Report to The Vermont Legislature
Emergency Medical Services Advisory Committee
(EMSAC)

In accordance with Act 155 (2012), Section 39, An Act Relating to Miscellaneous Changes to Municipal Government Law, to Internal Financial Controls, to the Management of Search and Rescue Operations, and to Emergency Medical Services.

Submitted to: House Committee on Government Operations
House Committee on Commerce and Economic Development
House Committee on Human Services
Senate Committee on Government Operations
Senate Committee on Economic Development, Housing, and General Affairs
Senate Committee on Health and Welfare

Submitted by: The Vermont EMS Advisory Committee
Prepared by: Drew Hazelton, Chair

Report Date: 1/8/2024

The EMS Advisory Committee (EMSAC) was formed under authority of Act 155 of 2012 and revised by Act 202 of 2018 and Act 166 of 2020. The committee makeup was changed in 2018 and additional work force information was requested. New EMSAC members met throughout the year, revisiting many of the questions and incomplete tasks from our last report. Information on the health of our EMS system was gathered through a survey, direct conversation with stakeholder groups and response data. The Health Department's Office of EMS participated in all the meetings providing statistical and historical information as requested. EMSAC recognizes the limitations of the available data and has worked to provide the most complete report possible.

Emergency Medical Services Advisory Committee
Report for 2023

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Vermont EMS Advisory Committee
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Executive Summary

The Emergency Medical Services (EMS) system in Vermont provides the public with emergency access to basic and advanced life support and ambulance transportation, 24 hours per day. EMS is a critical link for patients that need higher levels of care or need to be transported from one healthcare facility to another for continued care. **In many areas of the state, EMS services are struggling to meet even the basic needs of the community. Not all citizens in Vermont have access to adequate, equitable, and efficient emergency care and specialized transport.** Inadequate staffing in our volunteer and career departments is impacting access to timely, clinically appropriate, equitable care in parts of Vermont.

Vermont's 75 ground ambulance services, 1 air ambulance service, and 88 first response services continue to provide life-saving treatment and transportation every day, often relying on neighboring communities and mutual aid to meet the increasing demand for service.

On average, Vermonters request an ambulance 342 times per day. The public expects timely emergency response when they activate the 911 system today more than ever before, but timely, equitable access to pre-hospital emergency care and ambulance transportation is not a guarantee.

Despite efforts to stabilize the EMS system in Vermont during recent years, the system is failing. The greatest challenges to Vermont's EMS system that needs immediate legislative attention are:

- **Sustainable Funding**
- **Workforce Development**

Unreliable levels of local, state, and federal support have pushed our fragile system and those who serve our communities to the point of crisis. The attrition for licensed EMS providers in Vermont during 2023 was 14%, 390 providers did not renew their licenses. This along with increased demand for services has caused EMS workforce shortages across the state. During the last several years, wages in some regions have had to increase by more than 25% to compete with other healthcare facilities and out-of-state ambulance service providers. The cost of health insurance and the double-digit annual increases in premium prices make competitive benefit packages out of reach for most rural EMS providers.

As a critical component of Vermont's healthcare system, EMS responders have responded to 124,740 calls for service in 2023, an increase of 22% in the last five years. During the same period, the total number of licensed EMS providers has **decreased by 3%**. The introduction of the Vermont First Responder, an entry-level certification developed in 2020, has increased the total number EMS providers slightly but has not corrected the workforce shortage.

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Specific issues include:

- **Funding**
  - **Immediate action** needs to be taken to adjust Medicaid rates to cover the cost-of-service delivery.
  - **Immediate action** should be taken to incentivize towns and services to develop regional partnerships that will improve reliability and reduce costs.
  - The new Medicaid rate set in July of 2023 is helping with the funding gap, but unfortunately these new rates still do not cover the cost of delivering EMS.
  - Using property taxes to subsidize insufficient Medicaid reimbursement fails to take advantage of matching federal funds. Years of inadequate reimbursement has contributed to rising municipal budgets and higher property taxes.
  - Medicaid reimbursement rates need to account for rural areas and annual inflation.
  - Increase the Medicaid "treat no transport" rate to a minimum of the BLS emergency rate.
  - Small rural ambulance services need additional support.
    - Longer transport distance to a local community hospital increases out-of-service time and increases the overall cost of readiness.
    - Direct funding is needed to support strengthening EMS organizations.
    - In many cases, a cluster of small ambulance services in a hospital service area will fail to meet the need to transport patients between facilities. Interfacility transports from community hospitals is a burden to small rural services. As a result, patients are unable to get the care they need.

- **Workforce Development**
  - **Immediate action** needs be taken to support affordable additional paramedic programs.
  - **Immediate action** needs to be taken to add sustained annual funding of $1,000,000 to the budget to support workforce development through EMS education.
  - EMS education and continuing education continues to be a challenge to access.
    - EMS education and licensure has changed. Funding and training need to be available to help our current education programs meet the new education standards.
  - Career Staffing Challenges
    - Inadequate reimbursement and unreliable funding for EMS services has resulted in low wages, limited benefits, or only volunteer positions.
    - The cost of labor has increased by more than 25% in the last few years causing many services to be operating on reserve funds. Services are now seeking additional municipal support.

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- The cost of health insurance and the annual increases in premium prices make competitive benefit packages out of reach for most rural EMS providers.
- **Immediate action** should be taken to allow access to state retirement programs for non-profit and regional EMS providers.
- Regular EMS staff turnover as EMTs, advanced EMTs and paramedics pursue other health care career opportunities.
    - The American Ambulance Association published a 2022 EMS Industry Turnover Study, from the executive summary, "Voluntary and overall turnover increased for 2022, with the turnover rate being in the 20 to 36 percent range for EMTs and Paramedics, a 6% increase over the prior year... the primary reasons cited for turnover across all positions within EMS agencies is low pay and benefits, followed by a change in career."

- Volunteer Staffing Challenges
    - Increasing demand for time
        - We are asking for more from our volunteers every year with increasing call volume. The call demand has increased more than 21% in the last 5 years.
        - The cost and access of education continue to present obstacles to volunteers.
        - Hospital diversion shifts hospital staffing burdens onto EMS providers.
    - **Immediate action** needs to be taken to reduce costs and incentivize new and existing volunteer EMS providers and their employers.

- **System Utilization**
    - The number of requests for ambulance response have gone up -
        - The average number of requests for ambulance response during 2023 has **increased 22% in over the last five years.**
        - 79% of EMS utilization is 911 response. In 2023, 99,336 calls resulted in an emergency response.
    - Hospital capacity, access to definitive and specialty care has had a major effect on EMS.
        - Hospitals going on diversion results in longer transport times, results in longer response times and greater burden on our EMS system.
        - Overcrowded emergency departments have caused EMS crews to wait hours for the ability to turn patients over to hospital staff.
        - Local and regional facilities are unable to meet the patient demand which has required EMS to transport patients hundreds of miles out of state for services.
        - More than 25,000 patients required ambulance transport between healthcare facilities in 2023.
        - **Immediate action** is needed to support our hospital partners appropriately staffing local hospitals.

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Detailed Analysis

Question 1: Should every Vermont municipality be required to have an emergency medical services plan in effect, providing for timely and competent emergency response?

No, a timely and competent emergency response in only part of EMS delivery in Vermont. EMS is also a critical part of healthcare, providing for medical transportation to definitive or specialty care for the sickest members of our communities. With a few exceptions, municipalities acting to only provide one leg of the service have contributed to the current system struggles. EMS plans need to be developed regionally and need to include not only a robust 911 response, large incident response but also include basic and critical care level medical transportation to definitive care.

Question 2: Should the state establish directives addressing when an agency can respond to a nonemergency request for transportation of a patient? And if doing so will this leave the service area unattended or unable to respond to an emergency call in a timely fashion?

This is a concern in some areas of the state, but it is not a universal problem. EMS systems that transport to UVM or DHMC are unlikely to experience the same needs for acute transport as systems that are served by community hospitals. Regionally operated EMS systems can maintain 911 coverage, at the same time they serve the needs of patients to receive higher levels of care.

Question 3: How is the EMS system functioning statewide? What is the current state of recruitment and workforce development? Funding

The COVID19 pandemic changed the stakes for providers entering the field. New challenges in uncertainty required a new heightened dedication, resiliency, and adaptability can be unique to find in even seasoned care providers.

The creation of the Vermont Emergency First Responder (VEFR) certification level in 2020 increased the total number of EMS providers in Vermont however **the total number of licensed providers (EMR through Paramedic) has remained stagnant in the last three years.**

Current Licensures	1/4/2021	1/5/2022	1/3/2023	1/3/2024
EMR	180	114	83	77
EMT	1396	1399	1399	1404
AEMT	718	650	741	751
PARAMEDIC	389	390	393	430
CRITICAL CARE PARAMEDIC	79	84	57	64
Total	2762	2637	2673	2726

Vermont Emergency First Responder	287	525

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Question 4: What is each EMS district's response times to 911 emergencies in the previous year, based on information collected from the Vermont Department of Health's Division of Emergency Medical Service?

Response time is only one component of emergency response that alone has very little value measuring the quality of a modern EMS system. Modern dispatch and response protocols emphasize the need for risk appropriate response and priority dispatch. These may increase "response time" but improve overall system performance and improve quality of care. The response time below is provided by district and is for the ambulance arrival. It does not consider the valuable contribution our first response agencies make to the EMS system.

Incident Year	2018	2019	2020	2021	2022	5 Year Avg
District 01	11.02	10.02	11.96	11.18	11.03	11.04
District 02	13.49	14.93	14.13	11.54	13.68	13.55
District 03	8.94	8.29	9.73	9.03	10.27	9.25
District 04	18.01	17.15	15.43	16.19	17.08	16.77
District 05	12.94	12.3	13.03	13.72	15.72	13.54
District 06	11.3	11.17	11.13	10.96	15.28	11.97
District 07	15.5	15.09	14.45	12.59	15.66	14.66
District 08	17.77	18.73	17.22	21.98	18.6	18.86
District 09	10.77	11.58	11.58	11.73	12.75	11.68
District 10	10.86	11.49	10.66	11.12	11.16	11.06
District 11	13.6	13.18	11.47	14.02	12.88	13.03
District 12	12	10.83	10.5	12.13	12.5	11.59
District 13	9.45	8.67	8.83	10.03	7.86	8.97

Question 5: What are the funding mechanisms and funding gaps for EMS personnel and providers across the state, including the funding for infrastructure, equipment, and operations and costs associated with initial and continuing training, licensure, and credentialing of personnel?

Funding for EMS varies depending on the service delivery model for the town or region. Funding for first response services and ambulance service providers are different.

- Most of Vermont's first response services are volunteer services and depend on fundraising and small contributions from municipal budgets to operate. Career fire service-based first response is funded through municipal appropriation.
- Vermont has several ambulance agencies that continue to operate as completely volunteer services, providing medical treatment and transportation at no cost to patients. These services depend on fundraising and municipal contributions to operate.
- Most ambulance service providers are funded through a combination of insurance payments for services and municipal contributions. The exact formula varies widely.

- All services are struggling with the reality that the payment received for services does not cover the cost of delivering those services.
- Reimbursement for service is likely to be $600 for each call with most services expending more than $1000 in actual cost, capital, and labor for the service.
- The Medicaid/Medicare disparity is driving up ambulance billing rates. Families with high deductible health plans are struggling to balance rising premium costs and are not accessing medically-necessary services
- Long ER wait times and limitation of services are making patients hesitant to go to the hospital. Providing reimbursement for treatments in home for situations such as mild hypoglycemia, breathing treatments, and evaluations can keep the ERs available to more critical patients.

Question 6: What is the nature and cost of dispatch services for EMS providers throughout the state? Any suggestions for improvement?

It is important to note that inefficiencies and inequities in our current system as well as the lack of statewide coordination of dispatch, limit large incident response coordination. Lack of modern emergency medical dispatch software, training, and coordination limits the ability of the EMS system to appropriately triage calls. **Immediate action**: Asking to support the E911 program to update and modernize emergency medical dispatch system.

Question 7: Explain legal, financial, or other limitations on the ability of EMS personnel with various levels of training and licensure to engage in lifesaving or health preserving procedures.

First responders, including emergency medical services (EMS) providers play a critical role in addressing the opioid epidemic and has been apart of Vermont's Opioid Overdose Response Initiatives (DSUopioidoverdoseresponseapr2023.pdf (healthvermont.gov)) for over a decade. In addition to reversing overdoses, EMS agencies across the state are helping to build community networks and employ a comprehensive response to the opioid epidemic.

According to the 2021 Vermont Social Autopsy Report (healthvermont.gov)(released in 2023), of the 231 Vermonters who died of an overdose in 2021, 214 were identified in the SIREN database for the years 2015-2021. Of those 214 people, 172 (80%) were either declared dead on scene by EMS personnel or died in the hospital after being transported by EMS. Among the 231 people who died in 2021, 159 (69%) had a previous interaction with EMS before they died. EMS provide services to people who are using drugs, their loved ones, or others that may be able to help in the event of an opioid overdose.

First Response Naloxone Leave Behind Kits (LBKs) Leave behind kits are provided to people following an interaction with a first responder such as law enforcement or emergency medical services (EMS). EMS are required to offer leave behind kits to people who refuse transportation to the hospital following an opioid overdose. EMS are also encouraged to provide LBKs in any circumstance in which opioid use might be indicated, even if the original call to the first responder was not opioid-related. These kits include two doses of 4 mg naloxone, instructions for use, information on harm reduction, treatment, and recovery services, and information on VT Helplink & Vermont 211. Over the last year, the program also adapted to the emerging drug supply and overdose prevention efforts. In summer of 2023, the kits started in include Fentanyl test strips, and in January 2024 included Xylazine test strip packets.

Mental health impact on responders

First responders serve our communities, responding to many emergencies including drug overdoses. The difficult nature and feelings that can come from this work can create moral injury and negatively affect first responder mental and emotional health, which can lead to burnout and potentially leaving the profession. As such, it is critical to assess impacts on first responders, implement recommendations from the Emergency Service Provider Wellness Commission Report (https://legislature.vermont.gov/assets/Legislative-Reports/ESP-Wellness-Legislative-Report.pdf) and ensure supports and training are available to limit this occupational stress and promote resiliency.

Question 8: How can the current system of preparing and licensing EMS personnel be improved, including the role of Vermont Technical College's EMS program? Should the State create an EMS academy, and how should such an EMS academy be structured.

Structural changes have been made by ACT 166 to the way EMS education is being delivered in Vermont.

- VEFR- Vermont Emergency First Responder Certification
- Updates have been made to the instructor program.
- EMS training moved from a time-based course structure to a proficiency model, as demonstrated in part by the NREMT and EMS education guidelines, removing the time requirements and adding terminology/expectations to determine student competency and proficiency.
- The EMS office has partnered with an outside vendor to provide leadership training for current leaders and supporting the workforce development for future leaders.
- In-state Critical Care Paramedic programs were created in 2022.

Additional access to paramedic education is needed in Vermont.
With recent improvements in instructor training programs, and access to state funded education, quality EMS education has been available in all regions of the state. Ongoing state funding for EMS education is necessary to support the system.

Question 9: How can EMS instructor training and licensing be improved?

Vermont EMS is currently transitioning to a portfolio-based education program. Full implementation is anticipated by the end of June.

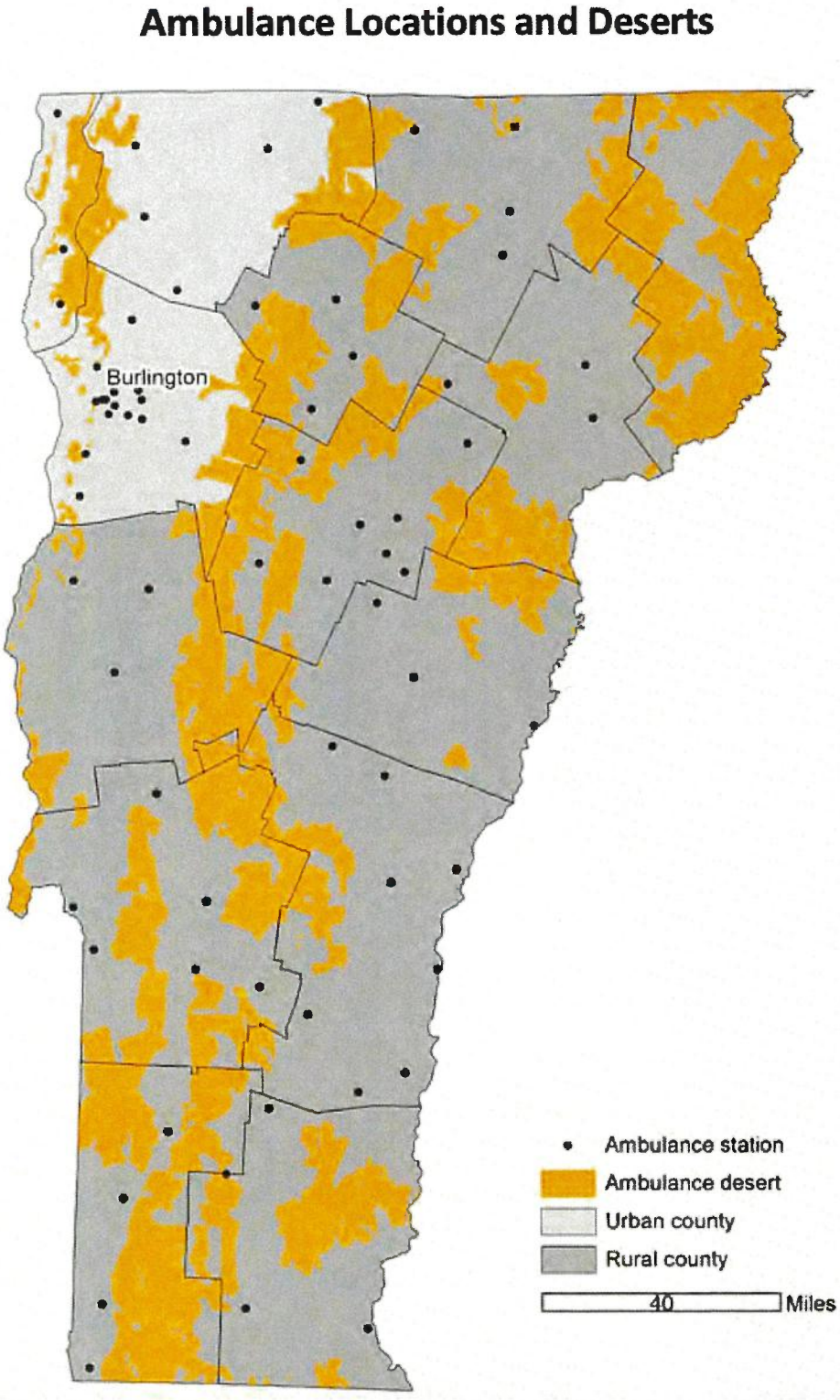
Question 10: How do the State's credentialing requirements for EMS personnel impact EMS providers?

The state credentialing requirement was eliminated by ACT 100. Agencies and districts continue to provide clinical oversite for field providers.

Committee Membership

Agency/District	Representative	Agency/District	Representative
EMS District 1 Franklin, parts of Grand Isle	Kathy Joachim	**Vermont Ambulance Association**	Drew Hazelton
EMS District 2 Orleans	Adam Heuslein	**Initiative for Rural EMS at UVM**	Patrick Malone
EMS District 3 Chittenden,parts of Grand Isle & Addison	Leslie Lindquist	**Professional Firefighters of VT**	David Danforth
EMS District 4 Lamoille	Scott Brinkman	**VT Career Fire Chiefs Association**	Aaron Collette
EMS District 5 Caledonia & Essex	Alissa Fontaine	**VT State Firefighters' Association**	Brad Carriere
EMS District 6 Washington County	Scott Bagg	**VT Association of Hospitals**	Devon Green
EMS District 7 Addison	Charlene Phelps	**Department of Health Commissioner (or designee)**	Will Moran
EMS District 8	Eric Hannet	**VT League of Cities and Towns**	Ted Brady
EMS District 9 Orange	Allen Beebe		
EMS District 10 Rutland	Jim Finger		
EMS District 11 Windsor	Aaron Sylvester		
EMS District 12 Bennington	Bobby Maynard		
EMS District 13 Windham	Mark Considine		

EMS Agency Map



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