

Better Together

COLLABORATING FOR THE COMMUNITY



Hennepin Healthcare

12.2

-

2023 - A YEAR IN REVIEW

421



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Welcome!

Since 1894, Hennepin EMS has proudly delivered medical care and transportation to the residents and visitors of Minneapolis and the surrounding communities. While much has changed since our horse and buggy days, we've long recognized the strength and expertise that we bring to every response call as part of the Hennepin Healthcare System (HHS).

That strength and expertise comes from a rich heritage of innovation and continues now as much as it did then. We're always looking for ways to improve our services and better serve our community partners.

One example: our Basic Life Support Program, which we launched last August. This program allows two EMTs to respond to low acuity (non-life-threatening) calls, instead of requiring paramedics to do so. It's an efficient way to ensure we're sending medical professionals appropriate for the level of care required by the patient – the right resource at the right time.

In addition to programs like this, we're pioneering new initiatives to create a sustainable staffing model; continuing to invest in top-of-the-line technologies to improve patient survival rates; routinely training fellow first responders on the latest treatments and techniques; sharing our insights in national media conversations on EMS; and so much more.

In our field, if you're not moving forward, you're moving backward, and here at Hennepin EMS, we refuse to sit still. As your partner, you can expect us to continue delivering on our promise to provide the best-in-class service — just as we always have, for years to come.

Sincerely,

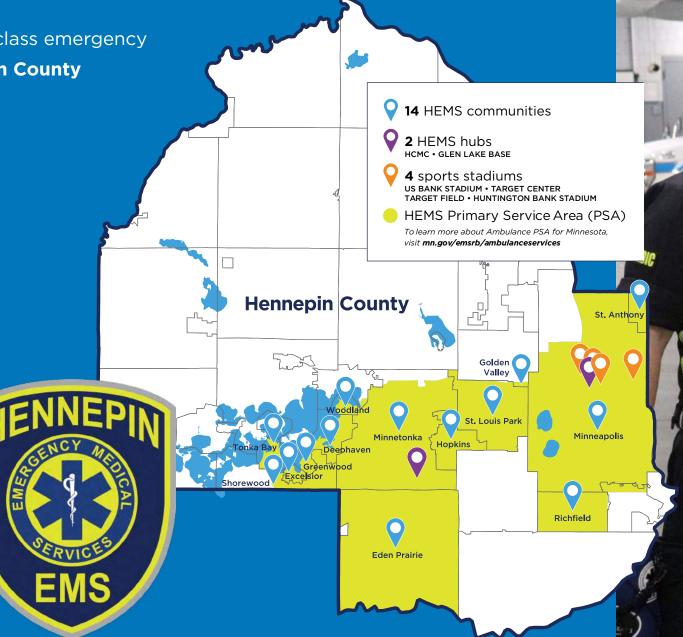
Martin Scheerer EMS Chief — Senior Director of EMS, Hennepin EMS MARTIN.SCHEERER@HCMED.ORG | 952-292-6555



Serving Our Primary Service Area (PSA) Communities

Hennepin EMS provides world-class emergency medical services to **14 Hennepin County communities**, including:

- Minneapolis
- **9** St. Louis Park
- Eden Prairie
- *Q* Richfield
- Minnetonka
- **9** Hopkins
- **9** St. Anthony Village
- *Q* Excelsior
- Shorewood
- Peephaven
- **9** Tonka Bay
- Golden Valley
- Greenwood
- **9** Woodland



Our Mission

MADISON G

429

Hennepin

TOTAL CONTRACTOR

Healthcare

EPIN EMS

Hennepin EMS partners with our community, our patients and their families to ensure access to outstanding care for everyone, while improving health and wellness through teaching, patient and community education, and research.

CHIEF

ST. ANTHONY VILLAGE

TOTAL RESPONSES IN 2023: **1,502**

RESPONSE TIMES (AVERAGE):

9.7

code 2 calls:

CODE 3 CALLS: 961



Summer is parade season! St. Anthony Village held its annual VillageFest in August. One of our rigs took part in the parade along with representatives of the Hennepin Healthcare St. Anthony Village Clinic & Pharmacy.





When it's fire department open house season in our PSA communities, you'll often see a Hennepin EMS rig taking part! In 2023, HEMS visited the St. Anthony Village event along with several other locations. We love this opportunity to share what we do with community members, city officials and kids.



Success Story

In August 2023, we received the following message from a police sergeant in St. Anthony Village:

"I'm reaching out as I just left the scene where a Hennepin EMS medic crew responded to an older male on blood-thinner that suffered a head injury from a fall. He was evaluated, but insistent in his refusal to get on an ambulance or go to a hospital for further treatment. HEMS responding paramedics spent a great deal of time listening to this patient and providing sound medical reasoning to go to a hospital ... It was exactly the way I would hope a loved one of my own would be treated by first responders. Time and time again I see HEMS paramedics do incredible things on scene, whether it's trauma related, sudden cardiac arrest, persons in crisis, or something far less minor.

Over my 24 years here, and having worked around several other ambulance services, HEMS medics have set themselves apart. I see them as without equal and would want your medics working on me if I ever found myself needing it. The St. Anthony PD has enormous respect for the HEMS paramedics and we are grateful to have them as our EMS providers and partners."

Success Story

HEMS has developed a very successful Advanced Life Support (ALS) protocol program in partnership with the St. Anthony Village Fire Department. The program is called the Paramedic Assist Unit and is a group of paramedic firefighters who can deliver ALS care while HEMS personnel are en route to a scene. HEMS trains these paramedic firefighters to provide care at this level. We're looking forward to expanding this successful program to other communities we work in, as it's a great example of how we can work hand-in-hand with fire departments to administer efficient pre-hospital care.

SOUTH LAKES COMMUNITIES

Excelsior, Shorewood, Deephaven, Tonka Bay, Greenwood and Woodland

TOTAL RESPONSES IN 2023:

939

RESPONSE TIMES (AVERAGE): **12.2**

CODE 2 CALLS:

CODE 3 CALLS:



Chief Scheerer enjoyed speaking at Excelsior Morning Rotary and Greenwood City Council this fall and sharing the ways HEMS is innovating to better serve the South Lakes communities.



The Excelsior-Lake Minnetonka Chamber of Commerce produces and hosts the only public July Fourth fireworks event on Lake Minnetonka. Once again this year, Hennepin EMS provided emergency response service — by land and "by sea" — to the many attendees of this Independence Day tradition.

Success Story

HOPKINS

TOTAL RESPONSES IN 2023:

2,554

RESPONSE TIMES (AVERAGE):

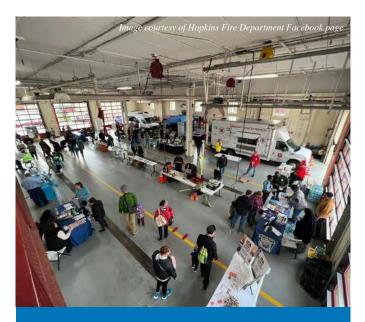
9.2

CODE 2 CALLS:

code 3 calls: **1,652**



We love supporting community events with EMS services in and around our primary service area all year round. This year marked the 89th annual Hopkins Raspberry Festival. What began in 1935 to promote local raspberry growers continues today as a celebration of community and its current local businesses. HEMS paramedics were at the festival in case EMS support was needed.



Every October during Fire Prevention Week, the Hopkins Fire Department holds an open house at the fire station. We are always pleased to join with our first responder partners on these events to educate the community on how to best stay safe and healthy.



HEMS supported Hopkins' first annual Pride Festival down Main Street last June. It was a well-attended and lively event!

GOLDEN VALLEY

TOTAL RESPONSES IN 2023:

69

RESPONSE TIMES (AVERAGE):

8.4

CODE 2 CALLS:

code 3 calls:



Only a small portion of Golden Valley is included in the HEMS Primary Service Area, and we proudly assist North Memorial Ambulance Service when called upon to serve the city's residents.

RICHFIELD

TOTAL RESPONSES IN 2023:

4,491

RESPONSE TIMES (AVERAGE):

8.3

code 2 calls: **362**

code 3 calls: **3,165**



Our team enjoyed seeing everyone's Halloween costumes during Richfield's fifth annual Trunk or Treat event at the Morris Nilsen Funeral Chapel. We loved handing out treats while also sharing Halloween safety reminders with kids and parents.

ST. LOUIS PARK

TOTAL RESPONSES IN 2023:

6,028

RESPONSE TIMES (AVERAGE): 8.6

CODE 2 CALLS:

CODE 3 CALLS: **3,219**



On our 2023 tour of fire department open houses, HEMS stopped at St. Louis Park Fire Station 1 for a great day of greeting families.



The MinnesoThai Culture and Food Festival in St. Louis Park was a multi-day event with an array of colors and flavors! It was one of many street festivals that Hennepin EMS supported this year.

EDEN PRAIRIE

TOTAL RESPONSES IN 2023:

4,536

RESPONSE TIMES (AVERAGE):

9.3

CODE 2 CALLS: **378**

CODE 3 CALLS: **2,777**



Success Story

We received this note from a patient who was helped by two of our paramedics, Derek Smith (L) and CK Mitchell (R), in Sept. 2023. We always appreciate when we hear from patients so that we can celebrate the fine work of our team and a positive patient outcome:

"I had sudden cardiac arrest (SCA) last week (9/14 around 4pm) in Eden Prairie. The team of first responders, including Hennepin EMS, are the reason I am in the 10% that survive an out-of-hospital SCA. I am alive, home from the hospital and doing well. I arrested in front of my children and my husband started CPR. They, and I, are more grateful than we can say to the team that provided such amazing care and rapid transport."



Our team enjoyed visiting the City of Eden Prairie's open house this October and meeting community members.



Hennepin EMS was on deck as hundreds of young athletes competed in the youth baseball tournament this summer.

MINNETONKA

TOTAL RESPONSES IN 2023:

4,760

RESPONSE TIMES (AVERAGE):

9.7

code 2 calls: **342**

CODE 3 CALLS: **3,203**



Minnesota is known for its bicycle-friendly communities, including the City of Minnetonka. This year, the annual Tour de Tonka bike ride took place the first Saturday of August, attracting more than 3,000 riders and over 600 volunteers. Hennepin EMS, along with other first responder agencies, was on hand to offer emergency medical services if needed. The Tour de Tonka features routes of various lengths from 16 to 100 miles around Lake Minnetonka. Despite the start being a bit rainy this year, it was a great event once again!



We love the chance to connect with kids and share more about our jobs in emergency response. This summer, at one of many events of its kind, Hennepin EMS brought an ambulance to Creative Kids Academy in Minnetonka for their students to learn more about "community helpers." The students explored the ambulance, along with a Minnetonka police vehicle and fire truck, and asked many questions about our jobs as first responders. These days are just as fun for us as they are for the kids!

Success Story

In early August in Glen Lake, our paramedics and a physician were part of a coordinated response to a complex motor vehicle accident that included a prolonged extrication upwards of 90 minutes. The crew was able to start multiple IVs, help initiate a blood transfusion on scene, and never left the patient's side as he was being removed from the vehicle.

The patient needed to be sedated, and moments before that procedure he said, "I'm in the best hands with Hennepin EMS."

MINNEAPOLIS

TOTAL RESPONSES IN 2023: **78,878**

RESPONSE TIMES (AVERAGE):

6.5

CODE 2 CALLS: **5,184**

CODE 3 CALLS: **48,164**



As the 16th largest metropolitan area in the United States, Minneapolis draws crowds from all over as a hotspot for entertainment and events of all kinds. In 2023, our special events staff had the busiest event schedule in recent history. This included offering EMS support at several sporting events and concerts, including those taking place at Target Center, Target Field, Huntington Bank Stadium and U.S. Bank Stadium.



Indoor and outdoor events happen all year. One annual winter event where HEMS offers EMS support is the Special Olympics Polar Plunge at Lake Nokomis. The 2023 Plunge was the largest in Minnesota history, with 4,000+ plungers and \$4.8 million raised for Special Olympics Minnesota to provide yearround training and services to thousands of athletes with intellectual disabilities.



After a seven-year hiatus, the Taste of Minnesota returned in 2023. And this year for the first time, the event was held in downtown Minneapolis on Nicollet Mall. Our Special Operations team was on hand for the event, which attracted thousands of people enjoying the festivities, food trucks and live music.

Success Story

On May 10, Hennepin EMS along with multiple units from Minneapolis Police and Minneapolis Fire responded to a call at West River Parkway when a citizen broke his leg after slipping down the embankment. After an initial search of the wooded area, crews were able to locate the patient. Initially, crews were preparing for a technical rescue, as the pitch of the riverbank and the patient's condition added complexities to the response. However, with the amount of first responders available to assist, crews were able to manually lift the patient out of the wooded area and back to the walking path. This call is another example of the efficient, collaborative work we do every day with our fellow public safety departments.



Image courtesy of Wayne Kryduba for MN Run Series

Hennepin EMS supports running events throughout the Twin Cities all year round, especially in the summer and fall months. The RBC Race For The Kids is one of those. It started in 2016 and supports the Ronald McDonald House Charities Upper Midwest. Organized by the Minnesota Run Series. the event raises \$50,000 to provide children with a home away from home when they are going through a crisis.



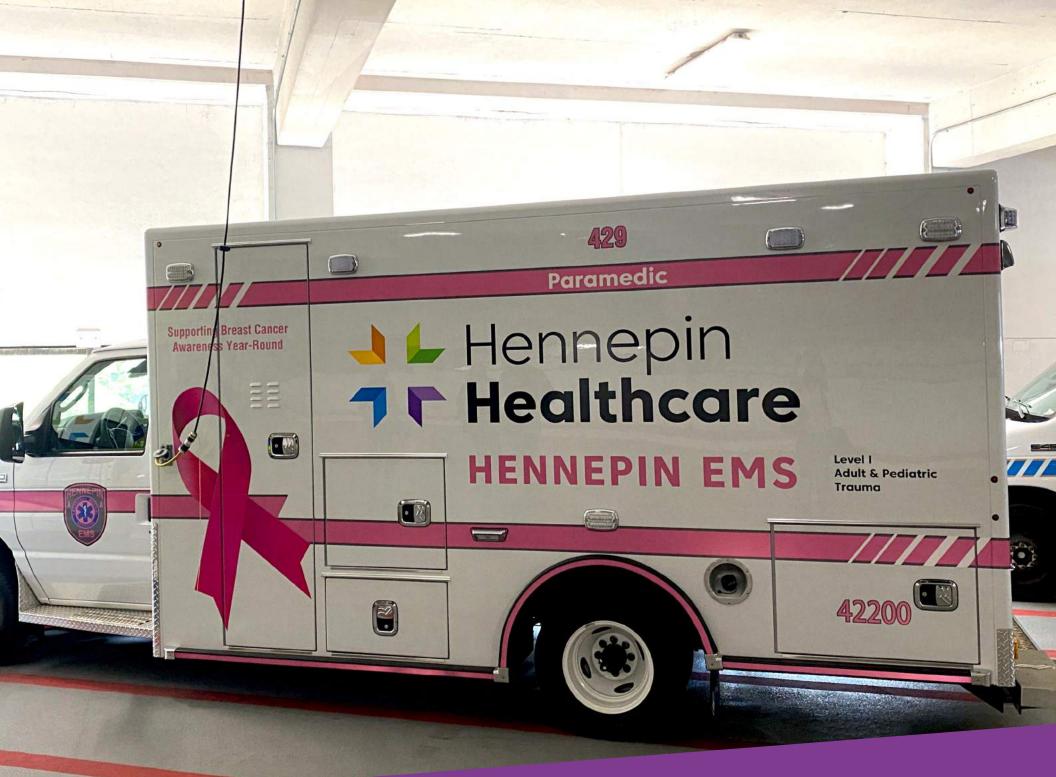
The Minneapolis Aquatennial is the annual summer celebration of the City of Lakes and a tradition for many Twin Cities residents. From the torchlight parade to the fireworks extravaganza, HEMS was at the four-day event offering EMS support to staff. vendors, volunteers and attendees.

In October 2023, Hennepin EMS rolled out a special ambulance in honor of those who have battled breast cancer. Our paramedic Ali Gaffney knows this journey all too well, because in July 2022 at the age of 31, she was diagnosed with stage four breast cancer.

With support from the HEMS team, she has continued to serve the community between treatments, appointments, and difficult days. After a surprise and emotional reveal, Ali and her teammate were assigned the pink truck for its inaugural shift on the streets.

"The Pink Truck," ambulance #429, is a state-of-the-art, fully operational ambulance that matches all other HEMS rigs apart from its exterior pink graphics. The ambulance will be used year-round to raise breast cancer awareness. Like all HEMS ambulances, it will be in service for the next three and one-half years.





Pursuing Excellence

Our commitment to excellence makes us one of the top EMS providers in the nation. This dedication is evident in everything from our cuttingedge technology to our efficient protocols to our specially trained teams and the way our staff handles Minnesota's extreme weather conditions. It's not just us patting ourselves on the back - we are affirmed by the multiple awards, patient letters, and positive survey feedback we received this year, while media and other EMS agencies continue to tap us for innovation and industry insights.



Awards & Accolades

Paramedic Gets State Patrol Award

While we know that our HEMS staff does amazing work on the job, one of our paramedics was recently recognized for applying his response skills as a private citizen. In 2023, Jason Wiskow received the <u>Minnesota</u> <u>State Patrol Meritorious Citizenship Award</u> he was awarded in 2022. This award is presented to citizens who have assisted the Minnesota State Patrol in providing a significant service to the public. Last spring while Wiskow was commuting home from work, he came across a single-vehicle motorcycle accident. The rider had lost control and hit the guardrail, amputating his lower leg. Wiskow applied a tourniquet and rendered aid until one of our crews arrived. Thank you, Jason, for being a compassionate human both on and off the clock.



EMSRB Rating

In 2023, Hennepin EMS was recognized by the <u>Minnesota Emergency Medical Services Regulatory</u> <u>Board</u> (EMSRB) for providing outstanding pre-hospital clinical care to patients in 2022. While there are more than 250 ambulance services in Minnesota, this special recognition was only awarded to 95 services. To qualify, we had to achieve a performance rating of 80% or higher in five or more performance measures, including strokes, chest pain, trauma, and pediatrics. The EMSRB is the statewide agency responsible for regulating ambulance services in Minnesota. The announcement comes after 2022's record-breaking year for Hennepin EMS in call volumes – 89,666 to all areas.

Patient Survey Results

HEMS conducts regular patient surveys to help understand how we can serve our communities better, and we're proud of our outstanding scores. A few highlights from 2023 Quarter 1 include:

- 4.72% increase in overall score.
- 96.71% extent to which the ambulance arrived in a timely manner (compared to the 92.66% national average).
- 97.73% skill of the medics.
- 97.73% degree to which the medics listened to you and/or your family.
- 97.73% extent to which the medics cared for you as a person.



Protocols and programs to protect resources

DIFFERENCE BETWEEN "CODE 2" & "CODE 3" CALLS

Not every 911 call warrants lights and sirens. By classifying our calls with a code system aligning with the internationally recognized Medical Priority Dispatch System, we can prioritize our calls while keeping our crews, patients and the general public safe. To simplify, "Code 2" is a 911 call that has been deemed nonemergent and/or non-life threatening. This could be an earache, itchiness, diarrhea or nervousness. In these situations, ambulance response and transport does not necessitate the use of lights and siren. A "Code 3" call is an emergency where time is critical, requiring immediate response with lights and sirens. Examples of this would include a cardiac event such as a heart attack, unconsciousness, difficulty breathing or other life-threatening conditions. Additionally, a call can be upgraded or downgraded while in progress, allowing crews and dispatch to prioritize response to achieve better patient outcomes.

BLS PROGRAM LAUNCH

In 2023, we started a new program that ensures we're sending medical professionals appropriate for the level of care required by the patient. It's called the Basic Life Support Program, and it will allow two EMTs to respond to and transport appropriately triaged calls instead of requiring paramedics to do so. Should the level of response needed change while the EMTs are on scene, paramedics can respond to further support the patient. Additionally, all Advanced Life Support HEMS rigs will continue to be staffed with two paramedics. This tiered response model is used by many EMS agencies across the country. It's a proveneffective way to increase the speed in which we respond to calls, relieve staffing shortages and, most importantly, ensure the right resource is being sent to the right patient at the right time.

PROTOCOL INFORMATION APP

Our new app is a web-based program designed to make it easy for community members and fellow first responders to understand and see our <u>EMS protocols</u> in action, including our Basic Life Support program. It's just one more way we're working to be a transparent and accessible partner.

Special Teams

Hennepin EMS boasts several advanced operations teams that are trained to go into unique situations and provide the highest level of medical care tailored to those environments. This deep commitment to training and specialization is one of the key differentiators that makes us the premier EMS service in the region.

► ADVANCED PRACTICE PARAMEDICS (P3)

Paramedics additionally trained in most advanced pre-hospital ultrasound, Advanced Airway Management, and utilizing additional medications and equipment.

TECHNICAL RESCUE MEDICS (TRM)

Trained in Urban Search and Rescue and structural collapse. Work closely with fire departments.

SPECIAL RESPONSE TEAM MEDICS (SRT)

Provide medical education and training to our law enforcement partners. Support high-risk law enforcement situations.

► INCIDENT DISPATCHERS

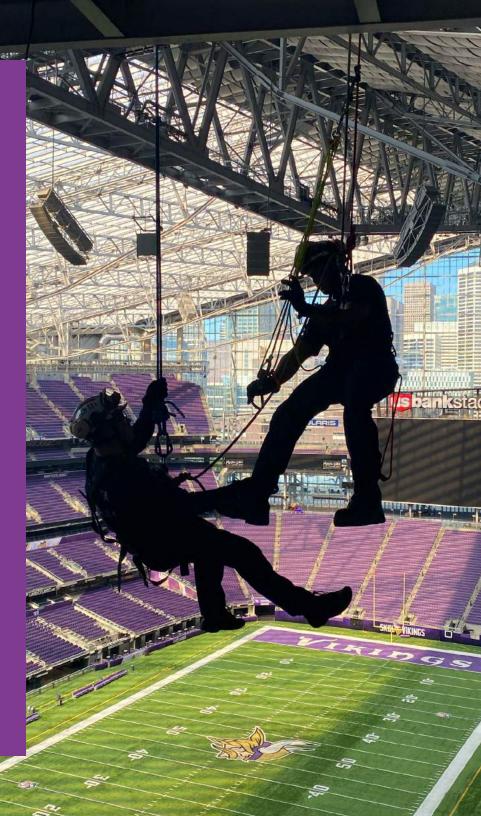
Specialized communication support for large incidents and mass gatherings. Work in stadium operations centers or makeshift field communication posts.

► WATER RESCUE MEDICS (WRM)

A team trained to assist in the unique emergencies encountered in, on and around Minnesota lakes and waterways.

PEER SUPPORT

Support for challenging emotional aspects on the job.



Water Rescue Medics

Our new partnership with the Hennepin County Sheriff's Office on Lake Minnetonka has been very effective. Launched in the summer of 2023, this new program brings specially trained HEMS paramedics on board with <u>Water Patrol</u> throughout the summer boating season, which helps expedite response times for calls in the area.

Success Story

After responding to multiple incidents over the Fourth of July weekend, HEMS received the following appreciation note from Hennepin County Sheriff Dawanna Witt:

"I want to express my sincere appreciation for your assistance in planning and executing an appropriate response to medical emergencies over the Fourth of July weekend on Lake Minnetonka. Our new initiative of having your medics riding with our Water Patrol Deputies on our boats was a great success. Your staff did an outstanding job and were a valuable part of our operation. Being able to provide immediate medical care to our patients out on the lake has been a tremendous help to our patients and Deputies.

You and your staff's work and professionalism helped provide quick medical care when needed to citizens on Lake Minnetonka and helped keep people safe. This operation would not have been successful without you and your staff's cooperation."







Toxicology and Pharmacy

Hennepin EMS provides guick and direct access to the best poison experts and infrastructure in the state. With Hennepin Healthcare hosting the Minnesota Poison Control System, Hennepin EMS and our patients benefit from the ability to collaborate on best practices and cutting-edge medical care with the Poison Control medical direction team. When an EMT or paramedic calls Poison Control, they get expert assistance in ways they can treat the patient while in-transit to the hospital. Then, once that patient arrives at the hospital, the physicians and Poison Control are already aware of the issue and ready to address it faster. For patients transported to Hennepin Healthcare, they also have the benefit of access to the region's only hyperbaric oxygen chamber – a truly lifesaving treatment option, particularly in cases of carbon monoxide poisoning.

Among our paramedics, we're also expanding our ALS HAZMAT care with advanced training. Our paramedics with an advanced HAZMAT life support certification:

- Understand in-depth chemistry as it relates to hazardous materials.
- Facilitate medical management of victims.
- Guide development and management of the hazardous materials components of the medical support system.





PharmD

As a branch of Minnesota's first <u>Level 1 Trauma Center</u>, we have many experts and resources available to us as we provide exemplary emergency response care to our patients and the broader community. An example of this is our EMS Pharmacist Holly Drone, who we added to our staff in 2023. In her role that bridges Pharmacy and EMS, we have the benefit of a team member who not only understands the breadth of pharmaceuticals available but also the operational challenges of providing care outside of a hospital setting. Additionally, Drone has industry knowledge of the many drug shortages that have been impacting the global healthcare system and is able to suggest alternatives, allowing us to continue high-level emergency care in the field. Today, we are the only metro-area EMS team with a dedicated PharmD.

Success Story

When Hennepin EMS responds to a call, we bring the power of Hennepin Healthcare with us. That was profoundly beneficial when a Hennepin Healthcare Doctor of Toxicology was dispatched on a carbon monoxide (CO) exposure call from a daycare in a community we serve. While there are symptoms for CO poisoning, they can be difficult to detect in infants and young toddlers who are unable to respond to evaluation questions. With the expertise of the HCMC toxicologist, approximately 40 children and 15 adults were assessed — and cleared — for carbon monoxide poisoning. Upon investigation, it was determined the carbon monoxide leak came from a failed exhaust hood in the kitchen after a gas stove was ignited. Thankfully, the staff was alerted by alarms on site and immediately implemented the site's emergency protocol, including evacuating everyone to a nearby gas station. The daycare's swift response, the seamless cooperative effort of emergency response teams, and the expertise of the HCMC toxicologist led to a positive outcome for all.



Community Paramedic Program

The HEMS Community Paramedic Program serves those who may not qualify for home healthcare services but are not independent enough to take care of their chronic health conditions, or who face social or economic barriers to receiving outof-home care. HEMS is actively growing our team of four specially trained community paramedics to help approximately 70 patients across our primary service area with medication management, routine vaccinations, and more. With this initiative, Hennepin EMS continues its dedication to innovative problem-solving by connecting with patients in a nontraditional way and proactively reducing the number of 911 calls and emergency room visits this demographic would otherwise require.

Success Story

This success story comes from one patient who received a lot of care at her home, on and off, from the HEMS Community Paramedic Program while she was awaiting a new heart, including medication management and bridging the care gap between her heart failure and transplant. She required ongoing care of her international normalized ratio (INR) until she was given a home machine to maintain her stability. That is, until she received a new heart on Feb. 25. She wrote the HEMS team members a special thank you for being a part of her care.



ERIK OLLILA HENNEPIN COUNTY COMMUNITY PARAMEDIC

PARAMEDIC

Delivering Expert Care, No Matter the Weather

Winter Weather

Every winter, Minnesota's weather makes headlines — often nationally. With the extreme temperatures, snow and harsh wind, Hennepin EMS sees an increased call volume due to car accidents, falls on icy walkways and exposure to the elements. We prepare our crews for all of this, with warm uniforms and added gear and tools for our rigs including shovels and sand mixture to gain traction on slippery roads. While all of this is second nature to us, it's impressive to people elsewhere in the country. In 2023, HEMS Assistant Chief Ryan Mayfield <u>appeared on CNN</u> sharing how we adapt during winter weather and major storm events.

Summer Heatwave

From extreme cold to extreme heat, Minnesota sees all temperatures. In the summer of 2023, we experienced a very strong heatwave that brought health risks associated with high temperatures. Hennepin EMS welcomed the opportunity to educate and remind people about these risks, in hopes of preventing heat-related illnesses. EMS Chief Medical Director Dr. Nick Simpson accepted an invitation to talk to a local television news team about risks associated with air quality and high temperatures, and his interview was replayed in several markets, including cities in North Dakota, Nebraska and New York.



Success Story

It goes without saying that EMS crews can encounter risks on the job, including uncontrollable elements like wind, snow and extreme temps. And still, they persevere in pursuit of positive patient outcomes. Here's an example from 2023: This photo shows a HEMS paramedic responding to a mental health call during a week of dangerous windchill temperatures. The patient in crisis was not wearing proper winter gear and hid under a parked vehicle. Our HEMS team worked with police to secure the area for safety so the paramedic could get in a position to connect with the patient. With the use of a thin blanket, the paramedic was able to get down on the patient's level on the frozen street, talk the patient through their crisis and eventually move them to safety. We're proud of the work our team does in the face of adversity.

Fostering Innovation

At HEMS, we're dedicated to moving forward in all aspects of the job. The result? Topnotch patient care across all our communities. This year we've continued to innovate toward best-in-class response with respect to our care techniques, dispatch programs, state-of-theart fleet, and more.

Glen Lake

Our Hennepin EMS Glen Lake Station is officially operating in support of our crews and western PSA communities. This remote HEMS base, located in Minnetonka, is one part of the solution to addressing record-breaking call volumes and universal EMS staff shortages. It will allow our crews to respond to calls in the western suburbs more efficiently while also allowing us to quickly restock supplies. The site — formerly Hennepin County Home School — was strategically selected after a multi-year study into where the mean call volume is located in the area. Thank you to all who came out to the ribbon cutting on Wednesday, May 24, celebrating this accomplishment.



Double Sequential Defibrillation

Here at HEMS, responding to cardiac incidents is a huge part of what we do. Cardiac calls are some of the most time-sensitive, delicate, and rewarding response calls, and we're always seeking new programs, technologies and procedures to continue leading the way in cardiac response. One example: the ability to do double sequential defibrillation. Double sequential defibrillation — sometimes referred to as dual sequential defibrillation — can be more effective in resetting the heart to its normal rhythm by injecting more electricity to shock the heart. We're proud to be the first EMS provider in the Twin Cities to adopt this method and we look forward to saving even more lives with it.



Success Story

On May 29, 40-year-old designer Jared Murphy was visiting a home where he had been working on a project when he suddenly wasn't feeling well. He asked the homeowners if they had any pain reliever, but when they returned with some, they found Jared unresponsive and immediately called 911. Hennepin EMS paramedics arrived, immediately began CPR, and placed him on a cardiac monitor because Jared did not have a pulse and was not breathing.

Jared was successfully resuscitated with dual sequential defibrillation and his artery was reopened with the stent. While he was supported with oxygen and other measures until he woke up from being placed in a coma, his family didn't know if — or how much — brain damage may have occurred in the 70 minutes he was down. After Jared's breathing tube was removed, it was evident that he did not experience any deficit to his cognition.

Dr. Kevin Buda, a cardiology fellow who cared for him in the Medical Intensive Care Unit at Hennepin Healthcare, said his recovery was remarkable.

"Jared's recovery is the pinnacle of what modern critical care can offer. The normal prognosis for a heart attack resulting in a cardiac arrest is dismal, especially when it occurs out of the hospital when timely diagnosis and care are difficult. With high-quality CPR, prompt opening of his blocked heart artery, thoughtful post-arrest care in the medical intensive care unit, and a lot of motivation from Jared to work with rehabilitation, he was able to rapidly return to his normal life."

Surgical Airways

HEMS began performing a new procedure this year to help patients suffering from airway obstruction. All of our paramedics are now trained in establishing a surgical incision over the trachea of a patient when other means of airway management have failed.

Cardiac and Lung Pre-Hospital Ultrasound

A differentiator for HEMS is that we provide prehospital imaging for patients en route to the emergency room. Every moment counts in an emergency, and this technology makes the most of them by quickly narrowing in on the patient's issue before they're even at the hospital. When HEMS paramedics utilize the ultrasound device, they can identify issues like cardiac arrest or pulmonary embolism quickly, saving time so that the hospital's medical team can begin treatment the moment the patient arrives.

Leaders in Burn Treatment

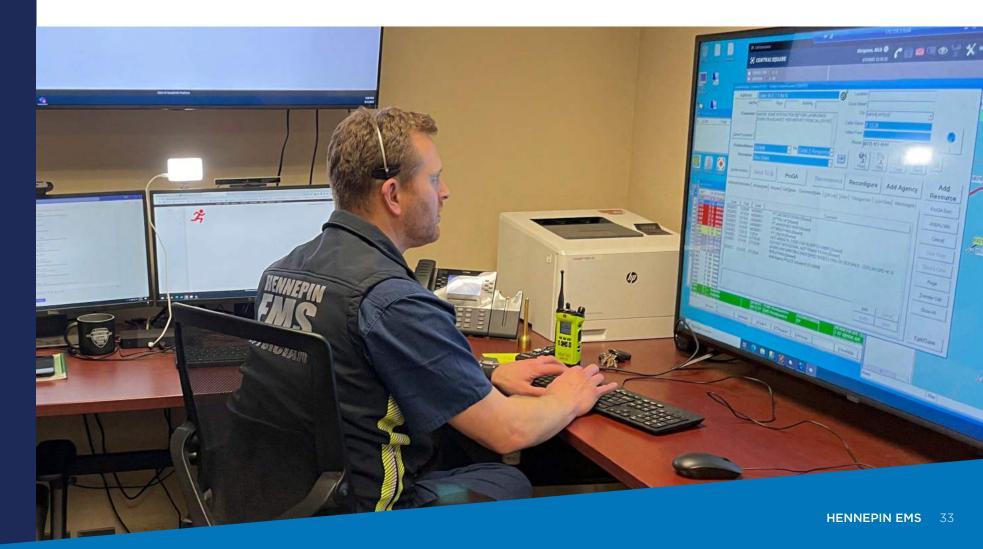
This year we worked with Hennepin Healthcare to host the Midwest Burn Conference at U.S. Bank Stadium. This conference brought together medical professionals from across the state to discuss the full spectrum of burn care, including critical care, research, education and outreach with a focus on improving burn care. Hennepin Healthcare continues to be the leader in burn care, with a nationally recognized burn center and the only 24/7 hyperbaric chamber in Minnesota. Each time HEMS responds to a burn call, including frostbite, we bring Hennepin Healthcare's burn expertise along with us.





"GoodSAM" App Trial

In 2023, Dr. Nick Simpson completed a pilot of the <u>"GoodSAM" platform</u> and we continue to seek funding to implement it into operations. This app allows physicians to video call with patients, family members or good Samaritans who dial 911 via a link that's texted to their phone. With this technology, physicians can immediately begin assessing patients while EMS crews are being dispatched to the scene. It provides them with important information about the scene, how to access it, and is the most robust way to quickly understand what is happening to the patient physically. In addition to improving patient triaging and providing better peace of mind for patients and callers, the "GoodSAM" app provides an opportunity for Hennepin EMS to use resources more efficiently and better tailor their response.



HEMS Answers the Call for Help

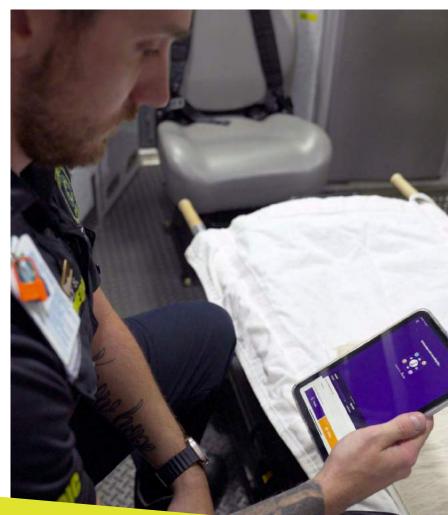
Many highly skilled and talented people make Hennepin EMS the powerhouse that we are. And it starts with the people who answer your 911 call. Our dispatch team consists of 26 trained Emergency Medical Dispatchers who respond calmly and quickly in the midst of emergencies. They answer emergency calls, dispatch emergency professionals and equipment, and render life-saving assistance to the communities we serve. It takes a remarkable person to manage the emotion, the volume, the stress and the complex coordination of this job.

Jeenie App

In recent years, the number of languages spoken in our 14 PSA communities has only grown. To help connect with patients, HEMS is using an interpretation app — to our knowledge, the first EMS service in the country to do so — called Jeenie. <u>The Jeenie app</u> connects to interpreters in seconds via video. HEMS began piloting the app in early 2022 and, based on early success and ease of use, moved the program out of pilot and into widespread use in the spring of 2023, on iPads that were already on-board HEMS ambulances.

Since implementation, HEMS has used Jeenie for 33 different languages and dialects including American Sign Language (ASL) and five different dialects of Arabic. Jeenie is also being integrated into trainings across the PSA. For example, HEMS recently used Jeenie in a St. Louis Park Fire Department training, demonstrating in a role-playing scenario how to use the app in the instance of a mother who speaks Somali seeking care for a sick child. This new technology not only helps our teams understand a situation and symptoms much faster, it also enhances the overall patient experience, patient outcomes and health equity.







Suboxone®

The opioid overdose epidemic is a public health and economic crisis with devastating impacts on individuals, families, communities, and more. Minnesota is not immune to this issue. as HEMS paramedics help patients with potential overdose situations daily. In 2023. HEMS added Suboxone[®] to our rigs, a Food & Drug Administration (FDA) approved drug that is used to treat opioid use disorder. Hennepin EMS worked closely with addiction medicine experts to see what we could do to help improve patient care outcomes during this opioid crisis, which ultimately led to the launch of the initiative. HEMS then collaborated with Hennepin Healthcare's Outpatient Addiction Medicine Department to finetune the protocol to ensure the best approach for positive outcomes. With Suboxone[®] now stocked on our rigs, HEMS is part of a small handful of EMS services in the United States using this medication to treat withdrawal symptoms for patients overdosing on opioids. We're already starting to see the results, with 15% of the patients we've treated having gone on to seek substance use disorder treatment.

Hennepin EMS keeps the best emergency medicine capabilities on the streets of our primary service area, and that begins with our fleet of emergency service vehicles. Currently, HEMS has 38 ambulances in our fleet. 17 of which we replaced toward the end of 2023. Of course, ambulances aren't the only vehicles on the road servicing our communities: We have an additional 18 support vehicles, which includes an allelectric Mustang Mach E, an ATV "mini-ambulance," physician and community paramedic squads, and our command SUVs.





Success Story

We are big proponents of sharing industry knowledge, because we know that when we do, emergency services improve and inevitably more lives are saved. At a February EMS conference in Minnetonka, HEMS offered to collaborate with other ambulance services in this spirit. Essentia Health in Moose Lake, Minn., took us up on the offer. We shared information about rigs and rig safety, which we had first-hand knowledge of as Essentia expanded its fleet with some of our earliergeneration HEMS units.

HENNEPIN

Ambulance Fleet in Constant Motion

With each rig running approximately 22 hours a day, the wear and tear on each vehicle is significant, causing the lifespan of a rig to max out after about 3.5 years of use. Ongoing maintenance helps keep rigs ready to serve, but not without significant investment. In addition to the \$380,000 price tag, Hennepin EMS budgets approximately \$12,000 annually per rig for routine maintenance and repairs. Managing the fleet day-to-day is no small task, nor is projecting the future needs of HEMS. With supply chain struggles as well as the intricacies that are part of all ambulance vehicles, it takes approximately 24 months to receive a rig from the date its ordered. The HEMS fleet is in constant motion to maintain the best capabilities for our teams and our patients.

Weighing System

Hennepin Healthcare Emergency Medical Services is the first large urban EMS nationwide that's now equipping its fleet with a weighing system developed by Minnesota-based Hinckley Medical — the first-ever integrated gurney scale and prehospital dosing app. When paramedics arrive at the scene of an emergency, getting an accurate patient weight allows for more accurate dosing, especially for children. Accurate weights also improve continuum of care for serious conditions like strokes. When every minute counts, so does accurate weight information, and HEMS paramedics are better equipped than ever in those time-sensitive moments.

Building the Future

From inspiring youth to explore careers in healthcare to equipping our newest EMTs and paramedics with knowledge and tools to be successful, we've put significant effort into building pipeline programs that are creating a sustainable staffing model amidst an industry-wide deficiency.

Inspiring Youth

Youth with Stethoscopes Summit Events

Hennepin Healthcare hosts hands-on experiences to connect youth with opportunities in healthcare while engaging with doctors, nurses, Hennepin EMS paramedics and other healthcare workers from similar cultural backgrounds. As part of the day, young attendees ages 12 to 18 learn CPR and how to properly use a stethoscope. Events include Black Youth with Stethoscopes, Latine Youth with Stethoscopes and American Indian Youth with Stethoscopes.

Talent Garden

Hennepin Healthcare's <u>Talent</u> <u>Garden program</u> introduces Black, indigenous and youth of color to careers in healthcare. The goal is to foster connection and mentorship between youth and healthcare professionals with similar backgrounds to their own. This summer's six-week internship program included 21 students.





Pipeline Programs

EMS Pathways Academy

This program helps the Minneapolis Fire Department and HEMS workforce to better reflect the community they serve. The first class of graduates included 91% people of color and was over 50% female. Graduates have been successfully hired as Minneapolis firefighters, HEMS dispatchers, and into the HEMS trainee program, ultimately becoming HEMS paramedics.

Paramedic Trainee Program

Started in 2020, the Paramedic Trainee Program hires EMTs as fulltime employees and pays to send them through paramedic training, with a three-year commitment to Hennepin EMS following their certification. Two Paramedic Trainee Program sessions took place in 2023.

Graduation

After seven months of preparation and the completion of the necessary requirements to earn their paramedic certifications through the HEMS Paramedic Trainee Program, we celebrate with a graduation ceremony. In 2023, 27 candidates graduated from the program. Now, these new paramedics will join the HEMS workforce as part of the training academy.

Badging Ceremony

After completing academy training, paramedics receive their badge in a special ceremony. In 2023, we celebrated 41 paramedics completing their academy training.







Residents and Fellows

We're excited to welcome Dr. Florian Merkle to our team as Hennepin Healthcare's newest EMS fellow. HEMS boasts one of only three Accreditation Council for Graduate Medical Education (ACGME) accredited EMS Fellowship programs in Minnesota and also a state-of-the-art simulation center, which welcomes fellows from statewide programs each year. We asked Dr. Merkle about what drew him to Hennepin Healthcare, and how he's using his fellowship to support his HEMS colleagues.



What was it about Hennepin Healthcare that interested you?

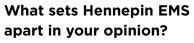
Before applying for residencies I had the opportunity to shadow at Hennepin Healthcare. I remember thinking, "I didn't know people actually cared so much." I shadowed a doctor who took time during a busy shift to talk with a patient who was an alcoholic. He took the patient aside and said, "It's not too late to change." I thought, "That's the place I want to work, where attendings and senior staff actually care." After that, I applied to the Hennepin residency and got it. After three years in residency, I then applied to be an EMS fellow and assistant medical director for Hennepin EMS.

What does a typical day look like?

There's a lot of flexibility to be involved and support, and right now I'm saying "yes" to

every opportunity. I have a response vehicle so I can go out and support calls, answering clinical questions on site. For example, if a medic runs an EKG they can show me and ask me, "What do you think this is?" Or they can say, "This is my plan, do you agree with it?" We can also debrief together after tough cases.

I also work six shifts per month in the emergency department. I'm able to attend staff meetings with HEMS senior leadership, medical director meetings and didactic meetings where we review difficult cases. In my role, I'm also the assistant medical director for the Edina Fire Department, and I do three trainings with them each month. And anytime there's a major event in the Twin Cities that HEMS is staffing, like the Twin Cities Marathon or major concerts, I'll be there.



I've spoken with HEMS medics who have come from other systems and say they never even met their medical directors at their old systems. It's very unique that HEMS has medical directors so available, visible and even out on calls. I'm stoked I get to work with really amazing medics - they are so good, they really are and my goal for this year is to support them as much as possible.





Board Certified EMS Physicians

All our EMS physicians at Hennepin Healthcare have become or are in-process of becoming board certified physicians.

This is a rigorous process which requires the following:



Must be Board Certified in another specialty (the most common is Emergency Medicine)



Must attend an <u>ACGME</u> accredited fellowship for one year. Within this year, they have a wide range of clinical and administrative experiences. They have over 140 hours of didactics as well.



Must pass the EMS Board Certification exam. This is a challenging exam and the pass rate in 2021 was 71%.

Community Training

Hennepin EMS continues to be a premier teaching and research organization. In 2023, we had over **22,558 student hours**, and **trained 19,988 people** including first responders, our staff, community members, and more.

Simulation Ambulance

Our state-of-the-art simulation ambulance is a hands-on learning tool for partnering PSA firefighters and first responders to familiarize themselves with our rigs and equipment. The sim ambulance incorporates highfidelity mannequins, cardiac monitors and real, working equipment to provide immersive, scenario-based training. It features audiovisual equipment to record and transmit to an external screen for facilitators and learners to observe during the scenario, is completely mobile and is able to function on the move. In our regular sim ambulance trainings with our PSA partners, we work together to practice protocols for handling a patient before EMS arrives and how to ensure a smooth transition from their care to Hennepin EMS Paramedics/EMTs.

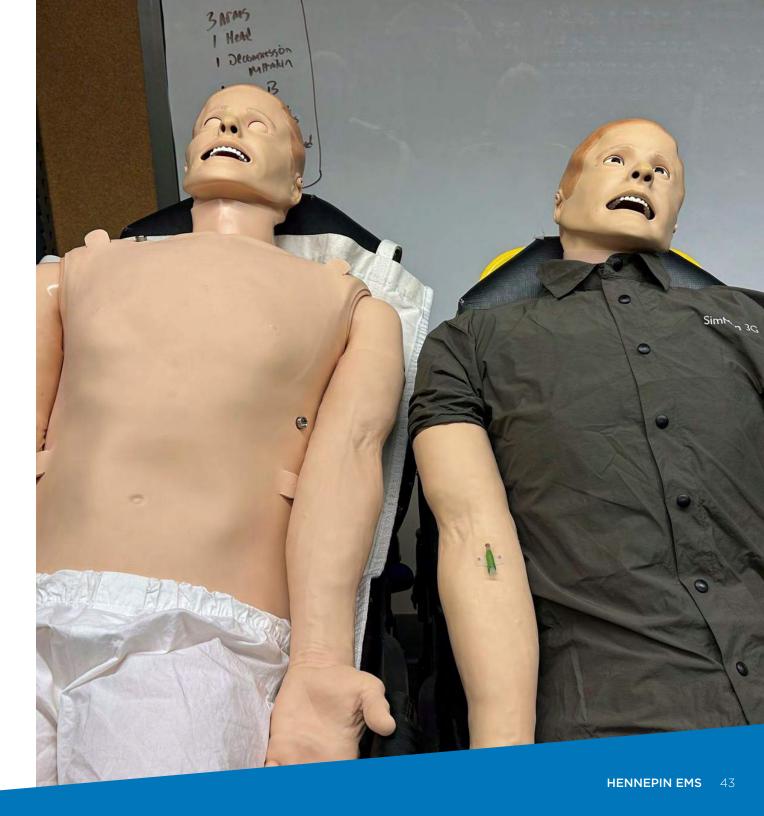


3G Mannequins

Meet our two new Sim Man 3G Mannequins! These mannequins allow our students to have a fully interactive patient scenario. They have an impressive list of capabilities, including being able to respirate, receive an IV, blink, talk and even change skin color to simulate cyanosis. We'll also have a baby model joining the family soon!

Naloxone (NARCAN[®]) Training

Naloxone (NARCAN[®]) is an over-the-counter medication that can be lifesaving in the event of an overdose from opioids. In one of many trainings offered on this medication, Hennepin EMS Education showed over 100 staff from the City of Minneapolis, Office of Violence Prevention proper administration in addition to CPR and Stop the Bleed tactics. This is a great opportunity for Hennepin EMS to amplify lifesaving skills and partner with the communities we serve.



Looking Ahead

Below are some projects HEMS has planned for our future. As always, we are continuing to innovate and push forward to ensure our communities have the best-in-class EMS partner:



New EMS headquarters and dispatch center

Bike medics

Expanding special teams

New camera systems on our rigs

Expanding our Basic Life Support (BLS) program

Art designed to promote healing on ambulance doors and ceilings

Voyageur AI: A program that HEMS has slated for implementation in early 2024 to identify performance issues more efficiently. Harnessing the power of AI, the program will be integrated into our dispatch center and give feedback on our response to all calls, ultimately bringing a heightened level of consistency to our quality improvement efforts.



Collaborating Together

To Solve Community Problems

Hennepin County Sheriff Dawanna Witt and Hennepin EMS Chief Martin Scheerer teamed up to deliver a <u>public service</u> <u>announcement</u> regarding the nation's opioid overdose crisis and the proper use of Naloxone. Hennepin EMS commends the U.S. Food & Drug Administration (FDA) for its approval of over-the-counter sales of the opioid overdose-reversing Naloxone drug. While historically Naloxone has been administered primarily by EMS, we support any efforts to make this lifesaving treatment more available. This decision does just that, and also paves the way for our community partners to access it more easily. The opioid epidemic rages on, and this decision is a commonsense measure to ensure more people are equipped to act quickly and compassionately in response to an overdose. We urge anyone who administers over-the-counter Naloxone to call an ambulance for follow-up care.



To Train for Every Scenario

Practicing "Active Threats"

Hennepin EMS and our first responder partners hold collaborative trainings to fine-tune our joint response in the event of a potential "active threat" scenario. In the fall of 2023, along with Eden Prairie Police and Fire and other agencies, we practiced drills to stop an assailant, evacuate the scene quickly and treat and prioritize transport of patients. While we hope to never use this skillset, it's important that we, as first responders, stay prepared for any and all circumstances.

Training the Trainers

We've been joining TRIA Orthopedics Center for the past few years in the summer ahead of high school football season. There, we meet with their athletic trainers to go over best practices in a medical emergency. Together, we work through how they could best handle an injury before HEMS arrives and what they could have on-scene so our medics are prepared and informed upon arrival. Our paramedics also showcased some of the equipment we use. Finally, we practiced our process to ensure a smooth transition from their care to ours in emergent situations.



Internationally

Helping Those In Conflict

Svetlana Vold, a member of our Event Medicine Team, volunteered in Ukraine helping train people who came to support the Ukrainian defense. She also helped transport medical supplies to some of the most war-torn areas. Vold was born and raised in Belarus, which borders both Ukraine and Russia. She's incredibly brave to have taken on so much personal risk to help the people caught in the conflict, and we're proud to have her part of our team.



Concerts

2023 was a memorable year as it was our busiest event schedule in recent history. The musical genres have spanned the spectrum, from Avenged Sevenfold to Ed Sheeran, from Carin Leon to Taylor Swift. In addition, a number of concert venues set all-time attendance records at their facility, including P!nk's concert at Target Field, and HEMS was there for all of them, to ensure fans had a safe experience.

Sports

U.S. Bank Stadium

The Minnesota Vikings kicked off the 2023 – 2024 regular season with a home game on September 10 against the Tampa Bay Buccaneers. As the EMS partner of U.S. Bank Stadium, HEMS supports the players, staff, volunteers and fans at all of the home Vikings games, including the pre-season schedule.

Target Field

Like many in Minnesota, we watched the Twins playoff series with a lot of excitement! After clinching the American League Central division, Twins fans flocked to Target Field for four home playoff games. Hennepin EMS offered medical support both on and off the field at all of these games. What a season!

Target Center

HEMS is also the official EMS partner for Target Center where we support many concerts throughout the year, as well as Timberwolves and Lynx games during basketball season.

Huntington Bank Stadium

We also support the University of Minnesota Golden Gopher football team. HEMS provides paramedics for each home game at Huntington Bank Stadium, offering emergency support for the players, staff and fans. Look closely at this photo and you can see our two HEMS team members standing on the sidelines at the ready during the September 1 game against the Nebraska Cornhuskers.







Event Team Capabilities

While it feels great to be back in the community after some quiet pandemic years, many may not realize how much goes into EMS at special events. From the Tonka Youth Triathlon to the ALARC Ice Dive in Excelsior to the MinnesoThai Festival in St. Louis Park, the expertise of our team and fleet helps to ensure everyone remains healthy and safe all year round.

Our event capabilities include:

- A fleet of specialized vehicles like our UTV ambulance and specially equipped golf carts.
- Our Event Medicine Team, made up of paramedics, EMTs and EMRs, is specially trained in event medicine and equipped with the latest technology to respond most efficiently to emergencies.
- An incident dispatch team and, depending on the size of an event, a mobile command center.
- Learn and utilize industry-wide best practices for sport and special event risk analysis and management.

Even if HEMS isn't contracted to staff an event, we're often sent the operational plans ahead of time for those in our PSA. This ensures that if a medical emergency comes up, we're ready to get in and out of the event as quickly as possible.



Event Team Stats

Supporting area events is one of the many services HEMS provides. In 2023 alone, we had over 425 events at nearly 70 venues/community events scheduled for our Special Operations division. These events are covered by our paramedics (more than 150 team members) and Event Medicine Team (more than 110 team members) and in a busy month, can have greater than 300 extra shifts available to claim. While the number of responses will vary depending on the size of the event, our crews will experience anywhere from one to 90 responses during special events such as Hopkins Pride, the Taylor Swift concerts, Minnesota Timberwolves basketball games and more.

Our Event Team in Action

Hennepin EMS was delighted to serve at and share in the celebration of many area high school graduation ceremonies that took place at U.S. Bank Stadium and Target Center. HEMS supported the ceremonies of Wayzata High School, Edina High School, Minnetonka High School and Eden Prairie High School. Congratulations to all members of the class of 2023!

Ride with the Chief

EMS Chief Martin Scheerer welcomes the opportunity to have city leaders and elected officials ride along with him on a shift. There's no better way to understand what our HEMS team does, day in and day out, than experiencing it for yourself. Minnesota State Attorney General Keith Ellison did a ride-along with EMS this last May. Ellison gave this statement about his experience:

"Recently I did a ride-along with Hennepin EMS Chief Marty Scheerer. I was impressed with the hardworking and professional staff who are providing the best care to our residents. EMTs have a difficult iob and I'm thankful for the sacrifices they make every day. It's no surprise why Hennepin County EMS is widely recognized and considered a leader in the services they provide. I look forward to doing another ride-along in the future."

in 2023

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OTHER ELECTED OFFICIALS

MINNESOTA HOUSE MEMBERS

MINNESOTA SENATE MEMBERS







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