



EST. 2001

20 YEARS OF SERVICE

• State of the Art Patient Care • Outstanding Customer Service • Financial Responsibility • Dedication To The Communities We Serve •

Lakes Region EMS













2020 Annual Report

Your Community Ambulance Service



Aarron Reinert, MA, NRP
Executive Director

Executive Director's Report

FOUR PILLARS

+ State-of-the-Art Patient Care
+ Outstanding Customer Service
+ Dedication to the Communities We Serve
+ Financial Health and Responsibility

Lakes Region EMS began 2020 as we have every other year: working every day to serve our communities with state-of-the-art patient care, outstanding customer service, dedication to the communities we serve, and financial health and responsibility. As we began the year, we never imagined a worldwide pandemic would challenge our organization's very survival and test each and every one of us.

Our team showed exemplary strength, commitment, and sacrifice to serve communities and their citizens.

The pandemic strained every facet of our organization, including our operations, clinical practice, finances, and workforce. Yet throughout the year, our team remained strong and continued to honor our 4 pillars. The entire LREMS team, from our frontline EMS responders, finance, billing, education, fleet services, administration, operations, senior leadership team, and board, made personal and professional sacrifices throughout the pandemic to serve our communities. Our team showed exemplary strength, commitment, and sacrifice to serve communities and their citizens. After more than 30 years of service in EMS, I was truly in awe of our team and what they were capable of under the most challenging circumstances. They were creative, innovative, and brave in a time of extreme uncertainty.

To give you a sense of their service, imagine responding to an emergency where something you cannot see, touch, or smell could infect you and cause serious illness or death. Compound that feeling with responding to this deadly virus without all the personal protective equipment you need while hearing regular stories and acts of community appreciation for other frontline responders but not emergency medical services. Add one last component, which is the knowledge you could unknowingly bring this deadly virus home with you. I would understand if after reading the above you felt anxious, scared, and fearful. The individuals who make up LREMS felt this too, but they rose above it to honor a higher calling, to serve.

As our community began to see COVID cases increase, we went from transporting a few COVID-positive patients each week to more than 10. We went from 125% staffing to multiple sick calls each day. At one point, over 20% of our clinical workforce was out sick. Yet, thanks to our team's commitment and sacrifice, our employees were able to staff all of our five ambulances 24/7 throughout the year. We never once reduced our staffing or lowered our services to our communities. While several of our staff did test positive for COVID-19, they thankfully all recovered.

My deepest thanks goes out to each of our team members as they continued to serve our organization throughout the pandemic, helping our organization to sustain itself amidst unbelievable circumstances. They came to work not knowing if the patients they were caring for may have COVID and not know it. They came to work not knowing if they would bring COVID-19 home with them at the end of the day. They came to work early, stayed late, worked extra shifts, and covered for other team members at a moment's notice. Our patients, our communities, our state, our nation, our planet owes them a debt that will never be fully repaid.

Thank you,



Aarron Reinert
Executive Director



Chris Ward, M.D.
Medical Director



Medical Director Report

As the COVID-19 virus spread throughout the world during 2020, Lakes Region EMS' (LREMS) mission quickly shifted. Our primary goal included providing our team with guidance on the pandemic, including reinforcing vital COVID information to keep our crews and patients safe.

Our top priorities during the year began as a review of airway management, but as COVID quickly spread in our community, we modified our focus to include screening for COVID, droplet precautions, new Personal Protective Equipment (PPE), and new tools for ventilatory care. These new ventilatory care tools included high-flow nasal cannula and airway pressure release ventilation, which are helpful in managing certain COVID patients and others with breathing difficulty.

LREMS expanded its staff education efforts in 2020 to include these areas, as well as further expanding bedside ultrasound training.

Our hospital colleagues' trust in our organization is stronger than ever. Throughout the year, I heard both nurses and the physicians asking for our crews whenever there was a sick patient that needed transport, especially urgently. Our partners have come to know and trust the care that we bring to inter-facility transports.

During 2021, we hope to return to our 2020 education focus of reviewing advanced and basic airway management. These critical skills, like many others, take review and repetition to keep our performance at its best.

Although COVID-19 became a centerpiece focus for 2020, I am optimistic that through continued vigilance with mask-wearing, physical distancing, and wide-spread vaccination, we can return to a more normal life by the end of 2021.

Thank you,

Chris Ward, M.D.
Medical Director



State-of-the-Art Patient Care

During 2020, state-of-the-art patient care continued to be front and center for Lakes Region EMS (LREMS), especially as COVID-19 changed the landscape of patient care.

Clinician Development

Throughout 2020, LREMS worked hard to on-board new clinicians while overcoming significant challenges as a result of the pandemic. Traditional educational efforts were difficult in the year of COVID, and most in-person staff education and simulation — including high-fidelity simulation, case-review sessions, and clinical course offerings — were avoided when possible to ensure staff safety.

In response to the risks of in-person training, LREMS transitioned to virtual education for the organization's quarterly in-person education sessions, which were completed by all staff in December. Online education was also developed for newly introduced ventilator strategies of high-flow nasal cannula, helmet ventilation, and airway pressure release ventilation, and we also introduced monthly case review sessions.

Also as a result of the pandemic, the Critical Care Provider course, originally scheduled for fall 2020, was postponed until spring 2021. To ensure ongoing training in critical care throughout the year, LREMS developed an education-focused website, criticalcareprovider.org, to help support individualized education and virtual classroom education.

For new-employee orientation, our organization transitioned to a hybrid model of small in-person group sessions for skill demonstration and limited simulation combined with virtual lecture and independent study for the initial orientation week, our Skills Academy course, and our Essentials of Critical Care course.

Simulation

LREMS relies on clinical simulation to prepare clinicians for actual field calls, which require efficient processes, critical thinking, and the ability to effectively deal with stressful situations. Simulating real-life experiences prepares our crews for all types of critical life-threatening situations and better prepares them for patient interaction, real-time decision-making, and process development. To achieve this, LREMS usually uses both online and in-person training to effectively prepare crews for real-life EMS incidents. However, as a result of COVID's spread during 2020, many of our simulation efforts were reduced in 2020.

To lower in-person training challenges, LREMS began exploring different virtual simulation models, including remote training, with live actor or avatar simulation replacing in-person simulation. Animation concepts and methods were also investigated, and while these specific training models were not rolled out in 2020, the principles developed are expected to be deployed in 2021 and beyond.

During 2021, LREMS plans to further explore virtual simulation efforts, including the value of distance learning in clinician training. This type of simulation will also allow for the involvement of more clinicians in a single simulation event. As COVID eases in our community, we plan to re-implement a robust in-person simulation program.





Clinical Training for COVID-19 Treatment
During 2020, all clinicians were trained in helmet ventilation, which can help patients in respiratory distress as a result of COVID-19. This method provides high concentrated oxygen within an isolated patient environment, keeping the clinical staff safe from aerosolization risk. Additional education was provided for our staff in the artistry of ventilating sick lungs that result from more serious COVID cases. These patients suffer from tissue damage to their lungs, which dramatically reduces elasticity, making it difficult to provide effective breathing cycles that won't further injure the lungs. Fortunately, the ventilators on LREMS ambulances can be adjusted for kinder, gentler forms of breathing.

During 2020, COVID shed more light on human hypoxic adaptation. To explain this adaptive capability, LREMS produced a nine-minute documentary, and our education curriculum was updated to include these revelations in human physiology. These updates were rolled out during the year through our online and virtual education.

Clinical Simulation Facilitator Workshop
During 2020, we hoped to send several of our educators to the HealthPartners clinical Simulation Facilitator Workshop at Regions Hospital, as we did in 2019. However, due to COVID, this workshop was canceled. The three-day course presents impactful information on simulation methods, blending didactic content with learning activities, hands-on experience, and group discussion.

High-Fidelity Simulation Manikins
During 2020, our EMS staff hoped to train with computerized high-fidelity simulation manikins to prepare for real-life patient scenarios. However, as a result of COVID risks throughout the year, LREMS educators utilized virtual education this year instead of in-person training. We hope to resume simulation staff training in person as soon as it is safe, as this training is an important component of enhancing critical care decision-making skills, from first response to patient transfer.

Critical Care Provider Course

LREMS paramedics, EMTs, and nurses continually strive to deliver high-quality critical care. To support our staff in these efforts, our organization provides critical learning opportunities that establish vital health and treatment knowledge. Our mission is to always enrich each clinician's capability, as well as the overall clinical capability of the organization. As such, LREMS is proud to collaborate each year with Hennepin Healthcare and Life Link III to provide the Critical Care Provider (CCP) course to paramedics, nurses, and mid-level providers from all area hospitals and EMS services. Due to COVID, the Critical Care Provider course, which was scheduled for fall 2020, was postponed to spring 2021.

During 2021, our critical care education agenda will include a hybrid version of the CCP course, virtual-based education, and extensive use of the criticalcareprovider.org website for directed individual education, course management, and general clinical-related updates. Additionally, LREMS has planned for an in-house, critical care-oriented Advanced EMT course in fall 2021, which will be available to our EMT staff.

Clinical Equipment
During 2020, LREMS' clinical equipment focus shifted in response to the pandemic to ensure all equipment additions reflected evolving best practices for the care of COVID patients.





HFNC
Our organization added High-Flow Nasal Cannula (HFNC) capability to our ventilators, with heater/humidification capability, which provides comfortable oxygenated air to our patients at flow rates up to 60 liters per minute. HFNC has become the world standard for oxygenation of non-intubated COVID patients.

APRV
This year, we also added Airway Pressure Release Ventilation (APRV) capability to our vents. This ventilation mode provides comfortable, effective ventilation for intubated patients and is often less injurious to lung tissue than conventional ventilation.

Clinical Equipment Training
Virtual and online training was developed and rolled out for these equipment additions during 2020, as well as for Sea-Long Helmet ventilation (while we did not add these devices to our trucks, our clinicians will be able to offer support during an interfacility transport setting if applied at the referral hospital).

Equipment Documentation and Quality Assurance
During 2020, LREMS equipment documentation was updated to include guidelines for:

- COVID-19 oxygenation
- HFNC
- APRV
- Helmet ventilation

Additionally, a Treat In Place (TIP) guideline was developed specifically for COVID patients that detailed how to apply effective triage for patients suspected of having COVID or those having COVID with minor symptoms. The TIP documentation also offers guidance for continued care that might not involve transport to a hospital. This guideline was created to preserve hospital resources while giving follow-up attention to patients who might otherwise feel forgotten or get overlooked by an inundated medical system. This guideline has become a national model for the TIP concept.

Arrowhead Association EMS Conference & Expo

The annual Arrowhead Association EMS Conference & Expo in Duluth allows EMS organizations to network and interact with other EMS services and companies, including emergency/trauma, first responder, and pre-hospital providers. With more than 22,000 square feet of exhibit space, the event features the latest EMS technology and training tools. This year's event, which represented the 40th annual conference, was held January 22–26 at the Duluth Entertainment & Convention Center. The conference took place prior to the COVID-19 pandemic in the U.S., and the event was attended by hundreds of emergency medical professionals. 2020 marked LREMS' ninth consecutive year of attendance.

Attending the Arrowhead Conference allows LREMS to increase our brand recognition in the community, recruit and engage qualified EMS staff, and recognize our own outstanding employees who go above and beyond every day. Our attendance at the event also allows us to promote our Critical Care class and promote our organization as a top place to work in EMS.

Ten staff members, who represented both our leadership team and our field staff, attended the conference. To comfortably engage conference attendees, LREMS' booth is designed to allow attendees to sit down and talk with our representatives about the LREMS culture and mission, including our four pillars:

- State-of-the-Art Patient Care
- Outstanding Customer Service
- Dedication to the Communities We Serve
- Financial Health and Responsibility

This year, the LREMS event booth featured various EMS equipment, including our cardiac monitors, ultrasound, ventilators, other new equipment, and one of our supervisor SUVs.



Outstanding Customer Service

As one of LREMS' core pillars, we strive for Outstanding Customer Service every single day. By going above and beyond the expectations of our community, our organization consistently receives high levels of patient satisfaction and raises our brand recognition throughout our region. By focusing on customer service, LREMS also improves community confidence in our services and staff, which leads to additional growth opportunities.





Our day-to-day operations depend on our ability to provide top-tier service. This has been and will remain a priority in the LREMS organization because it highlights our beliefs, values, and mission to care for our community at the highest level. It also strengthens our relationship with community members and ensures confidence in our organization.

As COVID spread throughout communities in 2020, LREMS worked harder than ever to exceed the expectations of our community. Doing so ensured the continued success of our operations, both internally and externally, during a very challenging time.

Each year we usually mail out survey cards to collect patient feedback — in an effort to assess various customer service performance areas and hone in on patient priorities — but as a result of the pandemic this year, we put our survey cards on hold. We plan to resume customer satisfaction measurement as soon as possible, including assessing patient satisfaction for 911 calls, inter-facility transports, and patients who declined transport. Through our last measurement in 2019, LREMS consistently was rated high in the following areas:

- Having a professional crew
- Being treated with respect
- Showing compassion, caring, and concern
- Being organized
- Having the knowledge necessary
- Quick response times
- Showing exceptional teamwork

LREMS pledges to continue to maintain the highest levels of outstanding service in an effort to increase community advocacy. We also realize it's important to meet the highest levels of service satisfaction to maintain a high level of employee satisfaction, because when patients are taken care of and happy, our employees become even more engaged in their work, which leads to a better EMS operation.

We care deeply for our patients' needs.

We provide state-of-the-art patient care.

We answer questions with care and transparency.

We aim to exceed expectations.







Dedication to the Communities We Serve

LREMS cares deeply for the members of our communities. This is why "Dedication to the Communities We Serve" is one of our organization's core pillars. While we serve a small percentage of the community with our 911 and transfer services, we are committed to serving all community members — not just those who use our ambulance services. As such, it's extremely important that our team connects on a more personal level with community members, as well as participates in community events. To do so, we continually strive to make sure the community knows we are here for them, whether they're calling 911 or just asking for a little extra support.



LREMS' community outreach includes education and training initiatives, which underscores our "mission to serve" beyond providing excellent patient care. Our organization is devoted to helping train community partners and organizations, including sharing our education space, engaging in volunteer work, and participating in community activities and events. In the year of COVID, however, these efforts were extremely challenging, and we made the decision to cancel certain activities and events to ensure the safety of the community and our staff members. The summary of our community efforts in 2020 are outlined below:

Good Neighbor Project: Donated $1,000 to the Black Dog Hill domestic violence shelter.

Family Pathway's Chisago County Backpack Program: Donated $3,000.

Anonymous Santa Program: Filled an 18-foot trailer with gift donations.

Parades and Job/Health/Community Fairs: Participated in many "drive-bys" for birthdays, retirements, and cheer-up support.

Ruby's Pantry: We started this year doing free blood pressure and blood sugar checks but had to stop due to COVID. We will continue this program when able.

Personal Visits: We were able to check in on past patients, bring dinners, etc., pre-COVID.

Food Shelf Challenge: While the event was canceled, we donated $1,500.

Patient/Crew Reunions: We had several patient/crew reunions in 2020. The family of a two-year-old child that we helped during an emergency came to our North Branch base to meet up with her crew and the dispatchers. A Triple A patient who had a 1% survival rate was able to meet his crew. We met him at his house with doughnuts, coffee, and a small gift. A four-year-old girl who was in a dirt bike accident had to have her first and only jersey cut off, so the crew went to the patient's home the following week with a new jersey and a teddy bear.









The information below provides details on LREMS' participation in several long-term community events.

Adopt-A-Highway

We did not participate in highway cleanup for our Adopt-A-Highway section during 2020 due to COVID-19 precautions and our decision to avoid group activities when possible. Our team really enjoys our community outreach activities and really missed being able to take part in many events this year, including our participation in the Adopt-A-Highway initiative. Being able to provide community service in a variety of different ways is part of what we stand for at LREMS, so we hope to be able to engage a group of our employees in this activity in 2021.

Anonymous Santa

LREMS participated in the Anonymous Santa Program for the sixth consecutive year in 2020. The Anonymous Santa nonprofit organization was created more than 30 years ago. Children who qualify for this program are able to select $20 in gifts, as well as stocking stuffers, a book, a hat, and mittens. Our team collected donations from across Chisago County and were able to fill up an 18-foot trailer with gift donations. Gifts included toys, sports equipment, games, and clothing items. A big "thank you" goes out to the local businesses and families who donated this year.

SWAT

LREMS works alongside the Chisago County SWAT Unit to save lives in high-risk situations, and 2020 marked the 14th year that our team of tactical paramedics partnered with law enforcement to provide critical EMS. The tactical LREMS EMS team responded to 13 call-outs in 2020, and we look forward to working alongside SWAT in 2021 to help protect our community members, as well as our officers. This year, we also provided medical services for multiple law enforcement agencies during the civil unrest in the Twin Cities.

Community Education Space

LREMS created its "Use of Facilities" program in 2014 in an effort to give back to our local community. Through this program, local nonprofit organizations and governmental agencies are able to use our high-tech meeting space free of charge. The Community Conference room seats 16 people, and the Community Meeting room seats about 80. These rooms are equipped with presentation monitors and Internet access. While our meeting rooms were closed for most of this year due to the pandemic, we look forward to opening them back up to the community as soon as possible.





Through charitable giving, we are able to extend our reach within the community, including through the implementation of individual support and broader programs that include our Good Neighbor Project, food-security initiatives, and many other vital programs.

A primary goal within our community education space is to offer technology for in-person training and presentations. The Community Meeting room includes a state-of-the-art video wall that allows up to five different programs to run simultaneously. The room also has updated equipment for presentations and improved video and audio-conferencing technology. We also use this educational space for EMT-Basic courses and CPR classes, including our hands-only CPR training, which is in high demand in our community.

Charitable Missions Committee

LREMS first began our Charitable Missions Committee in 2016 to help our fellow citizens in need. Through charitable giving, we are able to extend our reach within the community, including through the implementation of individual support and broader programs that include our Good Neighbor Project, food-security initiatives, and many other vital programs.

This committee meets each year to review incoming charitable requests and provide aid. This year we granted 10 individual requests, plus our annual line items, the Family Pathways Backpack Program for all of the Chisago County school districts, and $1,000 scholarships to one graduating senior from each high school in Chisago County, including North Branch, Chisago Lakes, and Rush City. We also granted a $1,000 scholarship to two graduating seniors from the Luck School District. In addition, we delivered more than 200 handwritten cards with artwork created by our staff's children to all of our local nursing homes.

During 2020, the pandemic significantly affected the committee's operation by limiting our ability to meet in person or visit with community members. This meant that we weren't able to hold our annual Good Neighbor Project, but we were able to donate $1,000 to the Black Dog Hill domestic violence shelter through this program.

LREMS' program participation that was put on hold in 2020 as a result of COVID included the Chisago County's Safety Camp; Summer Food Totes Program; ringing bells for The Salvation Army; cooking for and serving families staying at the Ronald McDonald House in Minneapolis; Shop With a Cop event; Back Your Buddy event; and Sentimental Journeys ambulance program. We are excited to getting back to serving the community and hope to resume our participation in these programs in 2021.

Financial Health and Responsibility

During 2020, LREMS' financial health was as important as ever as the pandemic affected call volume throughout the year. Because LREMS financial health strongly relies on liquidity, solvency, profitability, and operating efficiency, we assess and measure these factors weekly and adjust as necessary.

In response to call volume dropping from March through May (-19% in March, -33% in April, and -17% in May), we applied for and received a Paycheck Protection Program (PPP) loan to help meet payroll obligations. We also received funding through the CARES Act Provider Relief Fund; a grant from the Minnesota Department of Health for Personal Protective Equipment (PPE) and equipment to help with COVID-19 patients; and a grant from the City of North Branch for ventilators.

As a result of this additional funding, as well as putting on hold buying capital equipment, at the end of the year our financial snapshot remained healthy. We ended the year with just -3.6% of our projected call volume, and we had 4,124 ambulance transports (below our budgeted 4,278 ambulance runs for 2020). During 2020, LREMS responded to more than 5,630 ambulance calls for service requests (a .5% increase from 2019), providing care to more than 3,881 emergency (9-1-1) patients (on par with 2019) and 1,639 hospital transfers (on par with 2019).

Of each dollar in charges for services, LREMS collected approximately 33 cents after discount to government (Medicare $8.5 million; Medical Assistance $3.0 million; and other government $260,000) and private payers, charity discounts ($259,000), COVID-19 write-offs ($29,000), and bad debts. Resulting net patient revenue was used to pay expenses.



Dennis Frandsen

FRANDSEN FAMILY FOUNDATION

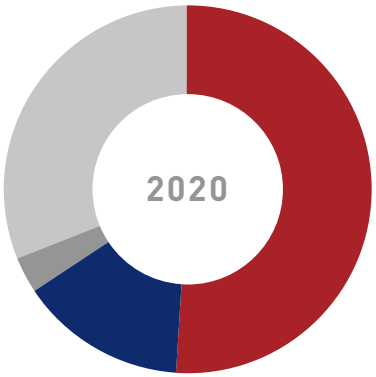
Helping Those in Need

Project Hope

In 2017, Dennis Frandsen and his family chose to give the gift of hope to our communities. The enduring gift, "Helping Those in Need," strengthens our ability to save lives across East-Central Minnesota and Northwest Wisconsin by ensuring critical care paramedic-level ambulance service, touching the lives of thousands of individuals. Project Hope has continued to be an ongoing gift for our patients and communities.

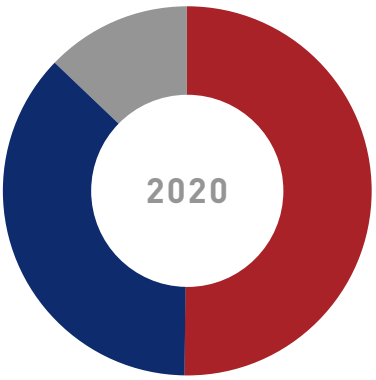
As a small nonprofit, LREMS needs to find a balance between the ever-increasing costs and decreasing reimbursement while striving to provide state-of-the-art patient care. Our long-term sustainability, viability, and reliability can waver amid these areas. Yearly capital needs draw cash away from the day-to-day operations, limiting the organization's ability to provide industry-leading employee compensation, infrastructure investments, cutting-edge treatments and procedures, and care for the community beyond just responding to 911 calls.

Mr. Frandsen's gifts have totaled over $2.1 million and have been used to purchase ambulances, ventilators, first-response vehicles, high-fidelity mannequins, and much more. These gifts have touched the lives of tens of thousands of individuals during their time of critical need.



Outgoing Distribution of Funds

- 50.9% Salaries and Wages
- 14.9% Payroll Taxes and Benefits
- 3.0% Vehicles
- 31.2% Other

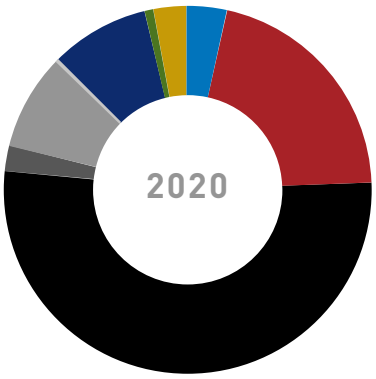


Revenue

- 50.3% 9-1-1
- 37.0% Transfer
- 12.7% Other

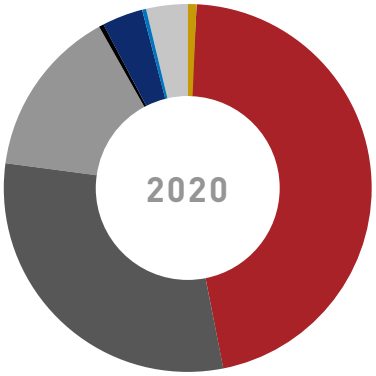
5-Year Transport Comparison

	9-1-1	TRANSFERS	TOTAL CALLS
2020	2,621	1,503	4,124
2019	2,673	1,565	4,238
2018	2,735	1,473	4,208
2017	2,523	1,272	3,795
2016	2,483	1,326	3,809



Payors – Money Received

- 20.9% Medicare and Managed Care
- 8.8% Cash
- 8.7% MA and Managed Care
- 2.2% Insurance - Secondary
- 52.1% Insurance - Primary
- 0.2% Other
- 2.9% Other Government
- 3.6% Auto
- 0.7% Work Comp



Payors – Billed Out

- 46.2% Medicare and Managed Care
- 3.8% Self Pay
- 15.0% MA and Managed Care
- 30.0% Insurance – Primary
- 0.3% Other
- 3.7% Other Government
- 0.8% Auto
- 0.3% Work Comp

New Equipment

New Vehicles

During 2020, LREMS acquired three new 2020 Chevy G3500s ambulances to replace vehicles up for replacement based on miles driven, as outlined by our vehicle replacement policy. The ambulance interiors were completely redesigned for safety and efficiency of equipment by about 10 LREMS team members. Data on safety and vehicle crashes was taken into account during the design phase. Our team's new design was based primarily on the following three factors:

1. **Safety**
   A primary factor in all of our equipment placement decisions.

2. **Customization**
   Based on the type of call and the crew member's style so they are able to position equipment based on their preference.

3. **Improving comfort**
   To further enhance patient comfort during transport.

The new ambulance redesign included converting bench-style seats to forward-facing seats for back attendants, mounting of heavier equipment instead of strapping equipment to benches and cots, and adding a new camera system. New vehicle features also include a new radio system so crews can stream music for patients, a new internal lighting system, and a new heating and cooling system for patient and crew comfort.

This year we also replaced one fleet maintenance vehicle with a 2021 GMC 2500 Sierra pickup and one administration vehicle with a 2021 Chevy Traverse. All vehicles are fully equipped with graphics, lights, sirens, and medical equipment.

LREMS also added the following new vehicle systems and features to aid our team in serving the community:

New Vehicle Systems and Features

Samsara Camera System: Cameras were added to all ambulances to provide internal and external video events as they happen. They also allow remote access and provide almost real-time feedback. The system features a diagnostic component that can track maintenance intervals and alert team members to any vehicle issues, such as when a check engine light alert turns on or a light bulb goes out.

Technimount System: These bracket mounting systems were added to ambulances to safely and securely mount ventilator or cardiac monitors to increase crew member and patient safety.

iNTRAXX Integrated Vehicle Component System: This system secures equipment inside the ambulance, including monitors, ventilators, and IV poles, and allows crew members to deliver patient care from a seated, restrained position. It also allows our team to move equipment around quickly and safely to prepare for patient care before or during care.

LiquidSpring Suspension System: This compressible liquid adaptive suspension system provides better control and can help lower maintenance costs. Its load-leveling technology reduces vehicle vibration and increases occupant comfort. The system also allows attendants to lower or raise the vehicle for easier loading and unloading or to accommodate ground clearance issues.







Lakes Region EMS photos from Minnesota Public Radio News. ©2021 Minnesota Public Radio®. Used with permission. All rights reserved.







Feature Story

LREMS Rises to Meet COVID-19 Challenges Head-On

Lakes Region EMS (LREMS) frontline workers go above and beyond every single day. But their dedication to service took on new meaning in 2020 as the COVID-19 pandemic took hold and exploded throughout the U.S. While the virus significantly changed the way our staff operated throughout the year, our entire team met the challenge through incredible commitment and sacrifice.

"Our staff faced serious personal and professional risks as the pandemic raged and mask mandates and social distancing created a new norm," said LREMS' Executive Director Aarron Reinert. From LREMS' frontline EMTs and paramedics to our operations team and organization's leaders, our entire team remained dedicated to our community during 2020 in very tough circumstances.

LREMS EMT-Paramedic Heidi Rennick exemplifies the spirit of LREMS staff to provide top-notch care during the "year of COVID." With more than 20 years of experience as an EMT and paramedic and 8 years of service at LREMS, Heidi initially thought the pandemic wouldn't last long, but it soon became clear this wasn't just a seasonal flu. "As people got sicker and sicker, we needed to ramp up our patient care abilities, our equipment, our PPE, our personal safety," she said. "It was a bit terrifying."

But even with the risks of being a frontline worker during one of the worst pandemics in U.S. history, Heidi relied on her decades of healthcare experience during extremely tough times. "I was afraid for myself, but I'm obligated to protect the first responders, my partners, and patients and their families as much as I can," she said. "At Lakes Region, we look after each other, as well as those in the community. And I knew my partners would look after me just like I would look after them. I will continue to protect my community, because that's my duty as a paramedic."

As frontline workers like Heidi helped COVID-positive patients, as well as other patients, every day throughout the year, she and the rest of the LREMS team faced a constant threat of testing positive for COVID-19. But during the first six months of the pandemic, there were no positive COVID tests within our organization.

"We took a proactive approach on keeping our staff as safe as possible, including in the areas of preparation, protection, staffing, and equipment," said LREMS' Director of Operations Ben Wasmund. Immediate safety measures included requiring all patients and crew members to wear masks and ensuring there was never a shortage in PPE, including N-95 masks, surgical masks, and other protective equipment. While taking this approach helped prevent infection within the LREMS team for many months, as the virus permeated our local community, 12 team members eventually tested positive for COVID-19, and then thankfully recovered. The serious effects of COVID on our team included going from a 125% staffing rate to multiple sick calls a day. But even in the toughest circumstances, our employees were still able to staff all of our five ambulances on the road 24/7 throughout 2020, thanks to staff members throughout our organization willingly giving up their nights and weekends to care for our community around the clock.

Dealing with the signs of COVID clinically also presented a challenge to LREMS because the disease did not follow traditional rules, specifically those regarding decreased oxygen content of the blood (hypoxia), according to LREMS' Director of Clinical Services Ken Larson. "The COVID pandemic revealed that some people seem to have an amazing adaptive capability to a lack of oxygen and, thus, hypoxia in some people might not be readily apparent until their fragile condition deteriorates rapidly," he said. In response to this challenge, our team members had to delve deeply into the disease pathophysiology and educate themselves on the subtleties of patient presentation to safely treat a patient's hypoxia while mitigating the risk of aerosolized disease transmission in our ambulances.

Our organization was one of the first EMS services to adopt high-flow nasal cannula in all of our trucks, providing the world recognized treatment-of-choice for COVID patients. Additionally, all clinicians were trained in helmet ventilation, a method of providing high concentrated oxygen within an isolated patient environment, keeping the clinical staff safe from aerosolization risk. Additional education was provided for our staff in the artistry of ventilating the sick lungs that result from the more serious cases of COVID.

To successfully deal with the pandemic, LREMS depended heavily on teamwork, including our administration, leadership, and throughout the entire company. Other solutions to the pandemic included utilizing technology in new ways and moving to a hybrid style schedule for office staff. "We utilized different parts of our software systems, integrating old and new," said LREMS' Director of Administration Michelle Anderson. "We shifted work schedules that allowed us to accomplish our workload and allowed us to decrease the number of people in our offices."

While COVID strained every facet of our organization in 2020, including our finances, clinical practice, operations, and workforce, our organization remains stronger than ever. "We continue to honor our four pillars, as well as the men and women in our organization who sacrifice every single day and run toward danger knowing they do it to serve others," Reinert concluded.

Time of Calls | Lakes Region EMS

Time Period	S	M	T	W	T	F	S	Total	Percentage
0000-0400	99	92	85	89	81	88	101	635	11.2%
0400-0800	58	51	61	73	58	40	65	406	7.2%
0800-1200	117	133	123	136	144	133	133	919	16.3%
1200-1600	171	195	165	177	181	193	165	1247	22.0%
1600-2000	205	194	212	203	197	227	203	1441	25.5%
2000-2400	130	163	131	125	139	161	155	1004	17.8%
Total	**780**	**828**	**777**	**803**	**800**	**842**	**822**	**5652**	**100%**

Time of Calls | St. Croix Valley EMS

Time Period	S	M	T	W	T	F	S	Total	Percentage
0000-0400	37	34	39	43	40	33	54	280	11.7%
0400-0800	34	36	30	36	39	35	37	247	10.3%
0800-1200	52	63	56	59	67	62	65	424	17.7%
1200-1600	78	69	82	82	62	100	86	559	23.3%
1600-2000	74	79	88	9	81	74	81	486	20.3%
2000-2400	47	56	59	63	56	53	66	400	16.7%
Total	**322**	**337**	**354**	**292**	**345**	**357**	**389**	**2396**	**100%**

Response by County | Lakes Region EMS

County	Responses	Avg. of Disp-Arrive	Avg. of Disp-EnRoute	Avg. Time on Scene
CHISAGO	4,539	15.25	4.46	21.36
POLK	410	39.05	12.71	17.67
ISANTI	393	39.4	18.54	19.17
WASHINGTON	84	14.46	1.8	21.16
ANOKA	47	40.52	25.15	21.05
BARRON	45	73.58	12.78	24.77
KANABEC	35	55.47	15.86	21.45
BURNETT	30	84.38	48.73	20.39
PINE	29	21.22	3.58	17.17
RAMSEY	13	17.1	9.86	19.73
HENNEPIN	12	28.17	20.93	19.82
WASHBURN	4	98.49	10.72	37.98
NOT REPORTED	4	11.86	0.7	11.33
MILLE LACS	2	80.45	6.67	13.01
LE SUEUR	1	5.7	3.23	13
MOWER	1	19.27	7.85	24.38
RENVILLE	1	-	-	-
SCOTT	1	112.7	84.88	30.8
ST CROIX	1	-	59.63	-
TOTAL	**5,652**	**44.53**	**19.34**	**20.84**

Response by County | St. Croix Valley EMS

County	Responses	Avg. of Disp-Arrive	Avg. of Disp-EnRoute	Avg. Time on Scene
POLK	2,045	16.77	6.53	19.49
CHISAGO	248	12.92	3.17	21.28
BARRON	146	65.78	23.55	22.74
WASHBURN	10	86.19	14.12	23.36
BURNETT	9	73.53	38.39	17.75
RAMSEY	6	7.79	1.71	37.26
WASHINGTON	5	13.76	2.08	15.25
ANOKA	1	14.75	8.68	
EAU CLAIRE	1	148.13	10.23	25.22
LE SUEUR	1	3.7	0.58	18.38
RICE	1	7.42	0.35	33.58
SAWYER	1	-	303.3	-
ST CROIX	1	132	116.45	-
TOTAL	**2,475**	**48.56**	**40.70**	**23.43**

Incident City | Lakes Region EMS

City	Count	Percent
NORTH BRANCH	1,095	19.37%
WYOMING	979	17.32%
CHISAGO CITY	549	9.71%
RUSH CITY	342	6.05%
SAINT CROIX FALLS	313	5.54%
LINDSTROM	296	5.24%
CAMBRIDGE	222	3.93%
FRANCONIA (TOWNSHIP OF)	213	3.77%
CHISAGO LAKE (TOWNSHIP OF)	163	2.88%
STACY	147	2.60%
LENT (TOWNSHIP OF)	140	2.48%
HARRIS	106	1.88%
NORTH BRANCH (TOWNSHIP OF)	94	1.66%
SUNRISE (TOWNSHIP OF)	92	1.63%
FISH LAKE (TOWNSHIP OF)	91	1.61%
SHAFER	87	1.54%
CENTER CITY	77	1.36%
FOREST LAKE	77	1.36%
NESSEL (TOWNSHIP OF)	66	1.17%
OSCEOLA	58	1.03%
CUMBERLAND	39	0.69%
AMERY	38	0.67%
AMADOR (TOWNSHIP OF)	35	0.62%
MORA	32	0.57%
RUSHSEBA (TOWNSHIP OF)	31	0.55%
GRANTSBURG	30	0.53%
SHAFER (TOWNSHIP OF)	29	0.51%
OXFORD (TOWNSHIP OF)	26	0.46%
ISANTI	17	0.30%
BRAHAM	11	0.19%
LINWOOD TWP	11	0.19%
COON RAPIDS	10	0.18%
PINE CITY	10	0.18%
ROCK CREEK	9	0.16%
MINNEAPOLIS	8	0.14%
COLUMBUS	7	0.12%
SCANDIA	6	0.11%
ISANTI TWP	5	0.09%
LINO LAKES	5	0.09%
ROSEVILLE	5	0.09%
ATHENS TWP	4	0.07%
BARRON	4	0.07%
BLAINE	4	0.07%
BRADFORD TWP	4	0.07%
POKEGAMA TWP	4	0.07%
ROYALTON (TOWNSHIP OF)	4	0.07%
SPOONER	4	0.07%
STANCHFIELD TWP	4	0.07%
TAYLORS FALLS	4	0.07%
EAST BETHEL	3	0.05%
FRIDLEY	3	0.05%
GRASS LAKE TWP	3	0.05%
CAMBRIDGE TWP	2	0.04%
ONAMIA	2	0.04%
RICE LAKE	2	0.04%
SAINT PAUL	2	0.04%
SPRINGVALE TWP	2	0.04%
ANDOVER	1	0.02%
ARDEN HILLS	1	0.02%
ARTHUR TWP	1	0.02%
BETHEL	1	0.02%
CHAMPLIN	1	0.02%
CIRCLE PINES	1	0.02%
EXCELSIOR	1	0.02%
FRANKLIN	1	0.02%
FREDERIC	1	0.02%
HAM LAKE	1	0.02%
HINCKLEY	1	0.02%
HOPKINS	1	0.02%
HUDSON CITY	1	0.02%
HUGO	1	0.02%
LEXINGTON	1	0.02%
LITTLE CANADA	1	0.02%
MAY (TOWNSHIP OF)	1	0.02%
NORTH OAKS	1	0.02%
PINE CITY TWP	1	0.02%
PLYMOUTH	1	0.02%
RAMSEY	1	0.02%
SAINT ANTHONY	1	0.02%
SHAKOPEE	1	0.02%
SHOREVIEW	1	0.02%
STANFORD TWP	1	0.02%
VADNAIS HEIGHTS	1	0.02%
TOTAL	**5,652**	**100%**

Incident City | St. Croix Valley EMS

City	Count	Percent
SAINT CROIX FALLS	95	38.35%
MILLTOWN	161	6.49%
TAYLORS FALLS	125	5.04%
CENTURIA	120	4.84%
CUMBERLAND	104	4.19%
BALSAM LAKE	103	4.15%
OSCEOLA	93	3.75%
BALSAM LAKE (TOWN OF)	92	3.71%
AMERY	90	3.63%
DRESSER	87	3.51%
SAINT CROIX FALLS (TOWN OF)	77	3.10%
EUREKA (TOWN OF)	65	2.62%
MILLTOWN (TOWN OF)	64	2.58%
STERLING (TOWNSHIP OF)	38	1.53%
OSCEOLA (TOWNSHIP OF)	35	1.41%
SHAFER (TOWNSHIP OF)	26	1.05%
BARRON	24	0.97%
AMADOR (TOWNSHIP OF)	23	0.93%
RICE LAKE	18	0.73%
CHISAGO CITY	17	0.69%
LINDSTROM	12	0.48%
LUCK	11	0.44%
SHAFER	11	0.44%
FREDERIC	10	0.40%
GEORGETOWN TWP	10	0.40%
FRANCONIA (TOWNSHIP OF)	9	0.36%
GRANTSBURG	9	0.36%
LUCK (TOWN OF)	8	0.32%
WEST SWEDEN TWP	8	0.32%
LAKETOWN TWP	7	0.28%
CENTER CITY	6	0.24%
CHISAGO LAKE (TOWNSHIP OF)	5	0.20%
SPOONER	5	0.20%
WYOMING	5	0.20%
BONE LAKE TWP	4	0.16%
GARFIELD (TOWNSHIP OF)	4	0.16%
SUNRISE (TOWNSHIP OF)	4	0.16%
CLAM FALLS TWP	3	0.12%
FARMINGTON TWP	3	0.12%
FOREST LAKE	3	0.12%
ROSEVILLE	3	0.12%
ALDEN TWP	2	0.08%
CITY OF SPOONER	2	0.08%
LENT (TOWNSHIP OF)	2	0.08%
NORTH BRANCH	2	0.08%
SAINT PAUL	2	0.08%
SHELL LAKE	2	0.08%
CUSHING	1	0.04%
EAU CLAIRE	1	0.04%
FRIDLEY	1	0.04%
HAYWARD	1	0.04%
HUDSON CITY	1	0.04%
HUGO	1	0.04%
LEXINGTON	1	0.04%
LORAIN TWP	1	0.04%
MAPLEWOOD	1	0.04%
MCKINLEY TWP	1	0.04%
NESSEL (TOWNSHIP OF)	1	0.04%
SCANDIA	1	0.04%
SHELL LAKE TWP	1	0.04%
STACY	1	0.04%
TOTAL	**1,623**	**100%**

Transfer Origin of Calls | St. Croix Valley EMS

Transfer Hospital	Count	Average of Disp-Enroute	Average of Disp-Arrive	Average of Time On Scene
ST CROIX REGIONAL MEDICAL CENTER	514	0:02:21	0:08:47	0:17:53
CUMBERLAND HEALTHCARE	99	0:02:08	0:38:17	0:22:19
OSCEOLA MEDICAL CENTER	80	0:03:47	0:24:27	0:14:44
AMERY REGIONAL MEDICAL CENTER	86	0:01:42	0:44:16	0:14:24
MAYO CLINIC HEALTH SYSTEM-NORTHLAND	21	0:02:46	0:53:39	0:25:04
MARSHFIELD MEDICAL CENTER - RICE LAKE	16	0:02:59	1:10:04	22:34.0
BURNETT MEDICAL CENTER	9	0:01:42	0:36:51	0:17:45
SPOONER HEALTH	7	0:02:26	1:16:08	0:25:07
FAIRVIEW LAKES MEDICAL CENTER	4	0:00:15	0:05:36	0:17:07
INDIANHEAD MEDICAL CENTER - SHELL LAKE	2	0:03:31	1:18:35	0:13:35
REGIONS HOSPITAL	2	0:00:03	1:09:42	0:00:06
SACRED HEART HOSPITAL	1	0:05:13	2:23:07	0:25:13
HAYWARD AREA MEMORIAL HOSPITAL	1	0:00:04	-	-
HUDSON HOSPITAL	1	0:00:12	-	0:15:45
TOTAL	**843**	**0:02:05**	**0:54:07**	**0:17:49**



2020 Employees

Name	Job Title	Years of Service
Jonathan Aldrich	EMT-IV Tech	2
Jason Anderson	EMT-IV Tech	1
* Jason Anderson	EMT-Paramedic	6
Jessica Anderson	EMT-Paramedic	6
Michelle Anderson	Director of Administration	12
Casey Banken	EMT-Paramedic	5
Natalie Barsness	EMT-Paramedic	2
Brendon Bartholmy	EMT-Paramedic	5
Alissa Behl	EMT-Paramedic	1
+ Caitlin Bjorgan	EMT-IV Tech	0
+ Victoria Bolander	Vehicle Service Technician	0
Joshua Brown	EMT-Paramedic	4
Lauren Buerkle	EMT-Paramedic	8
Andrew Carlson	EMT-Paramedic	25
Gerald Carlson	EMT-IV Tech	16
Christopher Carlstrom	EMT-IV Tech	5
Lonna Coddington	EMT-IV Tech	6
Kim Ditsworth	Sr. Patient Accounts Representative	14
Ellie Ehrich	EMT-IV Tech	2
Linette Erickson	EMT-IV Tech	6
+ Percy Eykyn	Accounting Specialist	0
Todd Fisk	Finance	32
Brandon Folsom	EMT-IV Tech	3
David Freerks	EMT-IV Tech	1
* Brian Galowitz	Manager Ops - MN	4
Lisa Gregerson	EMT-IV Tech	2
John Hagen	EMT-Paramedic	2
Nicole Hall	EMT-IV Tech	8
Kayla Hedlund	Clinical Coordinator	9
Luke Hedlund	EMT-IV Tech	6
David Hoye	Maintenance Engineer	3
Royce Hsiung	EMT-IV Tech	2
Lee Huber	Operations Manager	7
+ Colleen Hughes	EMT-IV Tech	0
* Cameron Huntington	EMT-IV Tech	1
* Kory Hynes	Clinical Coordinator	6
Bruce Johnson	EMT-IV Tech	6
John Joswiak	EMT-Paramedic	9
Jessica Keeney	Community Outreach	12
+ Cassandra Keocher	HR Manager	0
Caryn Koecher	Administrative Assistant	2
* Tessa Kolan	EMT-IV Tech	7
Jakob Kostecki	EMT-Paramedic	1
Terry Kraabel	EMT-IV Tech	11
Matthew Kramer	EMT-Paramedic	2
Donna Larson	EMT-IV Tech	6
Ken Larson	Director of Clinical Services	19
Charles Leary	Supervisor	5
* Jordan Long	Ed Support Specialist	3
* + Hunter Loveland	EMT-Paramedic	0
* + Cierra Marquis	EMT-IV Tech	0
Sarah Martens	EMT-Paramedic	14
Samantha Mathews	EMT-Paramedic	6
Daniel McIntosh	EMT-Paramedic	1
Dakota Mechelke	EMT-IV Tech	3
Brian Meyer	EMT-Paramedic	9
TenaMarie Meyer	Clinical Education Manager	20
Dakota (Cody) Miller	EMT-IV Tech	1
Morgen Mueller	EMT-Paramedic	3
Rebekah Nilius	Billing Specialist	2
Amanda Odegaard	EMT-Paramedic	6
* Brandon Olson	EMT-Paramedic	9
Danny Parker	Supervisor	9
Sara Press	EMT-Paramedic	5
Aarron Reinert	Executive Director	19
Heidi Rennick	EMT-Paramedic	8
+ Mitchell Rice	EMT-Paramedic	0
Darrell Rohe	EMT-Paramedic	7
+ Cory Rossini	EMT-Paramedic	0
Christine Rudolph	EMT-IV Tech	24
* + Wyatt Sachen	EMT-IV Tech	0
Elliot St. Amand	EMT-Paramedic	6
Gabriel Schreiber	EMT-Paramedic	7
* Jody Sellman	Accounting Manager	4
Elizabeth Soleayst	EMT-Paramedic	3
Allison Stout	EMT-Paramedic	9
Hunter Struemke	EMT-IV Tech	1
Graham Struwe	EMT-Paramedic	6
Carolyn Sundheim-Little	EMT-Paramedic	3
+ James Syvertson	EMT-Paramedic	0
Matthew Thelander	EMT-IV Tech	5
Christie Traczyk	EMT-Paramedic	6
Brandon Trauba	Supervisor	6
Alycia Vander Vegt	EMT-IV Tech	1
Kao Vang	EMT-IV Tech	2
Nathan Van Heel	QA Coordinator	8
+ Conor Vaughn	EMT-IV Tech	0
Doug Volin	EMT-Paramedic	10
Will Wandersee	EMT-IV Tech	1
Christopher Ward	Medical Director	4
Benjamin Wasmund	Director of Operations	18
+ Gabrielle Wasmund	Vehicle Service Technician	0
* Shannon Widenstrom	Community and EMS Educator	5
Sandra Williams	EMT-Paramedic	4
Benjamin Wilson	EMT-IV Tech	2
Kirk Winkelman	EMT-Paramedic	26
* Jesse Zajac	EMT-Paramedic	15

+ New Employee 2020

*** Employee Left 2020**

Board of Directors

Keith Carlson
Board Chairman
Former Mayor, City of Lindstrom
Elected or Appointed Official
Serving Since 04/10/2007

Mike Carroll
Board Vice-Chairman
Business Owner, Rush City
Member at Large
Serving Since 05/17/2011

Scott Sellman
Secretary/Treasurer
Chisago County Emergency Manager
Serving Since 10/16/2012

Bryan Gaffy
Director
VP of Hospital Operations Fairview
Member at Large
Serving Since 12/2016

Dan Meyer
Director
Police Chief - City of North Branch
Serving Since 06/18/2013

Julie Schroeder
Director
Serving Since 06/18/2013

Board/Staff Liaisons

Michelle Anderson
Director of Administration
Lakes Region EMS, Inc.

Ken Larson
Director of Clinical Services
Lakes Region EMS, Inc.

Aarron Reinert
Executive Director
Lakes Region EMS, Inc.

Chris Ward, M.D.
Medical Director
Lakes Region EMS, Inc.

Ben Wasmund
Director of Operations
Lakes Region EMS, Inc.

Jessica Keeney
EMT/Community Outreach Specialist
Lakes Region EMS, Inc.

Doug Volin
Paramedic
Lakes Region EMS, Inc.





LAKES REGION EMS



Lakes Region EMS ©2021 All Rights Reserved

Lakes Region EMS photos from Minnesota Public Radio News. ©2021 Minnesota Public Radio®. Used with permission. All rights reserved.