



EMERGENCY MEDICAL SERVICES (EMS)

*A Valuable Resource for
Community Vaccination
Campaigns*



Introduction

Across the nation, throughout rural, suburban and urban America, emergency medical services (EMS) responds to calls for help, 24/7.

Most people are familiar with the sight of an ambulance or fire truck rushing to the scene of a medical emergency, such as a motor vehicle accident or heart attack. The public became even more aware of the vital role of EMS in the community during the darkest days of the pandemic. At a time when so many were fearful and isolated, and some hospitals were overwhelmed and running out of beds, the public could count on EMS to continue to come to their aid.

Providing urgent medical care is a core part of the EMS mission. But EMS is also trained and equipped to provide illness

and injury preventive care and other non-emergent care – which is why EMS is often described as being at the crossroads of healthcare, public safety and public health.

During the COVID-19 public health emergency, paramedics and EMTs were deployed to nursing homes and hospitals to fill in for ill or quarantining staff, and to schools to help with school nurse shortages. Paramedics and EMTs also administered COVID-19 testing and monoclonal antibody infusions.

As the nation prepared to immunize millions of U.S. residents against COVID-19, the federal Public Readiness and Emergency Preparedness ([PREP Act Declaration](#)) included paramedics and EMTs as healthcare professionals who

could be called on to bolster the number of available vaccinators. The declaration also encouraged states to make the necessary regulatory adjustments to rapidly expand the number of healthcare professionals authorized to administer COVID-19 vaccines.

As communities gained an understanding of EMS as vaccinators, EMS agencies have been increasingly called on to assist with other types of vaccine drives, such as for flu shots and routine childhood immunizations. Millions of children fell behind on routine vaccines for diseases such as the measles because of pandemic restrictions, according to a [report](#) from the U.S. Centers for Disease Control and Prevention (CDC). There is an urgent need to get kids caught up, and EMS agencies may be able to help.



TABLE OF CONTENTS

PAGE 2

Introduction

PAGE 4

EMS as Vaccinators: The Basics

PAGE 6

CASE STUDY 01

Indianapolis EMS and
Crawfordsville Fire
Department, Indiana

PAGE 8

Community Checklist for an
EMS Vaccination Campaign

PAGE 9

CASE STUDY 02

Upper Pine River Fire
Protection District,
Bayfield, Colorado

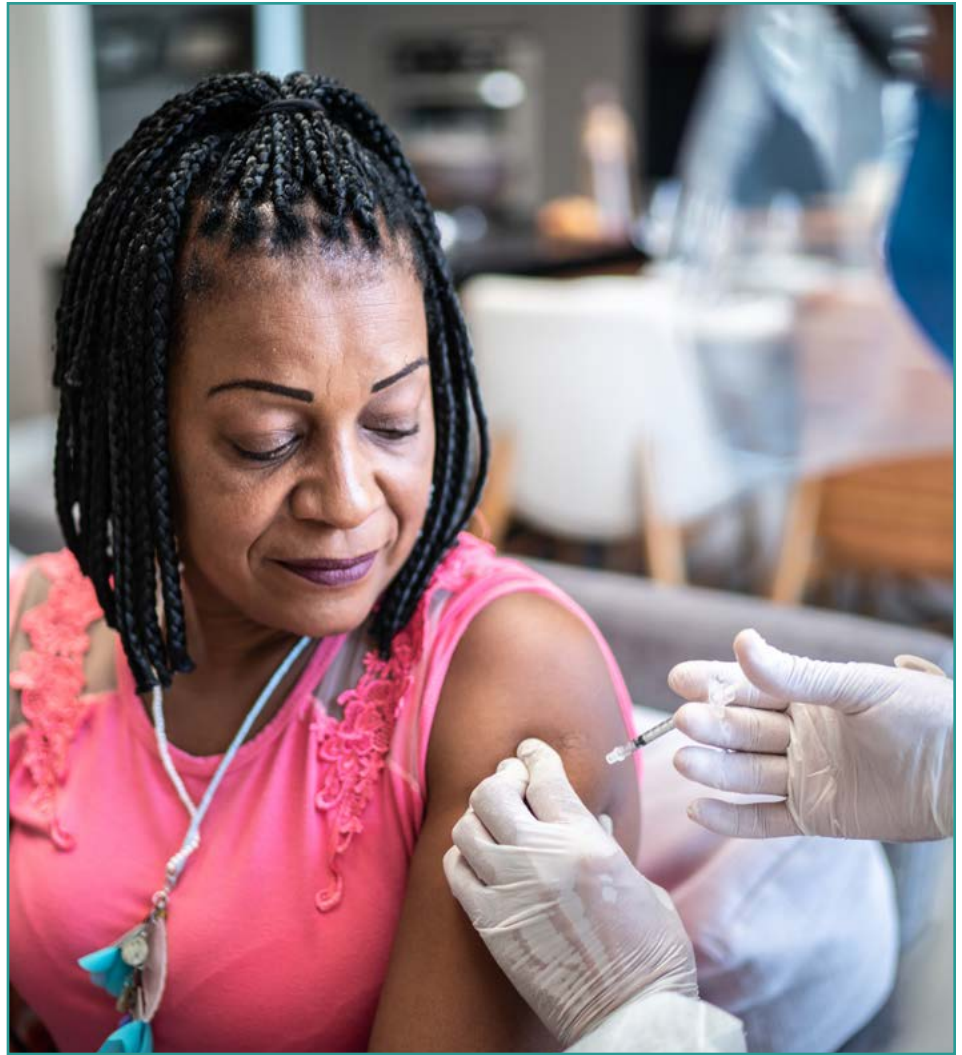
PAGE 10

Resources

WHY TURN TO EMS FOR HELP WITH VACCINE CAMPAIGNS?

EMS agencies, and the paramedics and EMTs who provide clinical care, have numerous attributes that make them an ideal resource for vaccination initiatives. EMS is especially well-suited for immunization campaigns that target medically underserved populations.

- Paramedics and EMTs are licensed by the state. The lead state office is usually the state Office of EMS, usually part of the Department of Health.
- Paramedics and EMTs are mobile and available 24/7.
- EMS agencies may have a fleet of vehicles that can be used to bring vaccines to the homebound or those who lack transportation.
- In most states, the clinical skills of paramedics and EMTs already include administering intramuscular injections/immunizations and treating allergic or adverse reactions with epinephrine, which is a requirement of vaccinators.
- Paramedics and EMTs are trained in wearing personal protective equipment (PPE) and in infection control procedures.
- Paramedics and EMTs have training and experience in treating a range of ages, from pediatric to geriatric patients.
- [National surveys](#) have found that paramedics and EMTs are among the most trusted first responders, including among members of vulnerable populations.
- There are over [1 million](#) licensed EMS professionals nationwide, including about 268,000 paramedics and 623,000 EMTs or advanced EMTs.



COMMITMENT TO SERVICE

Another attribute that makes EMS an ideal partner for a vaccine campaign is that paramedics, EMTs and EMS agency leadership have a deep commitment to serving their communities. Compassion for those who are struggling with health or psychosocial issues, and the desire to help those in need, is often why they chose their line of work.

During the pandemic, EMS personnel became a lifeline for people sick with COVID-19 and unable to leave their home. In some communities, EMS personnel made home visits and dropped off pulse oximeters and other medications when hospitals could not accept more patients. During times when PPE was in short supply, EMS continued to be there for their patients and their communities, even at risk to themselves.

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Dr. Michael Kaufmann, the former state EMS director in Indiana who helped lead his state's EMS participation in vaccine initiatives, explained his reasoning for turning to EMS to assist.

"EMS is available 24/7. They are mobile. They are licensed, and their education and training, especially the paramedic workforce, gives them a high level of awareness of health problems, particularly acute health problems but also how chronic disease ties into it. They are embedded in every community. It just made sense."

EMS as Vaccinators

The Basics

This section will help you better understand how EMS works in your local area, who to contact at your local EMS agency, and what considerations EMS agencies will have in participating in a vaccine campaign.

WHAT IS EMS?

EMS in the U.S. can be provided by a number of entities, both public and private.

- Public EMS agencies include local fire departments or EMS agencies that are part of municipal or county government.
- Private EMS agencies include private companies that provide ambulance services or hospital-based EMS.

All types of EMS agencies participated in COVID-19 vaccination campaigns and can be valuable partners in vaccination initiatives.

WHO MAKES UP THE CLINICAL STAFF OF AN EMS AGENCY?

EMS agencies are staffed by healthcare professionals who are licensed by the state at various levels: paramedics, advanced emergency medical technicians (AEMTs), EMTs (or EMT-Basics) and emergency medical responders (EMRs). Paramedics, advanced EMTs, EMTs and EMRs operate under a “scope of practice,” which is determined by state law and a local medical director’s discretion.



Paramedics have the highest level of training and are permitted to perform more medical services than those licensed at other levels. Next comes advanced EMTs (AEMTs), followed by EMTs, and finally emergency medical responders (EMRs).

Some paramedics have additional training and serve as [community paramedics](#), who serve as an extension of primary care and public health. The focus of community paramedics is on preventive care and caring for individuals with chronic disease, particularly in underserved populations. Community paramedic programs may also be called mobile integrated healthcare (MIH). Not all communities have a community paramedicine program, but if yours does, it would be a good candidate to help with a vaccine campaign.

WHAT IS THE ROLE OF AN EMS MEDICAL DIRECTOR?

Every EMS agency has a physician medical director who provides medical oversight to EMS agencies and develops patient care protocols. The EMS medical director will be involved with developing and approving immunization administration protocols for the agency’s clinical staff, and the clinical staff will function under the EMS service’s medical direction to participate in vaccine administration. In addition, the medical director will determine if EMS personnel need any specific training to administer vaccines.

WHICH EMS AGENCY PERSONNEL ARE PERMITTED TO ADMINISTER VACCINES?

Regulations vary from state to state. But a [survey](#) of state EMS offices by the National Association of State EMS Officials (NASEMSO) in 2021 found:

- Paramedics are permitted to administer intramuscular (IM) vaccinations in all states.
- AEMTs and EMTs are permitted to administer IM vaccinations in many states.

During the COVID-19 public health emergency (PHE), numerous states acted to allow AEMTs or EMTs to administer vaccinations that had not previously. According to the NASEMSO survey:

- 45 states permit AEMTs to give vaccinations, with 21 always allowing it and 24 allowing it due to the pandemic.
- 26 states permit EMTs to give vaccinations, with 12 always allowing it and 14 temporarily allowing it.
- 7 states permit EMRs to give vaccines, with 1 state (Texas) always allowing it and 6 states temporarily allowing it.

There can be nuances. In [California](#), for example, EMTs and AEMTs are permitted to administer COVID-19 vaccines, but they are not permitted to draw up the vaccine. Only paramedics can prepare the vaccine for administration.

EMS agency staff not permitted to administer vaccines can assist with other aspects of vaccine clinics, such as documentation and record keeping.



All states allow paramedics to give vaccines

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DO EMS PERSONNEL NEED SPECIAL TRAINING TO PROVIDE COVID-19 OR OTHER VACCINES?

Most likely, yes. The medical director will determine the specifics. Several examples of EMS vaccine training videos and curriculum used by EMS agencies participating in COVID-19 vaccine campaigns are provided in the [Resources](#) section.

CAN EMS PROVIDE ALL TYPES OF VACCINES?

Which vaccines paramedics and/or EMTs are permitted to administer, and to what ages, is determined by state regulations and/or medical director discretion.

Indianapolis EMS and Crawfordsville Fire Department, Indiana

HOW EMS AND THE STATE OF INDIANA WORKED TOGETHER TO IMMUNIZE MEDICALLY UNDERSERVED PATIENTS

In the fall of 2020, communities around the nation braced for a feared “twindemic” of COVID-19 and seasonal influenza, which could push already strained healthcare systems to the brink. Those worries prompted the state of Indiana to set ambitious goals for expanding flu vaccinations, before the COVID-19 vaccines had arrived.

They found an ally in Indianapolis EMS (IEMS). In October 2020, IEMS, in partnership with the city’s [Shepherd Community Center](#), held a series of community flu shot clinics. Their goal was to prevent flu, and develop best practices for eventually holding COVID-19 vaccine clinics.

“EMS is a fantastic force multiplier in healthcare, to get out in the community and help do the heavy-lifting with the health department to get the masses vaccinated,” said Shane Hardwick, the IEMS paramedic who led his agency’s effort.

Under the National EMS Scope of Practice Model, which has been adopted by many states, paramedics and advanced EMTs (AEMTs) are permitted to administer immunizations. In December 2020, EMT-Basics were granted permission by [executive order](#) of the Indiana Department of Homeland Security to administer COVID-19 vaccines for the duration of the public health emergency. There are about 24,600 licensed EMS professionals in Indiana.



TAKING VACCINES TO WHERE THE PATIENTS ARE

IEMS paramedics set up their flu vaccine clinic in a parking lot in a low-income neighborhood, where many residents struggle to access medical care and other basic needs.

To encourage participation, the free immunizations were offered during a regularly scheduled food distribution event. “While they were waiting in line for food, we had them filling out consent forms for the flu vaccine,” Hardwick said. As an added incentive to get the shot, Shepherd Community Center gave residents McDonald’s gift cards or gas cards.

To keep the line moving, one medic served as the “prepper” to prepare the vaccine, another as the “poker” to administer the vaccine, and a third as the “paper person”

to handle documentation. Paramedics determined their three-person crew could vaccinate one person every 2.5 minutes, or 24 people in an hour. Over four days, they vaccinated about 475 people.

GETTING EMS INVOLVED WITH VACCINES STATEWIDE

IEMS best practices were used to help create state guidelines for EMS as vaccinators.

“We looked at this pilot to be able to show that EMS could provide vaccines in a cost-effective manner, and they could reach at-risk or hard-to-reach populations, such as the uninsured,” said Dr. Michael Kaufmann, the former state EMS medical director.

In November 2020, the Indiana Department of Homeland Security published a 72-page [guidance document](#)

for EMS conducting vaccine clinics. The document contains a one-hour vaccine training program, vaccine protocols, how to register vaccines with the state's Immunization Registry Program, vaccine storage and handling tips, and tips for planning, organizing and managing drive-through and walk-up clinics.

That success led to the development of the [Homebound Hoosier](#) vaccine project in February 2021, in which EMS professionals brought COVID-19 vaccines to the homebound. Initially, when vaccines were still in short supply, paramedics were given leftover vaccines that otherwise would have been thrown away.

"We have these mobile resources available at a moment's notice," Kaufmann said. The Homebound Hoosier project "matched up available or leftover vaccines from clinics with EMS providers and homebound patients who didn't have another way to get them."

As vaccine supply increased, additional vaccines were allocated to local health departments and participating EMS agencies. Indiana residents who called 211 inquiring about vaccination were screened, and if they met criteria such as being homebound or lacking transportation and at high risk of serious illness, they were entered into a database that EMS then used to contact them to schedule an at-home vaccine appointment.

Across Indiana, over 50 EMS agencies participated in Homebound Hoosiers, administering nearly 3,000 vaccine doses. Indiana's Medicaid program also approved reimbursing EMS agencies for vaccine administration, although "many just did it out of goodwill because it was the right thing to do for their communities," Kaufmann said.

EMS-STAFFED VACCINE CLINICS IN SCHOOLS

Another EMS agency that led efforts to vaccinate Indiana residents was Crawfordsville Fire Department, in a rural community outside Indianapolis. Their department's Mobile Integrated Health (MIH) Program was funded by state grants and staffed by firefighter-paramedics whose mission was to fill gaps in healthcare services for Medicaid patients and the uninsured.

Since 2017, Crawfordsville community paramedics had provided flu and pneumonia vaccines to patients with chronic diseases enrolled in their MIH program. That program was later expanded to include high-risk obstetric patients. Community paramedics also administered hepatitis vaccines inside a jail in collaboration with the health department.

As the nation prepped for the COVID-19 vaccine rollout, the fire department registered as a provider of Vaccines for Children (VFC) and vaccines for uninsured adults, known as Section 317, which are [federally funded programs](#) that provide no cost vaccines. The department also partnered with [VAXCare](#), enabling them to vaccinate adults and children with any type of insurance.

When COVID-19 vaccines became available, firefighter-paramedics staffed a vaccine event inside a vacant grocery store for teachers and eligible school district staff. When vaccines were approved for teens ages 16 and up, the fire department held vaccine events in the gyms of three high schools.

Crawfordsville Fire Department community paramedics have also administered vaccines to children in their homes whose families were referred to the MIH program. They have also held "back to school" immunization clinics to help kids catch-up on the routine childhood vaccines missed due to lockdowns.

All told, the fire department has administered about 4,000 vaccine doses. Administering vaccines takes "trust, credibility and time," said Paul Miller, division chief of EMS for Crawfordsville Fire Department.

"There is a lot of mistrust and we are trying to capitalize on our firefighters and local health department being trusted and known professionals to go out and deliver this," Miller said. "The more opportunities we can provide to break down barriers and help people get immunized, the greater the service we provide to our community. If you have transportation barriers, we can bring the vaccine to you. You shouldn't have to take a day off work to get your child immunized, so if we can provide them in the schools, then we will."



Community Checklist

for an EMS Vaccination Campaign

→ Identify the EMS agency in your area. The agency could be part of your local government, fire department, a hospital or a private ambulance service.

→ Contact agency leadership, such as the EMS chief or fire chief, president or CEO, and the physician medical director.

→ Coordinate with other entities, including but not limited to:

- Local public health officials to ensure compliance with local vaccination programs.
- State health department. Providers that administer vaccines may need to register as a vaccinator with the state and fulfill other state-level requirements for administering and documenting vaccinations. Your local EMS agency may already be registered, or they may be able to operate as a vaccine provider under another healthcare organization that they're associated with, such as a hospital. The CDC has information on enrolling as a [COVID-19 vaccine provider](#) or in the [Vaccines for Children \(VFC\) Program](#).
- State EMS Office, which has expertise on EMS regulations.
- Other community organizations that may be interested in partnering with you or supporting your vaccine campaign.



→ Plan your clinic or vaccine campaign.

- Decide who you want to reach, and which vaccines to provide. Also determine if you want to invite members of the community to a specific location, or if you are going to bring vaccines to them in their home or to another location.

→ Promote your clinic or vaccine campaign.

- Explain who the clinic is for, including the age range and whether you need an appointment.
- Use multilingual and multimedia channels to widely post the clinic purpose, dates, locations, times and population that will be served.

*For a comprehensive checklist of considerations for EMS before, during and post-vaccine event, including scheduling second doses and reporting, see the Federal Healthcare Resilience Work Group EMS/Prehospital Team's **Utilization of Emergency Medical Services (EMS) Clinicians as Vaccinators for COVID-19 Vaccine Administration.***

Upper Pine River Fire Protection District, Bayfield, Colorado

BRINGING COVID-19 VACCINES TO RURAL, HARD-TO-REACH COMMUNITIES

“As EMS practitioners, we know the diabetics in our area who can’t leave their house, the people without cars who call a cab to get to their doctor’s office, and those who have just enough to fill up their gas tank to come into town once a month to get groceries.”

Those are the words of Bruce Evans, chief of the Upper Pine River Fire Protection District, a super rural agency serving a population of 12,000 people spread over 272 square miles in La Plata County, Colorado.

“I knew reaching those patients would be challenging. I also believed it was our duty to try,” he said of his department’s vaccine initiative.

LAYING THE GROUNDWORK

In September 2020, the fire department began offering COVID testing, while planning a vaccination program. That included rehabbing a vaccine fridge given to them by the public health department, and training EMT’s to administer vaccines under the guidance of state and local EMS medical directors.

When COVID-19 vaccines became available, EMTs and paramedics shadowed staff at a local hospital administering the first vaccines to healthcare workers.



Upper Pine River Fire Protection District began holding vaccine clinics in the community on January 10, 2021. As vaccine supply increased, they also sent mobile units to outlying rural communities.

“Because our agency got on board with vaccinations early, the state of Colorado contracted with us to assist other public health clinics in reaching underserved communities. We developed processes to deliver vaccines wherever they were needed. We’ve visited an Indian reservation, stood up a walk-in vaccine clinic at a pancake breakfast in a small rural town, and have shown up at businesses and vaccinated their entire staff,” he said.

TAKEAWAYS

All told, the fire department’s staff of 30 administered over 5,000 vaccines. “We learned a lot. We learned that our community has a large population of people over 70 who are shut-ins, or nearly so.”

“We learned the value as an EMS agency of participating in our local healthcare coalition. The relationships built with our health department and trust between our organizations was invaluable in facilitating our efforts.”

“We also learned that the public’s trust in our agency was key in overcoming vaccine hesitancy. We’ve had a lot of long conversations with residents about the value of vaccines, how they work and what are the risks. I was encouraged when those conversations convinced even some of the skeptics to get vaccinated.”

The fire department’s paramedics and EMTs also benefitted from participating. Some people were so relieved to be vaccinated after months of fear and isolation, they cried. “People in our community brought us cookies, lunch and their gratitude. It helped our providers refuel their tank, knowing they are potentially saving a life,” Evans said.

Resources



NATIONAL-LEVEL GUIDANCE

1. **National Association of State EMS Officials**, [A Survey of Emergency Medical Personnel as Vaccinators](#), March 4, 2021

Survey showing the state-by-state status of regulations involving paramedics, AEMTs, EMTs and EMRs in administering COVID-19 vaccines.

2. **Federal Healthcare Resilience Workgroup**, [EMS/Prehospital Team, Utilization of Emergency Medical Services \(EMS\) Clinicians as Vaccinators for COVID-19 Vaccine Administration](#), Jan. 23, 2021

Comprehensive guidance for EMS in developing a plan for vaccination events.

3. **CDC**, [COVID-19 Vaccination Program Operational Guidance](#)

The CDC's resource library for COVID-19 vaccine providers, including mobile vaccination resources, special considerations for the homebound, and vaccine provider requirements and support.

STATE-SPECIFIC RESOURCES, COULD BE ADAPTED TO OTHER STATES

4. **Indiana Department of Homeland Security**, [EMS Role and Guidance in Community Vaccinations](#)

Step-by-step guidance from the state of Indiana for planning and running EMS vaccine clinics, including staffing recommendations, vaccine clinic location and layout best practices, supplies needed, training and ideas for promoting your clinic.

5. **California Emergency Medical Services Authority**, [EMS Guidance for COVID-19](#)

Documents and regulations related to EMS and COVID-19 vaccines from California.

6. **American Journal of Emergency Medicine**, [EMS Incorporation in Mass-Vaccination: A Feasibility Study](#), November 2021

Peer-reviewed research on a successful flu vaccine campaign conducted by paramedics, EMTs and EMT students with Orange County Emergency Services and Orange County Health Department in North Carolina.

7. **South Carolina Department of Health and Environmental Control**, [Policy for Administration of Vaccines by EMS Personnel](#), December 2020

Guidance from the state of South Carolina for EMS as vaccinators for hepatitis A, influenza and COVID-19.

TRAINING FOR EMS AS VACCINATORS

8. **Maryland Institute of Emergency Medical Services Systems**, [Vaccine training video for EMTs](#)
9. **Oregon Health & Science University (OHSU)**, [COVID-19 vaccine training video](#)
10. **Northwestern Medicine North Region EMS System**, [Vaccine training curriculum](#)
11. **CDC Resource Library**, [Web-based immunization training modules](#)
12. **National Highway Traffic Safety Administration, Office of EMS**, [Just in Time Training Resources for EMT SARS-CoV-2 Vaccinators](#)

ABOUT NAEMT

Formed in 1975 and over 75,000 members strong, the National Association of Emergency Medical Technicians (NAEMT) is the only national association representing the professional interests of all emergency and mobile healthcare practitioners, including emergency medical technicians, advanced emergency medical technicians, emergency medical responders, paramedics, advanced practice paramedics, critical care paramedics, flight paramedics, community paramedics, and mobile integrated healthcare practitioners. NAEMT members work in all sectors of EMS, including government agencies, fire departments, hospital-based ambulance services, private companies, industrial and special operations settings, and in the military.

