

**Level Zero: Funding and
Workforce Shortages Place
EMS Response at Risk in the
Mountain State**



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The struggles of West Virginia hospitals have been repeatedly highlighted over the past couple of years with the bankruptcy and closure of several facilities. These concerns have been elevated with the COVID pandemic which has forced furloughs and layoffs and have now transitioned to significant shortages of nurses and other medical personnel. But overlooked in these discussions is the critical condition of many emergency medical services agencies.

When flooding, pandemics or other disasters occur, West Virginians eagerly express appreciation for their health care and first responder heroes. But once the crisis passes, EMS in particular goes forgotten.

EMS agencies in West Virginia have faced significant challenges even prior to COVID-19. According to the Office of EMS, more than 70 ambulance agencies have closed over the past decade plus. The issues have been compounded with the strain caused by the pandemic. Without additional support to help EMS providers, the West Virginia EMS Coalition believes that many communities may face the loss of emergency ambulance service or significantly longer response times.

The need for aid expands beyond just improved reimbursement from Medicaid and other government payors (although needed) and will require the state to examine its long-term strategy for funding and supporting workforce development for Emergency Medical Service. Without significant assistance, some rural squads will be unable to answer calls and the remaining agencies may not be financially or operationally positioned to aid services in low population areas as they have done in the past when agencies fail.

The Structure of EMS in WV and Funding Challenges

Many West Virginians wrongfully assume all ambulance agencies are part of County Ambulance Authorities, municipal government, or other political subdivisions because they are named after a county or city. Most ambulance agencies are either a Non-Profit or Private Corporation. Unlike police and fire departments, the majority of ambulance agencies in West Virginia receive little to no funding from county and local governments to support their services.

West Virginia Code 7-15-4 establishes that county commissions have a duty to make emergency medical services available but only to the degree that they can afford it. The amount of monetary aid provided by County Commissions to EMS agencies varies from county to county. Several EMS agencies that have been fortunate enough to historically receive county assistance have seen their financial support significantly reduced in recent years as counties face their own economic troubles.

Even the agencies that are fortunate enough to receive funding through a county ambulance levy are dependent on insurance reimbursement for much of their operating revenue. Multiple counties have experienced declines in levy collections as property assessments have dropped in coal and other industrial communities. One southern West Virginia County has experienced a 42% decline in ambulance levy collections between 2015 and 2021.

Beyond an absence of support from county and local government, the State of West Virginia provides extraordinarily little direct financial support for EMS agencies. In fact, due to repeated budget cuts, the Office of EMS within DHHR (Department of Health and Human Resources) has increasingly relied on fees assessed to EMS agencies, paramedics and EMTs (Emergency Medical Technician) to support its regulatory functions. Many licensing and certification fees have increased between 50 to 100% and several new fees have been created.

**OFFICE OF EMS LICENSE AND CERTIFICATION FEES FROM LEGISLATIVE RULE 64CSR48
CHANGE FROM 2007 TO 2021**

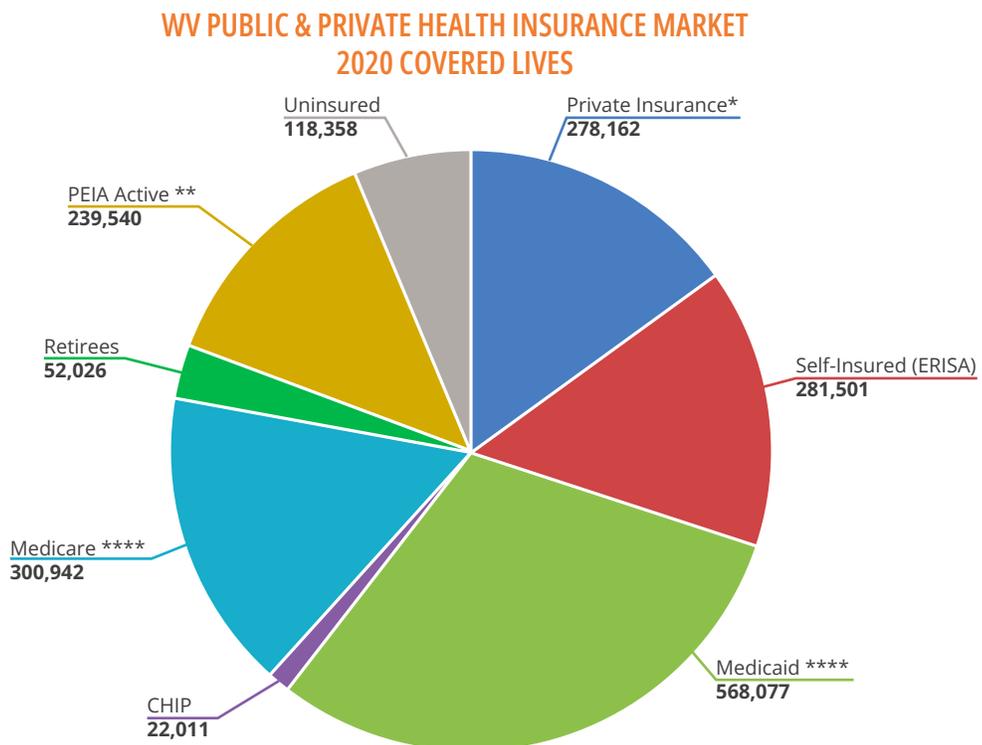
	2007	CURRENT
Agency License Application Fee	\$200	\$500
Agency License Renewal Fee	\$200	\$300
EMS vehicles permit	\$100	\$200
Agency License Modification	\$100	\$100
Initial Certification via National Registry or state examination	\$0	\$75
Recertification via National Registry or state process	\$0	\$37.50
Legal Recognition	\$0	\$100
Certification expired beyond two years	\$0	\$100
Nation Criminal Background Check	\$0	\$45

West Virginia also lacks the funding for emergency medical services on the state level that is provided by neighboring states.

- Virginia has a Four-for-Life fund, which is used only for EMS purposes and receives **\$4 per year** that is added to vehicle registration fees.
- Maryland imposes a **\$29 surcharge** on vehicle registrations to support EMS and a **\$7.50 moving violation surcharge**.
- Pennsylvania has an Emergency Medical Services Operating Fund, which provides over **\$12.5 million** in support to EMS annually. Funding comes from a \$10 fine assessed on all traffic violations, a **\$25 fee** assessed on all accelerated rehabilitation disposition admissions and other fees, fines, and penalties. Pennsylvania also offers a Fire Company and Emergency Medical Services Companies Grant Program and an Unconventional Gas Well Drilling (UGWD) Grant program.
- Ohio operates a grant program **funded by seat belt fines** to assist EMS operations.
- The Kentucky Board of Emergency Medical Services maintains a **block grant fund program** for the purposes of assisting in the provision of emergency medical services

The West Virginia Coalition has advocated for similar types of funding to support EMS in our state. During the 2018 session in SB 625, the West Virginia Legislature established an account within the Office of EMS to provide support for equipment and training but the funding source for the program was removed on the last day of session. During the three subsequent sessions, the legislature has not directed any funding to the program. The current COVID pandemic and the shortage of PPE (Personal Protective Equipment) clearly demonstrate the need for this funding.

Absent these types of funding, most EMS agencies are dependent on reimbursement from payors such as Medicaid, Medicare, PEIA (Public Employees Insurance Agency) and private health insurance to maintain emergency medical coverage in West Virginia. In West Virginia, 62% of insured residents receive their health coverage from a government plan such as Medicare, Medicaid, PEIA or CHIP with another 7% of the populations uninsured.



*2020 Population in West Virginia 1,793,716 (as of April 1, 2020)
WV Insurance Commission - 2021 Accident & Health Market Report*

Government sponsored insurance coverage typically reimburses significantly below the cost of readiness and delivering service. According to the Institutes of Medicine, "EMS costs include the direct costs of each emergency response, as well as the readiness costs associated with maintaining the capability to respond quickly, 24-hours a day, 7-days a week."

However, reimbursement methodologies for emergency medical services are not structured to capture readiness costs such as 24/7 staffing based on call demand experience, response time reliability, level of service provided, training, costs of equipment and supplies, and administrative expenses. Further, EMS agencies have no ability to negotiate rates with government health plans as costs rise. As an example, West Virginia Medicaid did not provide any increases in ambulance rates for 18 years between November 1, 2000, and January 1, 2019.



With 69% of West Virginia residents either uninsured or covered by government plans, most EMS care is provided at a monetary loss. The percentage of total runs comprised of patients that are uninsured, and government insured approaches 80% for most agencies. This is because private insurance is normally associated with employment and represents a younger, healthier population that utilizes less health care. Comparatively, Medicare and Medicaid are designed to assist citizens that are older or have disabilities or other significant medical needs which demand a greater utilization of health care services.

Relying on health coverage reimbursement comes with its own challenges. Ambulance agencies are only reimbursed by insurance when transporting a patient. Unloaded mileage, such as from point of dispatch to point of patient pickup or return from a hospital to the station, is not reimbursed. This is manageable for more urban based agencies near a hospital. But for some rural West Virginia agencies, the unloaded portion of the transport can be 2 hours or more of staff time and a hundred plus road miles when returning from one of the state's distant level 1 or 2 trauma centers.

Ambulance agencies receive no payment in most cases if the patient refuses to be transported even if care was provided at the scene. This is a frequent occurrence when responding to a car wreck or drug overdose. And refusals have increased during the pandemic as patients fear going to hospitals due to the risk of COVID exposure. During the initial stages of the pandemic, some WV EMS Coalition members reported that patient refusals increased 40 to 50% because of COVID concerns. This results in no payment for the response despite the costs incurred.

Over the last decade, family premiums for employer-sponsored coverage have jumped 47%, according to a report from the Kaiser Family Foundation. As insurers have attempted to control health care expenditures, it has become increasingly difficult for EMS agencies to collect reimbursement for services. Many smaller squads lacking internal resources and expertise have been forced to hire billing services that are paid a percentage (approximately 7%) to process claims to insurance companies. Larger squads have had to invest significantly in administrative staff to ensure payment. Both drain resources from the delivery of patient care.

We are also concerned that much of assistance for EMS from the federal government is directed through local government such as cities and counties. West Virginia's EMS system is structured differently from other states with many of the ambulance agencies being non-profits or private agencies. These EMS organizations are not directly affiliated with any government entities and the federal aid often does not reach all ambulance agencies.

Unlike many hospitals, EMS organizations could not layoff or furlough employees to conserve funds during this crisis. Personnel and units must continue to be on standby to respond to medical emergencies 24/7 or people will suffer. Heart attacks, overdoses and car wrecks continued during a pandemic.

In fact, West Virginia has experienced a surge in overdoses during the pandemic taxing the EMS system. According to the Office of Drug Control Policy's Data Dashboard, drug overdoses requiring an EMS response increased by 29% from 7,060 in 2018 to 9,094 in 2021.

Over a third of the individuals experiencing overdoses in 2021 were treated and released or refused to be transported. This means that EMS provided a response to over 3,000 overdoses where they provided response and treatment at a loss. EMS agencies are typically only reimbursed for care if they transport a patient. Since January 2018, Medicaid has reimbursed EMS agencies for naloxone administration and providing a "warm handoff: referral to substance use disorder treatment. But the rate reimbursed for naloxone (\$14.35) is less than half the cost of the drug and the \$43.44 paid for the "warm handoff" is inadequate to cover the cost of the crew, supplies and equipment.

EMS agencies cannot schedule staff around a set schedule like many healthcare providers that perform elective medical procedures. Ambulance providers have many of the same cost challenges faced by hospital emergency rooms but lack the additional revenue sources to offset those cost. Without state and county funding to support the fixed costs of readiness and standby, ambulance agencies only generate revenue when transporting a patient.

With hospitals being understaffed, the patient care burden at emergency rooms across the state has been shifted to the EMS agencies. Ambulance crews are being forced to remain with patients for hours in the emergency room waiting for patients to be transferred to beds.

The EMS agencies are not compensated for the extra time in the emergency room and, even worse, the ambulance and crew are taken out of service to the community during the wait, meaning they cannot respond to other medical emergencies.



Workforce Shortages

In addition to these financial challenges previously discussed, the same staffing problems being faced by Hospitals are being experienced by EMS agencies.

According to a survey conducted by the American Ambulance Association of nearly 20,000 employees working at 258 EMS organizations nationally, overall turnover among paramedics and EMTs ranges from 20 to 30 percent annually. With these percentages, ambulance services, even outside of the pandemic, face 100% turnover over a four-year period.

The pandemic exacerbated this shortage. The strain of the COVID pandemic has created substantial burnout among EMTs, Paramedics and other personnel. Retirements have increased. With wages rising across all professions, EMS personnel are leaving for other higher paying, lower stress careers. Some are moving to states with better funded EMS systems where they can earn higher wages. Those that remain are frequently refusing to work the overtime hours that were necessary to keep the EMS system functioning even prior to COVID-19.

Data provided by the Office of Emergency Medical Services indicates a 29% decline in the number of certified EMS personnel in West Virginia during the pandemic.

WEST VIRGINIA CERTIFIED EMS PROFESSIONS WORKFORCE TREND

	2019	2020	2021	Loss '19-'21
EMTs	4,586	3,944	2,943	1,643
Paramedics	1,690	1,634	1,432	258

Figure 2 Decrease in certifications Source: WVOEMS

But these alarming numbers do not tell the full extent of the problem faced by the state's EMS agencies. The West Virginia EMS Coalition believes that a substantial percentage of the paramedics and EMTs certified by West Virginia's Office of EMS are no longer actively participating in direct patient care. The West Virginia EMS Coalition formally requested data from the Bureau of Public Health to confirm these anecdotal reports and, while the information that we received appears incomplete, it does indicate a substantial difference between those certified as EMTs and Paramedics and those activity working to deliver EMS services in West Virginia.

	Documented in Direct Pt. Care	Certified	% of EMS Employment (labor participation)
EMT	688	2,943	23.3%
AEMT	4	57	7%
ACT	0	7	0%
EMT-P	710	1,652	43%

Figure 3 Actual Working number compared to certifications Source: WVOEMS FOIA

Even outside the stresses of the COVID-19 pandemic, a career in EMS is difficult and dangerous work. EMTs and Paramedics routinely encounter violent patients particularly when responding to a drug overdose or when caring for patients with behavioral health conditions. According to the U.S. Centers for Disease Control and Prevention, there are 2,000 EMS professionals injured every year in a violence-related incident. The rate of violence related injuries with lost workdays for EMS personnel is 22 times higher than the national average for all workers. More than half of assault-related injuries result in lost work time.

And because of the lack of financial support from state and local governments to fund the cost of readiness and 911 response, ambulance agencies in West Virginia struggle to compensate EMS professionals competitively with neighboring states. Employees can often earn \$2-3 more per hour simply by crossing the border.

US BUREAU OF LABOR STATISTICS OCCUPATIONAL AND WAGE STATISTICS - MAY 2020 EMERGENCY MEDICAL TECHNICIANS AND PARAMEDICS

	Mean Hourly Wage	Mean Annual Wage
National	\$19.41	\$40,370
West Virginia	\$14.67	\$30,520
Kentucky	\$15.40	\$32,030
Ohio	\$16.67	\$34,680
Pennsylvania	\$17.29	\$35,970
Virginia	\$17.69	\$36,790
Maryland	\$25.69	\$53,440

But EMS agencies are not just competing to recruit and retain EMTs and paramedics against other states, they are also competing for a workforce against other better paying health care professions.

US BUREAU OF LABOR STATISTICS OCCUPATIONAL AND WAGE STATISTICS MAY 2020 - WEST VIRGINIA

Profession	Mean Hourly Wage	Mean Annual Wage
EMTs/Paramedics	\$14.67	\$30,520
Registered Nurses	\$31.31	\$65,130
Radiologic Technicians	\$25.81	\$53,690
Pharmacy Technicians	\$15.33	\$31,890
Veterinary Technicians	\$15.64	\$32,540
Licensed Practical Nurses	\$18.72	\$38,940
Massage Therapists	\$21.46	\$44,640
Dental Assistants	\$15.50	\$32,240

These factors are contributing to a pending crisis where communities face a loss of emergency ambulance service. Even the largest and best staffed agencies in the state are facing periods of time right now where they would be unable to dispatch an ambulance if a call came to 911.

CARES Act Funding for EMS

The EMS community is grateful for Governor Justice's recent announcement that \$10 million of CARES Act funding will be directed to first responders. EMS providers feel like they have been overlooked during this COVID pandemic, and this funding is a welcomed sign of appreciation for the struggles they have experienced.

"We have done this to try to retain or recruit, you know, good, good, good people. These people have given so much. You talk about they run to the fire; they surely have."

— Gov. Jim Justice

We are optimistic this one-time funding can serve as a first step towards stabilizing the EMS system in West Virginia and provide a short-term bridge that will allow time for the Governor, Legislature, and other stakeholders to work together on a plan to address the long-term workforce, readiness and funding needs of ambulance agencies in West Virginia.

Recommendations

Free Education and Education Stipends

Reducing the cost of education would benefit EMS agencies that are struggling to recruit and retain EMTs and Paramedics. For volunteer EMS squads, it is extremely difficult to attract paramedics because of the rising costs of education. It is difficult enough to find individuals willing to volunteer. When you require individuals to obtain an education that costs thousands of dollars prior to volunteering, the task becomes impossible.

The cost of education is also an impediment in recruiting for paid agencies across the state. When balancing the cost of education versus potential earnings, many individuals considering careers in EMS elect to pursue other healthcare careers, such as nursing, where they can earn higher wages, often with signing bonuses.

Because of the severity of the workforce shortages, it is important that those enrolled in EMS education programs be able to focus full-time on their training and that programs can be completed on a compressed timeline. An EMS "academy" that facilitates an intensive, regionally based training program with a wage stipend and room and board would help accomplish this goal.

Expanded availability of education

In addition to affordability, EMS education needs to be accessible. Volunteers and individuals actively employed in other fields cannot travel long distances to receive training. Some of West Virginia's community and technical colleges (CTCs) do not currently offer EMS programs leaving their regions with limited access to this vital training. And even more concerning, other CTCs are limited in their ability to deliver courses in these communities due to territorial restrictions. All West Virginia CTCs should be required to offer EMS education and any artificial barriers to delivering this training in local communities should be removed.

Program enrollment and completion incentives for both students and instructors

West Virginia has lost over 35% of its EMTs and 15% of its paramedics since 2019. The worker force participation rate of EMS personnel has dropped by an even greater percentage. It is essential for the safety of our communities that these individuals are replaced.

To incentivize West Virginians to enroll and complete EMS training, individuals should be provided with monetary payments after completing benchmarks within a program such as enrolling and attending classes, completion of instruction and passing of National Registry or State Examinations.

The West Virginia EMS community recognizes that one of the crucial factors in the success of an EMS student is the quality of the instructor and time dedicated by the instructor towards student support outside of classroom hours. Monetary incentives should be provided to instructors whose students have high passage rates on certification examinations.

Expanded reimbursement for treatment in place

Ambulance agencies are only reimbursed by insurance when transporting a patient. However, under authority granted through American Rescue Plan, Medicare has issued a waiver to allow for the payment of treatment in place services for ground ambulances during the COVID-19 public health emergency (PHE) in cases where:

- The ground ambulance service was furnished in response to a 911 call (or the equivalent in areas without a 911 call system) and
- The patient would have been transported to a destination permitted under Medicare regulations, but such transport did not occur because of community-wide emergency medical service (EMS) protocols due to the COVID-19 PHE.

This policy is designed to aid ambulance squads that have experienced higher refusal rates during the pandemic. It also provides relief to strained hospital emergency rooms when EMS assesses patients and determines the individual has a low acuity level.

Medicaid is the largest insurance program in West Virginia covering over 30% of the state's residents. Medicaid has not established a payment program for treatment in place. Medicaid should be required to implement and make permanent a treatment in place program that reimburses ambulance agencies for providing care when no transport occurs at a rate comparable to Medicare.

Enhanced Medicaid Payments

Despite the January 2019 rate increases, Medicaid reimbursement rates remain below the cost of delivering patient care for ambulance agencies. And in the case of ALS level 1 emergency and non-emergency transports, the rate paid by Medicaid dropped following the most recent rate adjustments.

West Virginia Medicaid benefits from one of the highest federal match rates in the country. Currently, the state receives nearly \$4 in federal match for each dollar of state spending. Enhancing Medicaid payments to EMS agencies is a cost-effective way to provide additional support for ambulance services.

Permanent Funding Source for EMS – Support for the Cost of Readiness

Reimbursement methodologies for emergency medical services are not structured to capture readiness costs such as 24/7 staffing based on call demand experience, response time reliability, level of service provided, training, costs of equipment and supplies, and administrative expenses. This creates significant financial challenges for EMS agencies, particularly those in rural areas with patient volumes to support the fixed costs of operations.

A permanent funding source, like neighboring states, should be developed to provide base funding to support the availability and cost of readiness for 911 emergency response throughout West Virginia. Until such time as a permanent and adequate funding source for EMS can be established, the West Virginia EMS community would request the first \$55 million of any unappropriated state surplus be directed to the Emergency Management Response Fund created by Governor Justice to support EMS or the EMS Equipment and Training Fund.

All ambulance agencies designated to provide emergency response by one or more county dispatch centers should be eligible for the funding and allocations should be distributed on a formula that considers population, population density and the number of square miles contained within the service area.

Elimination of Licensure and Certification Fees

EMS agencies and personnel are required to pay a variety of licensure and certification fees. These fees, established by legislative rule title 64 series 48, include EMS agency and vehicle licensure fees and certification and renewal fees for paramedics, EMTs and other emergency medical personnel.

Essential public health and safety services should not be burdened with funding their own regulatory functions. These fees were lower or did not exist prior to 2011 but were implemented due to budget cuts within the agency. With the state's improved financial health, funding should be restored to the Office of EMS in an amount adequate to eliminate all licensure and certification fees without negatively impacting the office's ability to still perform its statutorily required functions.

EMT (Emergency Medical Technician) Restoration Program for EMTs that have allowed their certification to lapse.

1,643 EMTs and 258 paramedics have allowed their certification to lapse between 2019 and 2021. Given the critical shortage of EMS personnel, a program should be authorized to allow the Office of EMS to issue a temporary certification without examination to EMS personnel who have been certified within the last 5 years that apply for reinstatement and complete appropriate refresher training in protocols or specialty care.

Eliminate or Reduce Tolls for First Responders

West Virginia first responders, including emergency ambulances, are required to pay tolls when traveling the West Virginia turnpike. Minutes count when trying to save a life and fire departments and ambulances should not have to worry about tolls in emergency situations.

Of even greater concern are the toll increases on the West Virginia turnpike that were authorized to fund revenue bonds to finance road projects. The single fee discount program for EZ pass transponders, intended to offset these costs for West Virginians, is limited to passenger motor vehicles making first responder vehicles ineligible. Without access to the single fee discount program, an ambulance is required to pay between \$5.46 to \$6.75 per toll.

Ambulance agencies do not receive reimbursement for toll expenses from health insurance providers when transporting a patient. A roundtrip transport from Beckley to the Level 1 trauma center in Charleston costs a minimum of \$21.84 in tolls. If the transport originated in Bluefield, the minimum toll would be \$32.76. This is a significant cost if you consider the tolls can represent as much as 17% of the base rate reimbursement paid by Medicaid for a patient transport.

First responders should not have to pay toll charges when utilizing the West Virginia Turnpike for patient transportation or emergency response. Absent a complete toll waiver, ambulance services request the same ability to participate in the single fee discount program for EZ pass transponders as passenger vehicles.

Systemwide Review – including all levels of patient care including dispatch, EMS, hospitals, the regulatory structure, and other stakeholders

The needs of EMS are critical. Level zero conditions where an agency has no ambulances immediately available for dispatch in response to a call to 911 are becoming increasingly frequent. The recommendations listed above should all be immediately implemented without delay or additional study.

However, a longer-term review of the entire emergency medical system should be conducted including an assessment of the dispatch structure and policies, all aspects related to the delivery of Emergency Medical Services including ground and air transports and rapid response, the role of hospitals in emergency medical care including emergency rooms, the regulatory structure of EMS, data and communications and other applicable stakeholders.

The review should be conducted by an outside, independent, third party that can objectively evaluate both the strengths and weaknesses of the current system.

Media Coverage

Below are a series of links to media coverage of the challenges being faced by EMS agencies both in West Virginia and nationally. We encourage you to review these articles to better understand how every corner of the state is being affected by these problems.

[Statler: State's EMS agencies need help](#)

[Kent Carper: Facing the health care workforce crisis \(Opinion\)](#)

[Calls grow for state leaders to address EMS issues magnified by pandemic](#)

[Gov. Justice gave COVID-19 help to WV hospitals and nursing homes. But emergency services agencies ask 'what about us?'](#)

[Staff shortage hits home with ambulance services](#)

[Local ambulance staff overwhelmed, fatigued, and overworked](#)

[Mercer County Emergency Management asks residents to only call 911 for emergencies](#)

[Parsons resident concerned EMS Calls could go unanswered](#)

[EMS departments frustrated as long wait times at Charleston hospitals tie up services](#)

[Ambulance squads' troubles mirror state's](#)

[COVID-19 takes EMS worker shortage to 'crisis level': American ambulance association president](#)

[Ambulance, EMT first responders face 'crippling workforce shortage'](#)

[EMS services warn of 'crippling labor shortage' undermining 911 system](#)

[Ambulance services face national paramedic shortage](#)

[Worker shortage having an impact on ambulance response times](#)

[Ambulance EMT First Responder Face Crippling Workforce Shortage](#)