Crossings of Colonie



About the Department of Emergency Medical Services

The Colonie EMS Department is an award winning municipal 911 service formed in 1989 after a consolidation of several volunteer ambulance services into a singular paramedic level EMS System. The EMS Department consists of a staff of more than 100 EMTs, paramedics, support, and administrative staff. We maintain a vehicle fleet of 23 vehicles in 7 stations —ambulances, a bariatric ambulance, special operations ambulances and vehicles, as well as SUVs.

In 2021 call volume exceeded 13,000 calls for service. The Department participates in new initiatives for patient care including telemedicine, alternative destination transports, and treat in place; and is also a Centers for Medicare & Medicaid Services ET3 Model Participant.

The Department can provide Medication Facilitated Intubation with surgical airway backup, video laryngoscopy, mechanical CPR, Zoll X Series Advanced monitors, and ballistic protection are available on all ambulances. As an integral part of the Town's emergency plan, staff are also trained in water rescue, ice rescue, low angle rope rescue, vehicle extrication, hazardous materials, confined space rescue, trench rescue, and receive active shooter training (ALERT/AIRR).

The EMS Department is an American Heart Association Training Center for all disciplines as well as a NYS EMS Course Sponsor offering First Responder, EMT original and recertification courses. Through our community outreach efforts, the Department trains the public in courses including Stop The Bleed, fall prevention, Hands Only CPR/AED and bloodborne pathogens.

Additionally, the Department serves as a clinical field training location for EMT and paramedic students from Hudson Valley Community College, State University of New York College of Agriculture and Technology at Cobleskill, and the Regional Emergency Medical Organization courses.



Mission Statement

The mission of the Department of Emergency Medical Services is to maintain a system capable of timely response to people in times of crisis, deliver quality “out-of-hospital” medical treatment and evacuation of the sick and injured. To accomplish our mission the department:

- Develops standards, policies & procedures pertaining to the provision of EMS.
- Conducts medical and operational quality assurance.
- Oversees Medical Priority Dispatch System (MPDS) & EMS dispatch procedures.
- Manages Basic and Advanced Life Support First Response Service.
- Manages Basic and Advanced Life Support Ambulance Service.
- Provides training and support services to maintain system equipment and personnel.
- Provides public information and education on prevention and emergency aid.

The Department is committed to providing these services utilizing a combination of volunteer and career staff and to continuing a tradition of EMS leadership.



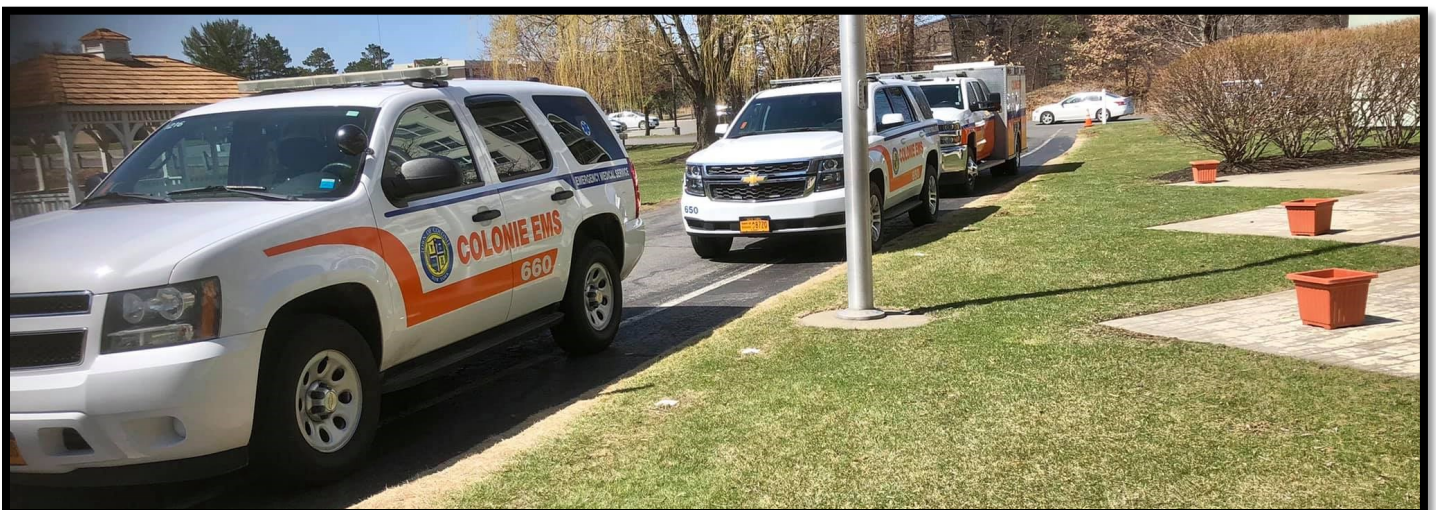
Our 670 vehicle is equipped for extended incidents, technical rescue, mass causality incident response and treatment, as well as an emergency back-up generator for the Public Safety Building.



To fulfill our mission, the EMS Department maintains a complete system capable of timely response to anyone in a time of crisis and deliver exceptional quality medical care wherever that patient is located.

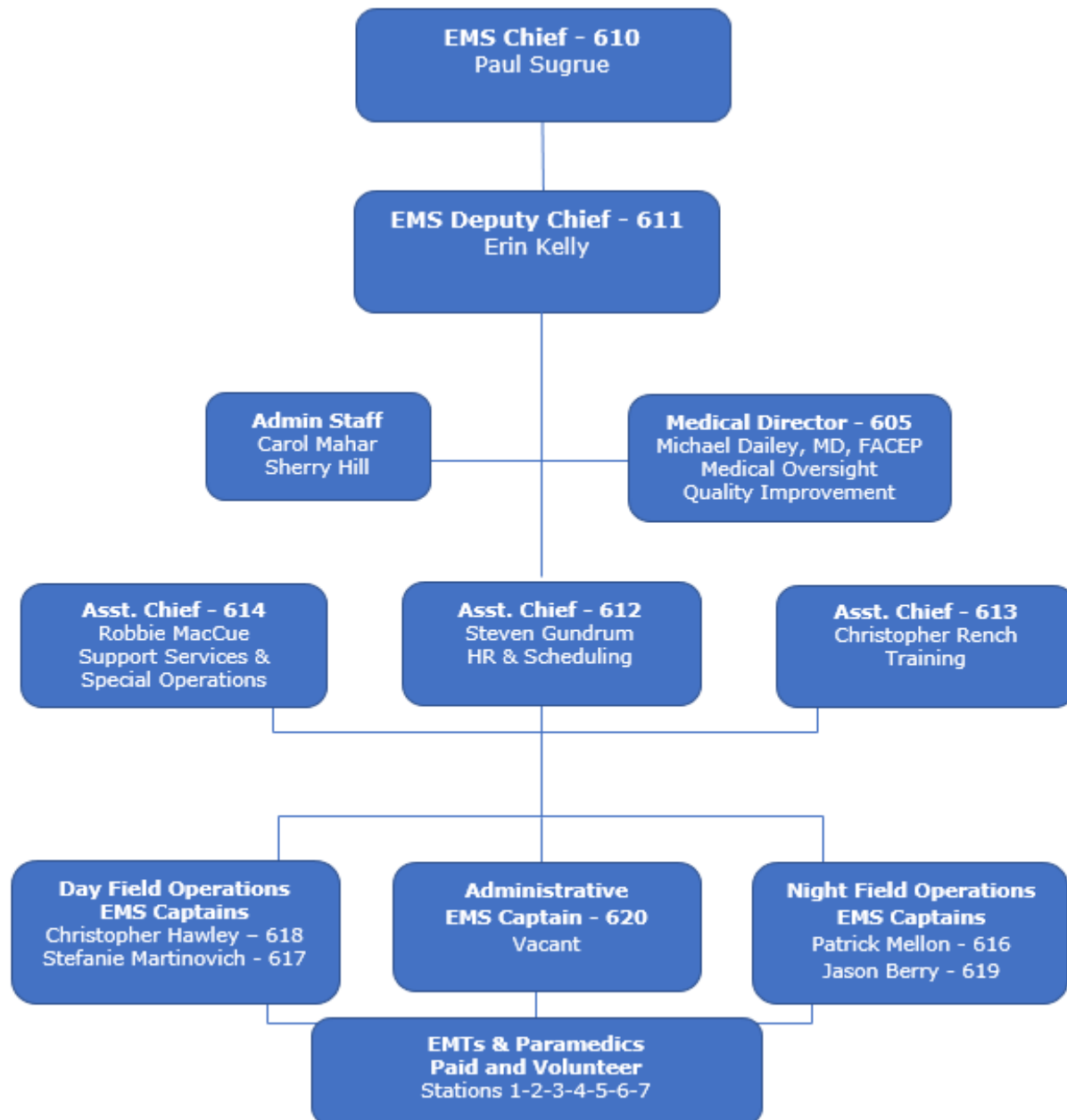
To accomplish this mission the department:

- Provides sole coverage for all emergency ambulance requests within the Town
- Provides primary rescue services for confined space for town departments
- Provides hazardous materials response as part of the town and regional hazmat plans
- Conducts First Responder and EMT courses and maintains EMS instructors
- Has employees that train and are capable of entering scenes with the Police Department's Special Services Team
- Maintains instructors for all medical and rescue training disciplines in house
- Oversees the Medical Priority Dispatch System and EMS dispatch procedures in the 911 center
- Manages basic life support fire department responses
- Provides public education and information on prevention of injury & emergency aid
- Participates in school district meetings and critical incident drills
- Participates in North and South Colonie SAFE schools
- Maintains a close working relationship with the Albany International Airport Authority for EMS and incident management drills
- Provides staff to the Albany County and Town Emergency Management
- Works with the Regional EMS Council on various committees
- Oversees more than 40 AEDs in public locations within the Town and police department patrol units
- Collaborates with the Town Senior Resources Department social and case workers to provide referrals to services allowing residents to age in place

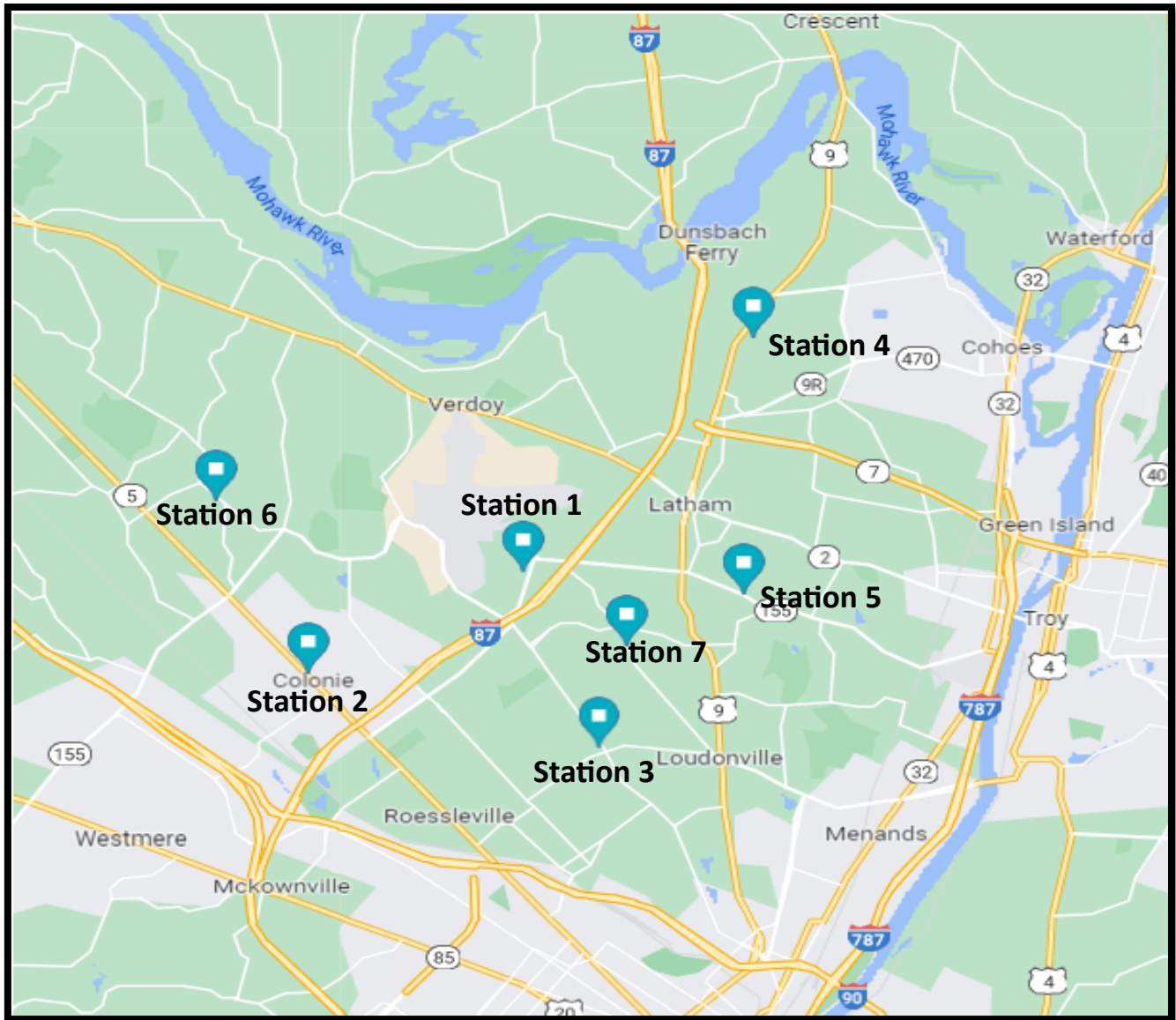


Colonie EMS Department

Organizational Chart



EMS Stations



- Station 1—EMS Headquarters 312 Wolf Road
- Station 2—1631 Central Avenue
- Station 3—494 Albany Shaker Road
- Station 4—8 Preston Drive
- Station 5—469 Watervliet Shaker Road
- Station 6—200 Consaul Road
- Station 7—146 Old Niskayuna Road

Ambulances, Specialty Vehicles & Equipment

We work closely with our Fleet Maintenance division to ensure our department ambulances are kept serviceable and thanks to capital planning our gas-powered ambulances are replaced approx. every 7 years.

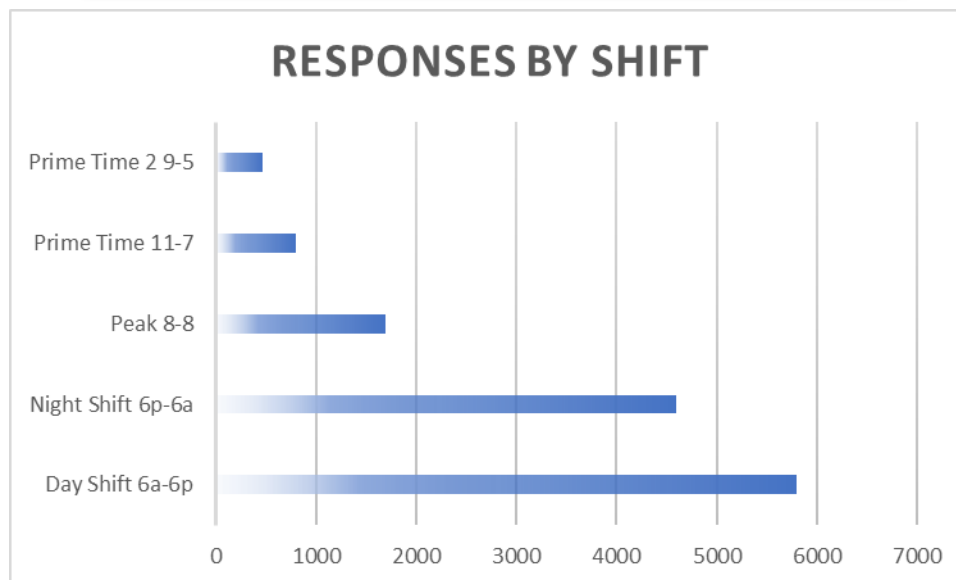
Ambulances	Year	Make/Model
621	2020	Chevy / Wheeled Coach
622	2019	Chevy / Wheeled Coach
631	2019	Chevy / Wheeled Coach
632	2020	Chevy / Wheeled Coach
633	2017	Chevy / Wheeled Coach
641	2016	Chevy / Wheeled Coach
642	2016	Chevy / Wheeled Coach
651	2020	Chevy / Wheeled Coach
652	2016	Chevy / Wheeled Coach, bariatric ambulance
661	2018	Chevy / Wheeled Coach, specialty squad ambulance
662	2018	Chevy / Wheeled Coach, specialty squad ambulance
681	2020	Chevy / Wheeled Coach
682	2015	Chevy / Wheeled Coach
683	2016	Chevy / Wheeled Coach

SUV/Special	Year	Make /Model
610	2021	Chevy Tahoe
611	2020	Chevy Tahoe
630	2012	Chevy Tahoe
640	2015	Chevy Tahoe
660	2019	Chevy Tahoe
650	2013	Chevy Tahoe
670	2002	HME / Hackney, specialty squad rescue vehicle
TSU-1	2019	Chevy / Kenco, specialty shift commanders' vehicle
TSU-2	2016	Chevy / Kenco, specialty shift commanders' vehicle

Department Staffing

The EMS Department staffs ambulances with 1 paramedic and 1 EMT working 8 or 12 hour shifts. Shifts have a staggered start time to provide for optimal coverage during hours of peak demand. Shifts are either a set 3-3-4 Thursday, Friday Saturday/Sunday Monday Tuesday, or a rotating every other weekend arrangement.

<u>Day shift</u>	<u>Units</u>	<u>Night shift</u>	<u>Units</u>
6am-6pm	4.5	6pm-6am	4.5
8am-8pm	1		
9am-5pm	1		
11am-7pm	1		



COVID 19 Response

2021 COVID Vaccines

The EMS Department is an authorized vaccine program and partnered with multiple entities to provide COVID 19 vaccination clinics across the town. More than 3,000 people were vaccinated in the workplace, at home to homebound citizens, the airport, schools and senior residential facilities.



*L to R Dale Hebert, Raymond Hughes III, Jason Berry, Steven Gundrum,
Peter Berry, Samantha Spagnola, Scott Bowman
Joint vaccination clinic with Albany County Sheriff's Department EMS Division*



Retired EMS Asst. Chief Ray Hughes III, along with other retired and active EMS personnel returned to assist with vaccine distribution at Public POD (Point of Distribution) sites

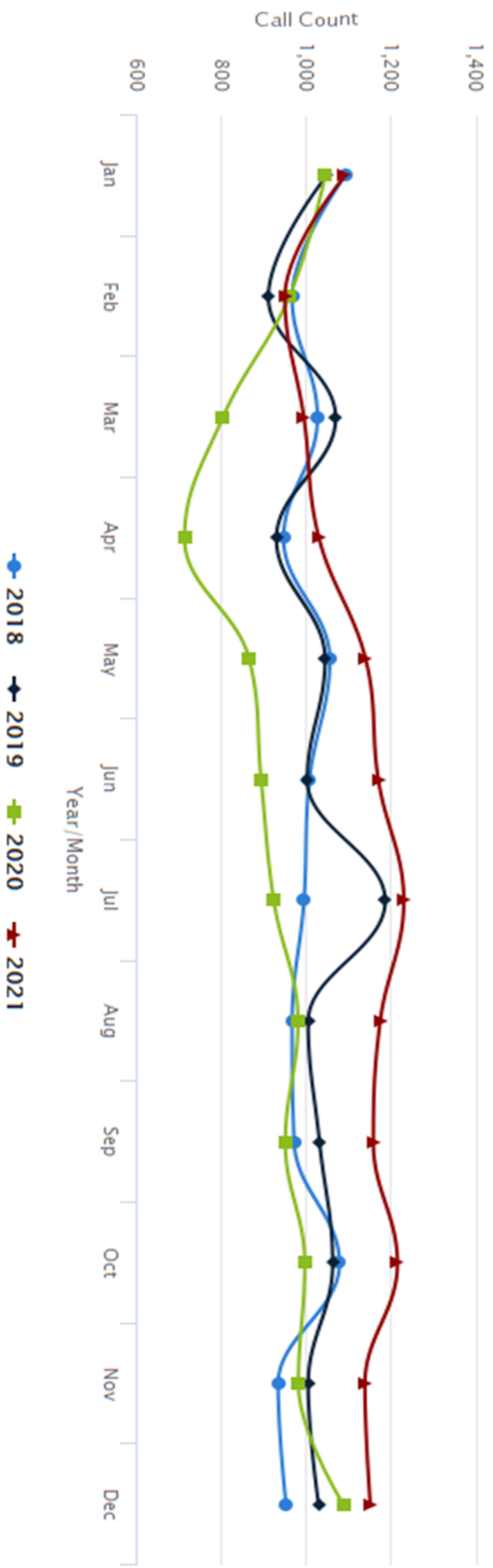
2021 Call Volume

Advanced Life Support to Other Agency	6
Assistance Only	1,016
Cancelled	763
Evaluation Only	20
No Patient Found	988
Deceased on Scene	152
Patient Refused Care/Transportation	803
Telemedicine—Consult/Treat in Place/Transferred Care	18
Standby	276
Service call	27
Treated and Transferred Care to Other Agency	22
Treated and Transported to ER	9,336

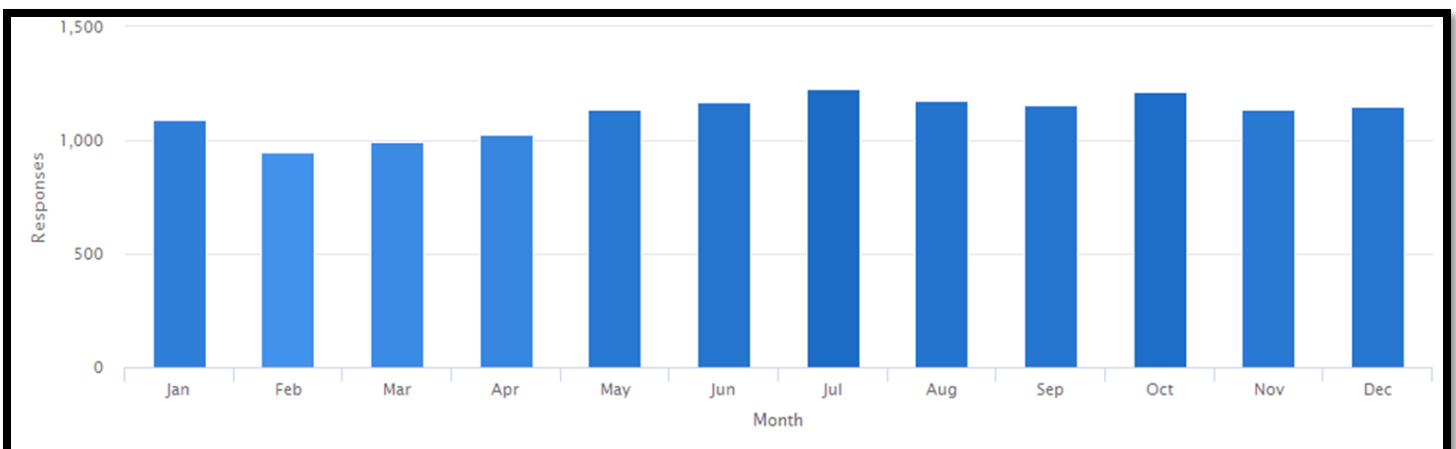
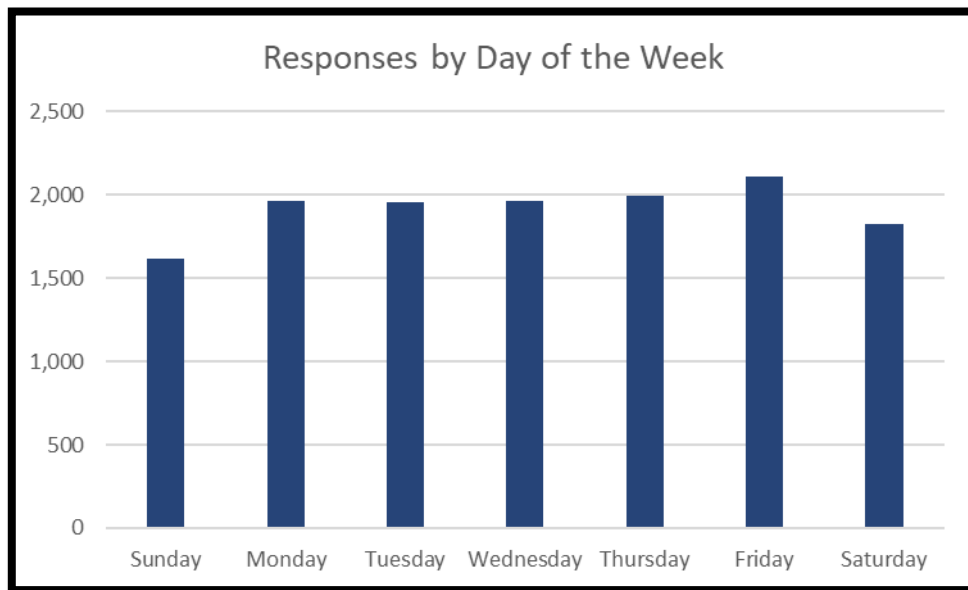
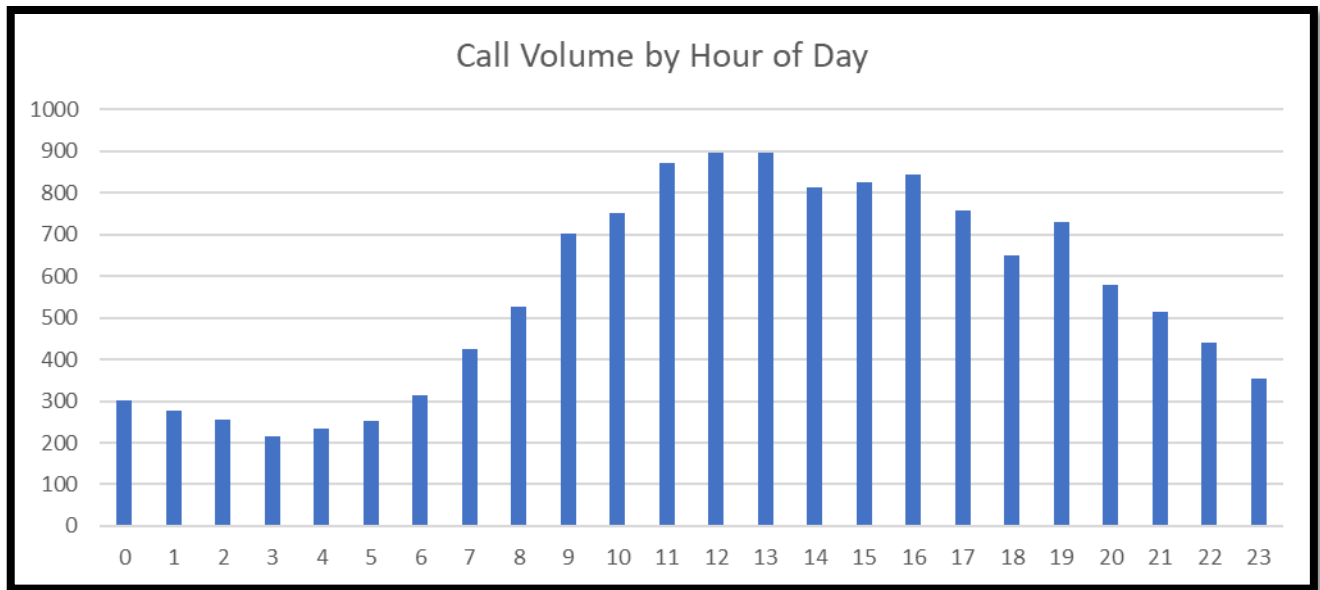
Total Calls for Service: 13,427

Call Volume by Month

2018-2021



Characteristics of Responses



Patients by Age

Age	Number	Percent
0-4	125	1.1%
5-9	58	0.51%
10-17	253	2.2%
18-24	650	5.7%
25-44	2023	17.6%
45-64	2744	24.1%
65-84	3790	33.3%
85+	1751	15.4%
Total	11,394	



Call Types

As calls are received by the 911 center they are categorized by patient complaint to a call type.

Type of Call	Count	Percent
Abdominal Pain	511	3.8
Alcohol Overdose	134	1
Allergies	119	0.9
Altered LOC	128	1
Animal Bite	11	0.1
Assault	130	1
Assist the Invalid	586	4.4
Asthma	11	0.1
Back Pain	158	1.2
Blood Draw	38	0.3
Breathing Problems	1,032	7.7
Burns	15	0.1
Cardiac Arrest	200	1.5
Chest Pain	698	5.2
Choking	54	0.4
Convulsions / Seizure	306	2.3
Diabetic Problem	175	1.3
Electrocution	1	0
Epistaxis	12	0.1
Evaluation for Police	12	0.1
Eye Problem	14	0.1
Fall Victim	1,682	12.5
GI Bleed	20	0.1
Hazmat Exposure	14	0.1

Type of Call	Count	Percent
Headache	53	0.4
Heart Problems	143	1.1
Heat/Cold Exposure	13	0.1
Hemorrhage	198	1.5
Hemorrhage/Laceration	118	0.9
Medical Alarm	431	3.2
Medical Device Failure	23	0.2
Overdose/Poisoning	259	1.9
Pain	162	1.2
Pregnancy / Childbirth	32	0.2
Psychiatric Problems	661	4.9
Respiratory Arrest	1	0
Sick Person	2,002	14.9
Stab/Gunshot Wound	8	0.1
Standby DEDICATED	74	0.6
Standby FIRE	282	2.1
Standby MUTUAL AID	215	1.6
Standby NON Dedicated	7	0.1
Standby POLICE	27	0.2
Stroke/CVA	214	1.6
Traffic Accident	640	4.8
Transfer / Interfacility	620	4.6
Traumatic Injury	243	1.8
Unconscious / Fainting	615	4.6
Unknown Problems	325	2.4
Total:	13,427	



Confined space rescue training

Response Times

Response times serve as a guide to operational efficiency. The total response time is a measure of the time call was received by the EMS crew (dispatched time) to the time the ambulance arrived on the scene. In some instances, rapid response vehicles, supervisory staff, police or fire department responded and arrived first. The response times measured include the highest levels of calls where the ambulance responded with lights and sirens. Emergency calls that were deemed not severe in nature, or calls where there is no arrival time are not counted.

Measure	Total Response Time
Median Time	8
6 minutes or less	41.6%
8 minutes or less	66.9%
9 minutes or less	77.3%
10 minutes or less	84.7%

Total miles driven	335,987
Billed mileage	74,949



Key Performance Indicators

Performance Measure	Definition	2021 Results
Percent of calls where pain level is documented	Initial pain scale is documented, post pain medication pain scale is documented	98.8%
Percent of calls where patient weight is documented with pain medication use	Patient weight is documented in e-PCR	100%
Percent of calls where patient contact to medication administration meets standard	Patient contact to first dose of medication given is 15 minutes or less	61%
Percent of patients >35 years old with ACS symptoms who received a 12 lead ECG	Patient contact to 12 lead EKG performed is less than 10 minutes	100%
Average time to transmit STEMI 12 lead	Patient contact to 12 lead ECG transmission if positive for STEMI is less than 15 minutes	87%
Scene time standard for STEMI	Patient contact to transport time is less than 20 minutes in patients with STEMI	62%
Percent of cases where blood glucose was checked in seizure patients	Patient with a complaint of seizure have blood glucose evaluated	85%
Percent of CVA/TIA patients receiving blood glucose check	Patients with stroke symptoms have blood glucose level evaluated	94%
Percent of suspected CVA/TIA patients having stroke have stroke scale performed	Patients with stroke symptoms have stroke scale performed and last known well time documented in e-PCR	93.6%
Percent of suspected CVA/TIA patients having stroke have last known well time	Patients with stroke symptoms have stroke scale performed and last known well time documented in e-PCR	82.6%
Scene time for suspected CVA/TIA	Patient contact to transport time less than 20 minutes when CVA/TIA symptoms are present	69%

American Heart Association *Mission: Lifeline* EMS Recognition

The EMS Department has again been recognized as a Gold Plus award recipient in 2022 for the year 2021. This is the highest level of recognition by the AHA. Criterion include performance of and time to 12 lead EKG, hospital notification of heart attack patients within 10 minutes, patient contact to hospital treatment time in under 90 minutes, stroke alerting and documentation, aspirin administration and cardiac arrest survival EKG performance. All measures must be an aggregated compliance of greater than or equal to 75%.



2022 Mission: Lifeline® EMS Recognition

The American Heart Association proudly recognizes

Town of Colonie Emergency Medical Services
Latham, NY

Mission: Lifeline® - EMS - GOLD PLUS

Achievement Award - EMS Agency

The American Heart Association/American Stroke Association recognizes this EMS provider organization for demonstrating continued success in using the **Mission Lifeline®** program.

Thank you for applying the most up-to-date evidence-based treatment guidelines to improve patient care and outcomes in the community you serve.*

A handwritten signature in black ink.

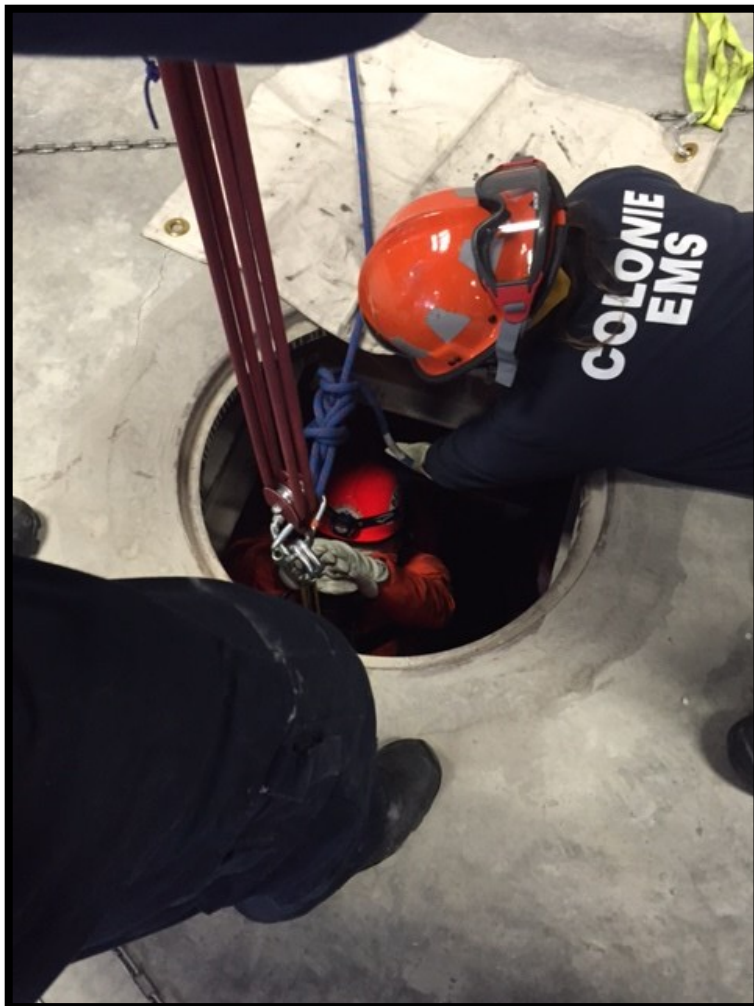
Nancy Brown
Chief Executive Officer
American Heart Association

A handwritten signature in black ink.

Donald M. Lloyd-Jones, MD, ScM, FAHA
President
American Heart Association

*For more information, please visit [Heart.org/MissionLifeline](https://heart.org/MissionLifeline)





Crews continued training of treating critical patients and working together to improve survival of a sudden cardiac arrest, as well as practicing confined space entry and rescue scenarios. In 2021, the EMS Department was named on over 800 confined space permits issued by town departments.

Cardiac Arrest Statistics

Cardiac arrest is the abrupt loss of heart function—the heart suddenly stops pumping. When this occurs, the victim becomes unconscious, stops breathing, and blood flow to the brain and other vital organs stops. More than 350,000 cardiac arrests occur outside a hospital in this country each year, and about 90 percent of those people die. Without immediate intervention cardiac arrest always leads to death.

The first few minutes of cardiac arrest are the most critical. Without immediate CPR and an electrical shock to restore the heart's rhythm (defibrillation), advanced prehospital and hospital care, death is certain. The American Heart Association has coined the term Chain of Survival which includes:

- Recognition of cardiac arrest & activation of the emergency response system
- Early CPR with an emphasis on chest compressions
- Rapid defibrillation
- Advanced resuscitation by EMS and other healthcare providers
- Post cardiac arrest care
- Recovery

The actions taken by bystanders, 911 telecommunicators, first responders, and EMS personnel increase the chances of a successful resuscitation and discharge from the hospital after a cardiac arrest event. Colonie EMS regularly holds CPR courses for the public and industry and provides hands only CPR demonstrations at public gatherings. The EMS Department trains heavily on cardiac arrest response and utilizes the most up to date equipment and science to produce the best outcomes for our patients.

The following page contains statistics about cardiac arrest care in the Town of Colonie. While cardiac arrest calls are a small sample of our overall calls, these calls test all components of the 911 system from receiving the call, giving instructions to callers, first response from law enforcement and the fire departments, to response times and performance of our providers. We regularly report all of our cardiac arrest responses and outcomes to the Cardiac Arrest Registry to Enhance Survival (CARES) national database. This allows us to measure our performance against other agencies and gain insight in how to improve cardiac arrest survival. Within this reporting system there are 3 distinct groups; the Utstein survival group, cardiac arrest before, and cardiac arrest after EMS arrival. The Utstein group is a special subset of cardiac arrests and serves as a standardization in reporting and is thought to be an excellent benchmark of EMS system performance.

EMS Department Cardiac Arrest Statistics

1. Overall number of non traumatic etiology cardiac arrests where resuscitation efforts were attempted:

Year	2017	2018	2019	2020	2021
Cardiac Arrests	55	72	61	66	72

2. 2020 Overall survival to hospital discharge

Initial Presenting Rhythm	Number treated	Number survived to discharge	Percent Survived
Arrest before EMS:	57	10	18%
Ventricular Fibrillation/Ventricular Tachycardia (VF/VT)	9	4	44%
Asystole	26	0	0
Other initial rhythm	22	6	27%
Arrest After EMS:	11	1	9%
Ventricular Fibrillation/Ventricular Tachycardia (VF/VT)	3	0	0
Asystole	3	0	0
Other initial rhythm	5	1	20%
Total	68	11	16%

3. Utstein Survival: Survival to hospital discharge for cardiac arrests witnessed by bystanders with an initial rhythm of VF

Year	2021	5 Year cumulative 2017-2021
Survival Rate	3/4 (75%)	23/46 (50%)

4. Bystander CPR and AED use prior to EMS arrival:

Year	2017	2018	2019	2020	2021
Bystander CPR	45.50%	49.10%	30.40%	16.70%	45%
Public AED use	44.40%	14.30%	28.60%	0%	18.80%



In April of 2022 these new defibrillators were prepared for the Colonie Police Department patrol vehicles in our continued efforts to improve survival from a sudden cardiac arrest. Thanks to capital planning these replaced older units that were no longer serviceable.



During the pandemic we continued our semi-annual mandatory in-service trainings at the Crossings Park which allowed for more space and continued proficiency of skills with our crews

EMS Training

The EMS Department maintains an American Heart Association Training Center designation for all disciplines and is a NYS Course Sponsor authorized to teach EMR (first responder), EMT and EMT recertification courses. The Department conducts 2 EMT courses per year, spring and fall.

EMT Courses

Course	Enrollment	Withdrawal	Graduation	Pass NYS practical	Pass NYS written	Percent Pass	Did not test
Spring original	24	3	21	21	19/21	90%	-
Spring recert	9	2	7	6	5/5	100%	1
Fall original	33	5	28	27	22/25	88%	2
Fall recert	5	1	4	4	3/3	100%	1

American Heart Association Courses

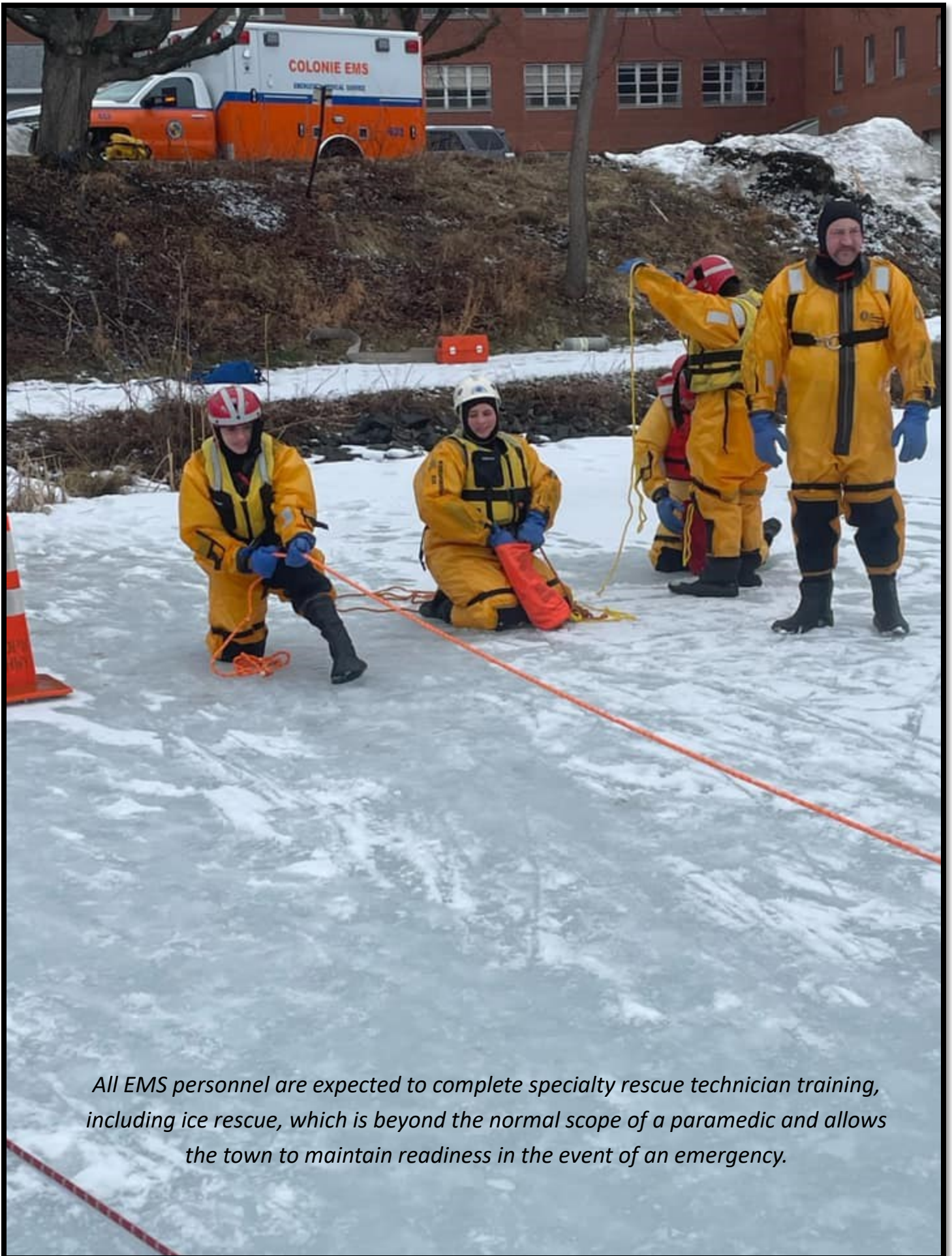
Course	# of courses	# of students
ACLS	27	156
BCLS	93	507
PALS	16	60
First Aid	2	18
FA/CPR	8	48
Ped FA/CPR	1	8
HeartSaver CPR	7	37
Total	154	834



Our paramedics provide free community hands-only CPR training and stop-the-bleed training.

Pictured L to R, Paramedic Chrissy Klouse, Chief Paul Sugrue, 40 year paramedic & community outreach coordinator David Plouff, Paramedic Jon Behrens.





All EMS personnel are expected to complete specialty rescue technician training, including ice rescue, which is beyond the normal scope of a paramedic and allows the town to maintain readiness in the event of an emergency.

2021 Budget—Expenses

	ACC'T	ACTUAL
ACCOUNT TITLE	NO.	2021
PERSONAL SERVICE:		
REGULAR	110	\$3,075,519
OVERTIME	130	568,573
PART-TIME	140	598,548
SEASONAL	150	31,707
TOTAL PERSONAL SERVICES		\$4,274,347
EQUIPMENT:		
FURNITURE	210	
OFFICE EQUIP	220	786
OTHER EQUIP	250	27,664
TOTAL EQUIPMENT		\$28,450
CAPITAL OUTLAY:		
PROPERTY IMPVMNTS	310	
TOTAL CAPITAL OUTLAY		\$665,000
CONTRACTUAL:		
GASOLINE & OIL	411	83,268
MISC SUPPLIES	413	6,969
VEH&EQUIP SUPPLIES	414	3,535
PHONE	421	23,998
ELECTRICITY	422	23,000
UTILITIES	423	9,323
WATER USAGE	425	516
EQUIP RENTALS	441	1,430
REPAIRS	443	14,068
VEHICLE REPAIRS	444	107,379
PROPERTY RENTAL	446	68,514
MAIN SERVICE CONTRACTS	448	126,283
POSTAGE	462	2,142
PROP&SCH TAXES	466	322
TRAINING/CME	472	25,457
DUES AND MEMBERSHIPS	477	7,315
MEAL ALLOWANCE	479	5,610
UNIFORMS & PPE	501	24,441
CLOTHING ALLOWANCE	503	100
DISPOSABLE SUPPLIES	505	123,267
VOLUNTEER/MISC REIMB	541	
TOTAL CONTRACTUAL		\$656,937
TOTAL EXPENDITURES*		\$5,624,734

*Exclusive of insurance and retirement costs

2021 Budget—Revenue

Description of Revenue	2021 Budget
EMS Training + CPR	\$20,000.00
Misc. documents, FOIL	\$400.00
Ambulance Services	\$5,650,000.00
Paid ambulance standbys	\$4,500.00
Total revenue	\$5,674,900.00

2021 Grant Funding

The Department submitted two grant requests through the FEMA AFG (Assistance to Firefighters Grant) that has made funding available for equipment and vehicles since 2001. However, EMS organizations qualify for only 2% (\$7M) of the \$350M funding and have to compete against over 11,450 911-response ambulance services according to (NASEMSO 2020) report.

In 2021 the department requested the following and is awaiting a decision:

Ambulance replacement \$207,500.00

Equipment replacement \$263,793.69

There are no other dedicated federal or state grants for EMS in the United States.

Due to the COVID-19 Pandemic in 2020/21 the Federal Government provided funding of \$126,022 through several distributions to make up for lost Medicare funding, through the CARES Act phases of funding.

